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Beyond CEO Tenure: The Effect of CEO Newness on Strategic Changes

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Prior research on strategic changes has asserted that long-tenured CEOs are less likely to initiate strategic changes. The authors argue that this assertion may exclude CEOs' prior experiences since it implicitly assumes that all new CEOs have the same inclination toward change. By viewing CEOs as individuals embedded within experiences and relationships throughout their careers, the authors propose that CEO newness—a concept integrating prior board experience, prior heir apparent experience, and length in the current position—can provide a more complete assessment of a new CEO's tendency toward change. They further argue that the impact of CEO newness on strategic changes will be moderated by the strategic distance between a focal firm and a CEO's previous firm, as well as by industry similarity between the two firms. The authors' analyses of U.S. computer firms from 1994 to 2007 support their arguments, suggesting that it is useful to adopt the concept of CEO newness while considering its boundary conditions in order to better understand strategic changes.

Keywords: *CEO newness; CEO experiences; strategic changes; strategic distance; industry similarity*

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The role of CEOs in firm strategy has been widely recognized (summarized by Finkelstein, Hambrick, & Cannella, 2009). As top decision makers for their firms, CEOs have the ultimate responsibility to utilize their perspectives for strategy formulation and implementation. Following this concept, a CEO's disposition affects a firm's change initiatives (Datta, Rajagopalan, & Zhang, 2003). One important antecedent of strategic changes within this research stream is CEO tenure (Miller, 1991; Miller & Shamsie, 2001). Since long-tenured CEOs increasingly narrow their perspectives and become less open minded, firms led by long-tenured CEOs may continue to follow existing directions (Hambrick & Fukutomi, 1991). Strategic changes are therefore most likely when a new CEO is appointed, and the likelihood of changes gradually decreases as the CEO remains in the current position (Hambrick & Fukutomi, 1991; Miller & Shamsie, 2001). This argument has been supported both by case studies (Gabarro, 1987) and by empirical investigations (Miller, 1991; Miller & Shamsie, 2001).

Although CEO tenure has offered insights for understanding strategic changes, it may have an implicit assumption that all new CEOs will have the same tendency to enact change. Yet, as Hambrick and Mason argued, executives have distinctive backgrounds, and their "career experiences . . . have a significant effect on the types of actions" (1984: 199) that they may take. By this notion, although CEO tenure has captured the effect *after* CEO appointment, the experiences and relationships that the new CEO accumulated *before* the CEO appointment may not be adequately recognized. More importantly, our understanding of a CEO's tendency toward change may be one sided if the CEO's prior experiences are excluded. To provide a more complete assessment, it is important to incorporate a CEO's previous experiences into consideration.

Our study intends to examine this issue with two main motivations. First, we argue that a new CEO is not born out of the vacuum but instead is embedded within his or her experiences and relationships. By incorporating a new CEO's prior background into consideration, we are able to treat his or her career in a continuous manner. Although prior research has noted that executives accumulate experiences throughout their careers (Fondas & Wiersema, 1997; Hambrick & Mason, 1984), most studies rely on CEO tenure as a single indicator. All new CEOs are therefore assumed to stand on the same starting point and have a similar level of inclination toward change when they take office. However, in reality, a new CEO may accumulate experiences via various top management positions as a chief operating officer (COO), director, or president within a focal firm—a process generating considerable variation in the CEO's perspective. Bigley and Wiersema (2002) argued that the extent to which a new CEO accepts the prior paradigm is influenced by his or her heir apparent experience in a focal firm. Following this reasoning, how "new" a CEO is to a firm is not determined by CEO tenure alone. To offer a more complete assessment of CEO influences we propose a new concept—CEO newness—defined as the extent to which a CEO can be considered as new or recent based on his or her experiences (or, specifically, lack of experiences) as a CEO, director, or heir apparent within the focal firm.

Second, our study examines the boundary conditions of CEO newness. The impact of CEO newness on strategic changes may be moderated by a new CEO's experiences within his or her previous firm. Prior research has shown that firms often recruit managers from other firms (Boeker, 1997; Somaya, Williamson, & Lorinkova, 2008) and that some new CEOs are hired from the extant labor market (Harris & Helfat, 1997; Zhang & Rajagopalan, 2003). Do the prior experiences in other firms matter for these CEOs? We argue that a new CEO's experience at a prior firm may influence the new CEO's perspective, which may further affect his or her tendency toward change in a focal firm. To study this issue, we contend that the strategic distance between a focal firm and a new CEO's previous firm (the definition will be provided later) may strengthen the relationship between CEO newness and strategic changes. Additionally, whether a focal firm and a new CEO's previous firm are in the same industry may matter. Since executives in the same industry face similar environments (Huff, 1982; Sutcliffe & Huber, 1998), a new CEO hired from another firm in the same industry may find it easier to utilize his or her skills within a focal firm and, accordingly, has a greater tendency to lead change. Our framework therefore considers industry similarity as a boundary condition.

Our study seeks to answer two questions: (1) How does CEO newness influence strategic changes? and (2) Is this relationship moderated by the strategic distance between a focal firm and a new CEO's prior firm, and/or by the industry similarity between the two firms? Our contributions are twofold. First, we develop CEO newness, a concept based on the experiences and relationships a CEO has accumulated before and after accepting the CEO position in a focal firm. This conceptualization extends the upper echelons perspective (Carpenter, Geletkanycz, & Sanders, 2004; Hambrick & Mason, 1984) while emphasizing the continuity of the managerial career. Second, we develop hypotheses examining the boundary conditions of CEO newness. By viewing a new CEO as an actor who accumulates experiences and relationships throughout his or her career, our study aims to move beyond CEO tenure and advance our understanding regarding new CEOs and strategic changes.

Theoretical Background

CEO Tenure and Firm Strategy

A CEO's decisions are complex in nature. Although a CEO may be able to formulate a company's strategy without any preassumptions, in reality his or her decisions often are subject to cognitive limits, personal preferences, and potential bias (Cyert & March, 1963; March & Simon, 1958). These criteria and decision rules create a cognitive schema wherein information is absorbed and alternatives are generated as well as evaluated. In Hambrick and Fukutomi's (1991: 723) term, this is a CEO's "paradigm" developed from the point a CEO takes office. Once formed, this paradigm is likely to be refined and strengthened as the CEO's tenure increases. Several factors account for this tendency. The first is the scope of information search. When a CEO is new to the position, he or she is more open to external information. Yet as a CEO's tenure increases the CEO may narrow the scope of information search. Gabarro's (1987) study showed that most changes are made within the first 2½ years of a CEO's assignment. Major alterations are less likely after this period.

Second, the shorter a CEO's tenure is, the less likely will the CEO commit to the status quo. Executives with long tenure in their current positions tend to have strong adherence to the status quo (Finkelstein & Hambrick, 1990; Hambrick, Geletkanycz, & Fredrickson, 1993; McClelland, Liang, & Barker, 2010). Therefore, the longer a CEO has stayed in office, the less likely his or her decisions will deviate from current directions. Finally, long-tenured CEOs tend to refine their existing knowledge, as opposed to learning new skills. When a CEO is new to the position he or she has motivation to learn more concerning the current job. Novel product designs, fresh marketing campaigns, and new strategic directions are more likely during this stage; these are essentially exploration (Levinthal & March, 1993; March, 1991). Wu, Levitas, and Preim (2005) found that short-tenured CEOs generate greater technological output, suggesting that CEOs with short tenure are more likely to explore new possibilities. However, as tenure accumulates the same job may look less attractive or even stale to a CEO. In support of this argument, Miller and Shamsie contended that as a CEO's tenure increases, "the level of experimentation falls" (2001: 728). Similarly, Hambrick and Fukutomi argued that "beyond the early period in office, the CEO's commitment to his or her paradigm gradually increases" (1991: 724). CEO tenure accordingly is regarded as one "consistent" factor influencing a firm's strategies (Finkelstein et al., 2009: 90).

Although CEO tenure has a profound impact on a firm's strategy, it merely captures the effect *after* a CEO is appointed, assuming that the CEO's perspective is shaped solely by the period following the appointment. However, in reality, new CEOs may have distinctive backgrounds and diverse prior experiences. The exclusion of prior experiences therefore implicitly assumes that all new CEOs share the same tendency toward change at the beginning of their office. When prior experiences are excluded, a considerable variation of the new CEOs' perspectives will not be revealed. We argue that it is necessary to consider these prior experiences in addition to CEO tenure, leading to our concept of CEO newness.

CEO Newness: Linking Prior Top Executive Experiences and CEO Tenure

The upper echelons perspective suggests that managers continuously accumulate experiences and relationships throughout their careers (Carpenter et al., 2004; Hambrick & Mason, 1984). Many begin their careers as employees or entry-level managers, and over time some are promoted to middle-rank positions within their firms. Eventually, some are selected to become top executives, including presidents, directors, or even CEOs. Since these executives have profound influences on their firms, their experiences and dispositions carry important strategic implications (Finkelstein et al., 2009). In this section, we argue that prior top executive experiences in a focal firm will affect a new CEO's inclination toward change because (1) these experiences provide the foundation of a new CEO's paradigm, and (2) they socialize a new CEO. Consequentially, when an executive with considerable prior top executive experiences within a focal firm is appointed as a new CEO, he or she may have accepted the existing assumptions and treat the current strategy as given. New CEOs of this kind may therefore not be entirely new to their firms. The logic will be elaborated as follows.

Prior experiences as a foundation for a CEO's paradigm. Hambrick and Fukutomi argued that a CEO has his or her own way of leading a focal firm; they define a CEO's paradigm as the way the CEO conceives "how the environment behaves, what options are available, and how the organization should be run" (1991: 721). This paradigm arises from two sources. The first source is a CEO's beliefs and assumptions that serve as "perceptual and interpretive apparatuses" for seeing a firm and its environment (Hambrick & Fukutomi, 1991: 721). These schemes allow CEOs to understand the environment and interpret events. The second source is the knowledge and skills that a CEO has acquired. Professional education, work experience, and/or personal observations are the sources of these skills. In particular, CEOs may learn more new skills and knowledge during the earlier phases of their careers. After a certain period of time, CEOs tend to refine existing skills while learning fewer new skills. A CEO's paradigm will therefore become increasingly mature or even rigid as CEO tenure evolves (Miller, 1991; Miller & Shamsie, 2001).

We agree with Hambrick and Fukutomi's (1991) and Miller and Shamsie's (2001) insights that CEO tenure is a driving factor of a CEO's paradigm. At the same time, we wish to argue that prior top executive experiences and relationships within the focal firm lay the *foundation* of a CEO's paradigm. At least two reasons support this argument. First, top executive experiences within a focal firm contribute to a new CEO's skills and perspective. Becker (1964) argued that managerial skills can be classified as (1) general, (2) industry specific, and (3) firm specific. Castanias and Helaft contended that firm-specific experiences possessed by top executives are "unique resource[s] for a firm" (1991: 162). To better utilize these experiences, executives may have motivation to stay in their current firms. When these executives are appointed as CEOs, they are likely to exploit these experiences in leading their firms. Kotter accordingly commented that most general managers are "highly specialized" (1982: 34) within their expertise areas.

Second, executives' firm-specific knowledge is crucial for their jobs. Gupta proposed that organizational familiarity is an "important characteristic," contending that this allows executives to create "an appropriate coalignment between a firm and environment" (1984: 403). Zhang and Rajagopalan (2010) argued that a new CEO with deep firm-specific knowledge has a more complete picture of a firm's resources and constraints, facilitating the CEO's decision making. An executive's prior experiences within a focal firm can therefore allow him or her to generate alternatives and implement plans following CEO appointment.

Socialization at the top of a firm. Prior top management experiences may matter because they socialize new CEOs, altering their perspectives. When individuals enter a new firm, they may experience a transition period in adjusting to the new environment. These newly recruited employees are socialized by formal and informal interactions with others within the firm (Van Maanen & Schein, 1979). These social and relational activities help new hires make sense of the new context and absorb the firm's norms (Louis, 1980). Hirschman (1970) argued that individuals who can fit within a firm's context tend to stay and exhibit their loyalty, while individuals who do not fit the context are likely to leave. Moreover, the selection and promotion process ensures that a firm chooses employees who best fit the firm's context to be executives (Wanous, 1992). Consequentially, individuals promoted to high-rank positions not only know a firm's social context well but also believe in its importance and value.

Although individuals may begin to become socialized when joining a firm as low-rank or middle-level employees, the socialization process is more influential for top executive positions. One reason is that the social context of a firm's top management significantly affects an executive's perspective. Sutcliffe and Huber (1998) contended that top executives within a firm tend to have similar views. Being a member of top management allows an executive to acquire the views and values shared by other top management team members; this in turn alters the focal executive's view. Bigley and Wiersema (2002) found that a new CEO with prior experience as a COO or president within a focal firm is less likely to reduce the firm's scope. Moreover, being part of top management increases an executive's organizational identification. Tushman and Romanelli argued that the firm's top management can "develop shared commitments and beliefs which justify previous actions" (1985: 193). Since top executives, just as individuals, live in a social environment (Barr, Stimpert, & Huff, 1992), prior top executive experiences within the focal firm may induce a new CEO to accept the prevailing views.

Therefore, previous top executive experiences within a focal firm prior to CEO appointment are expected to lay the foundation of the CEO's paradigm since they not only provide a new CEO with firm-specific skills and knowledge that can be exploited in the future but also supply the new CEO with the prevailing views shared by top management. These experiences accordingly allow an executive to develop professional expertise and familiarize himself or herself within a firm's context. Since an executive's career is continuous in nature (Cheramie, Sturman, & Walsh, 2007), prior top management experiences will significantly influence a new CEO's decisions. We highlight this feature by defining CEO newness as the extent to which a CEO is new to a focal firm via prior top management positions in the focal firm, including director, COO, and president, in addition to CEO tenure.

Related Concepts

It is useful to distinguish CEO newness from other related concepts such as firm tenure and industry tenure. Fundamentally, firm tenure captures the length of time an individual has remained within a focal firm. While firm tenure has been found to affect executives' psychological commitment to the status quo (Hambrick, Geletkanycz, & Fredrickson, 1993), it may not fully reflect the CEO's total experiences as a member of top management within a focal firm. Since top management positions differ from lower level positions with regard to job demand and responsibilities (Hambrick, Finkelstein, & Mooney, 2005), the insights and experiences associated with top management positions may deserve additional theoretical investigations.

Another related concept is industry tenure, denoting the amount of experiences an executive has gained in an industry. By acquiring such experiences, executives are able to identify and assess opportunities within the environment (Castanias & Helfat, 2001; Kor, 2003). Meanwhile, industry tenure may constrain an executive's cognitive frame since managers with long tenure within an industry would be more receptive to industry norms (Spender, 1989). Conceptually, CEO newness differs from industry tenure in that the former concerns the experience developed within a focal firm, while the latter focuses on experiences developed in an industry. Since executives may stay in different companies in a given industry and hold various levels of positions during a period of time, industry tenure may mingle the experiences of different levels of positions in multiple firms and therefore may offer less insight into a focal firm (Harris & Helfat, 1997), which CEO newness aims to emphasize.

Hypotheses

CEO Newness and Strategic Changes

In the proceeding section, we argued that prior top executive experiences as a director, president, or COO may affect a new CEO's perspective. This calls for a need to relate prior top management experiences in a focal firm to CEO tenure and, accordingly, to CEO newness. This section discusses the impact of CEO newness on strategic changes. Indeed, although firm strategy is potentially subject to both internal (Hannan & Freeman, 1984) and external constraints (DiMaggio & Powell, 1983), the impact of the CEO on firm strategies has long been recognized. For instance, studies have shown that CEOs' demographics, such as education and age, reveal their tendencies to develop and implement new ideas (Datta et al., 2003) and that CEOs' psychological traits also have a significant effect on firm strategies and performance outcomes (Chatterjee & Hambrick, 2007; Nadkarni & Herrmann, 2010). Together, these studies indicate that a CEO must obtain information, devise alternatives, and implement his or her plans. Following this reasoning, we contend that CEO newness influences a firm's strategic changes since it affects a new CEO's information search scopes and choices of alternatives.

First, the more prior top management experiences that a new CEO has developed within a focal firm, the less external information that the new CEO will acquire for decision making. Prior research has argued that executives' strategic decisions are shaped by their assumptions of the firm and its environment (Hambrick & Mason, 1984; Tushman & Romanelli, 1985). Extensive experiences via top management positions increase a new CEO's confidence in depending on internal rather than external information (Hambrick et al., 1993; Miller, 1991). Consequentially, a new CEO with considerable top management experiences within a focal firm may strongly rely on internal information. Restricted information sources reduce the novelty of a CEO's ideas and may decrease the number of new alternatives. Accordingly, such a new CEO may continue the current direction, and strategic changes are therefore less likely.

Furthermore, while some new alternatives can be developed by a new CEO with extensive top management experiences within a firm, he or she may place greater weight on alternatives that are more familiar. Hitt and Tyler (1991) argued that although managerial decisions are rational in nature, these decisions are shadowed by unwritten decision criteria. One underlying factor is managerial experience: Extensive top management experiences within a focal firm often induce a new CEO to believe that his or her assumptions are correct and have no need for modifications. This not only inflates a CEO's confidence but also makes the CEO increasingly conservative (Herrmann & Datta, 2006; Rajagopalan & Datta, 1996). For such a CEO, known alternatives are more familiar and less risky; thus, known plans are usually favored, while unknown directions may be disregarded. As a result, the difficulty of "considering alternative views" (Hambrick et al., 1993: 404) may discourage a CEO with extensive top management experiences within a focal firm from initiating change. Conversely, a CEO with limited top management experiences within a focal firm may have greater tendencies to change. On the basis of above arguments we hypothesize:

Hypothesis 1: CEO newness will be positively related to a firm's strategic changes.

Hypothesis 1 contends that a CEO with fewer top management experiences in a focal firm may have a greater inclination to initiate strategic changes. One may question that if CEO newness provides theoretical insights, then the superiority of CEO newness should be reflected in the empirical investigation. CEO newness is therefore expected to explain greater variance of strategic changes than independently examined components of CEO newness. The rationale is that linking prior top management experiences to CEO tenure may be able to better capture the continuous nature of managerial careers. This issue is examined in our Results section.

The Boundary Condition of Strategic Distance

Hypothesis 1 posits that the total amount of top management experiences within a focal firm will shape a new CEO's perspective and accordingly influence his or her inclination to initiate strategic changes. Prior research has recognized CEOs with extensive firm-specific experiences as *insider new CEOs*. In addition to insiders, it is possible that some new CEOs may acquire relatively more external experiences from other firms instead of from the focal firms and thus are *outsider new CEOs*. The distinction between these two types of CEOs is important because this may reflect boards' preferences (Kesner & Sebora, 1994; Westphal & Fredrickson, 2001). Insiders are selected when boards of directors intend to maintain the current strategy. Conversely, outsiders are appointed when firms crucially require new perspectives. Although outsider new CEOs generally have fewer top management experiences within the focal firms, their prior experiences in other firms are valuable and important (Boeker, 1997; Harris & Helaft, 1997). To capture such external experiences, we contend that the strategic distance between a focal firm and a new CEO's prior firm may influence a new CEO's perspective, providing an impetus for strategic changes.

Inspired by Westphal, Seidel, and Stewart (2001), we define strategic distance as the dissimilarity between a focal firm's strategy and that of a new CEO's prior firm. Central to this concept is that firms have varying strategic orientations. Some commit greater proportions of resources to innovation and new product introduction than others do. Some stress marketing and advertising strategies more than others do. To capture these differences, prior research has utilized financial indicators that illuminate a firm's strategic profile, including research and development, advertising, and other dimensions (Carpenter, 2000; Finkelstein & Hambrick, 1990). According to Westphal et al. such an approach can "capture graduations . . . that range along a continuum from relative modest adjustments in spending levels to relative large changes in resource allocation" (2001: 727). Since a large difference along these dimensions suggests that two firms pursue distinctive strategies, the notion of strategic distance has been found to be useful for examining a focal firm's strategic choices and performance outcomes (Canina, Enz, & Harrison, 2005; Yang, Lin, & Lin, 2010).

We argue that as the strategic distance between a focal firm and a new CEO's previous firm increases, the relationship between CEO newness and strategic changes will be stronger. Prior research has indicated that executives' decisions are influenced by their backgrounds and experiences (Hambrick & Mason, 1984; Hitt & Tyler, 1991). When a new CEO is hired from outside a firm, the CEO's knowledge may be primarily based on this previous firm (Boeker, 1997; Harris & Helfat, 1997). Boeker argued that prior experience in other firms "provides a model for the decisions made by the focal firm" (1997: 216). Prior experiences in other firms are emphasized because they are more available to individuals when performing tasks (Tversky & Kahneman, 1973). Therefore, when a focal firm's strategy is different from the strategy of a new CEO's previous firm, the new CEO may not feel comfortable continuing the current strategy and strategic changes may be initiated.

Moreover, individuals tend to allocate greater attention to subjects that have substantive differences from their previous experiences. Due to this tendency, individuals usually pay more attention to differences while overlooking similarity. According to Ocasio, "Differences . . . may have significant impacts upon the focus of attention of decision-makers and the subsequent organizational moves" (1997: 202). A great strategic distance between the focal firm and a new CEO's previous firm is therefore likely to receive the new CEO's attention. Tension and pressure may mount when the discrepancy remains present. In response, a new CEO may have motivation to take actions that reduce the gaps, making strategic changes likely. In contrast, trivial differences receive limited attention from individuals. Under these conditions, a new CEO may have less motivation to initiate strategic changes. Therefore:

Hypothesis 2: The positive relationship between CEO newness and strategic changes will be stronger as the strategic distance between a focal firm and a new CEO's prior firm increases.

The Boundary Condition of Industry Similarity

Hypothesis 2 argues that a new CEO's tendency toward change may be influenced by the dissimilarity between a focal firm's strategy and a new CEO's prior firm strategy. The rationale is that in order to better utilize his or her expertise a new CEO may initiate changes within a focal firm. In this section, we argue that this inclination may be further affected by the industry similarity between a focal firm and a new CEO's previous firm.

Central to the industry similarity between a focal firm and a new CEO's prior firm is new CEO origins. Extant research argued that a new CEO may not always come from the focal firm, but from another firm in the same industry or from a firm in distant industries (Zhang & Rajagopalan, 2003). Although internally developed executives are equipped with the most firm-specific knowledge, new CEOs recruited from other firms in the same industry have greater industry-specific skills than those from distant industries (Castanias & Helfat, 1991, 2001). New CEOs recruited from other firms in the same industry are knowledgeable concerning the industry's competition, buyers, and suppliers; such CEOs possess "tacit knowledge of the opportunities, threats, competitive conditions, technology, and regulations specific to an industry" (Kor & Sundaramurthy, 2009: 986). This is particularly important when a new CEO faces a large strategic distance between a focal firm and his or her previous firm. Although some new CEOs perceive considerable differences between their focal firms' strategies and their previous firms' strategies, the intention to initiate changes may be low if they are not equipped with industry knowledge. Harris and Helfat (1997) contended that industry differences constrain the extent to which managerial skills can be transferred across different sectors. When a new CEO's previous firm is in the same industry as a focal firm, the new CEO may find it less costly to make use of his or her expertise. Under these conditions, a significant strategic distance between a focal firm and a new CEO's previous firm may encourage the new CEO to initiate changes.

In contrast, when a new CEO is hired from a distant industry the new CEO may need to acquire the necessary background knowledge for making strategic decisions. While a large strategic distance between a focal firm and a new CEO's previous firm may encourage the new CEO to undertake change initiatives, he or she may not be able to realize this goal in the short run. Prior research suggested that industry differences make managerial skills less portable when executives move across different sectors (Bailey & Helfat, 2003: 351). Since a new CEO from a distant industry may require additional time and effort to become familiar with the new environment, his or her tendency to initiate change may be reduced. Therefore:

Hypothesis 3: While the relationship between CEO newness and strategic changes is positive under conditions of high strategic distance between a focal firm and a new CEO's previous firm, this relationship will be stronger when a new CEO is hired from another firm in the same industry as opposed to a firm from a different industry.

Method

We tested our hypotheses by examining the U.S. computer industry from 1994 to 2007 (inclusive) for two reasons. First, this industry is noted for intense competition and constant technological innovations, placing greater responsibilities on CEOs (Henderson, Miller, & Hambrick, 2006). Second, since firms operating within a dynamic environment may use executive turnover to update routines (Virany, Tushman, & Romanelli, 1992), we expect CEO turnover to be more frequent in the computer industry, allowing us to document incidences of new CEOs and their strategic decisions. Consistent with Chatterjee and Hambrick (2007), we defined computer firms as companies operating in the hardware and software areas (four-digit Standard Industrial Classification [SIC] codes include 3570 to 3572, 3575 to 3577, and 7371 to 7374).

We identified our sample firms by consulting the COMPUSTAT database, obtaining 261 firms as our initial sample. We traced CEO successions within the observation period by searching the U.S. Securities and Exchange Commission's EDGAR database, where company 10K reports and proxy statements are publicly available. We studied each newly appointed CEO's background and previous employer via company annual reports, websites, Marquis Who's Who, and *zoominfo*.[1] New CEOs with incomplete information regarding their demographics, backgrounds, and prior experiences were excluded. After dropping these cases, we had 281 new CEOs appointed by 139 firms in our sample. We compared these firms against those dropped due to incomplete information on firm age, firm sales, and employment. The *z* tests were not significant, suggesting that there are no significant differences between the two groups of firms. Since new CEOs may remain in office for different lengths of time, our data are an unbalanced panel data set with 558 firm-year pairs for analysis.

Variables

Dependent Variable

Strategic changes. Two main approaches have been developed for measuring a firm's strategic changes. One approach is to trace a firm's resource allocation decisions over time, using key financial indicators to profile a firm's strategy (Carpenter, 2000; Finkelstein & Hambrick, 1990). The other approach is to recognize a firm's change actions with regard to the firm's structure and strategy (Gordon, Stewart, Sweo, & Luker, 2000; Tushman & Romanelli, 1985). Our study follows the former approach.[2] Consistent with Carpenter (2000) and Zhang and Rajagopalan (2010), we utilized the following financial indicators in creating our strategic change measure: (1) advertising intensity (advertising/sales), (2) research and development intensity (R&D/sales), (3) plant and equipment newness ratio (net P&E/sales), (4) nonproduction overhead ratio (sales, general, and administrative [SGA] expenses/sales), (5) inventory levels (inventories/sales), and (6) financial leverage (debt/equity). The data were obtained from COMPUSTAT. Finkelstein and Hambrick (1990) argued that these ratios collectively illuminate a firm's strategic positioning.

Carpenter (2000) contended that a firm can be viewed as maintaining the status quo if these ratios remain at similar levels over time and/or close to industry norms. Conversely, a large discrepancy in these ratios over time would indicate considerable changes in a firm's resource allocations. We measured these changes by first calculating the absolute differences in these ratios between the prior and current year. As an illustration, Δadvertising intensity = a focal firm's advertising intensity$_t$ – the focal firm's advertising intensity$_{t-1}$. Then we consider industry effects by subtracting the industry median changes in these ratios (e.g., industry median advertising intensity$_t$ – industry median advertising intensity$_{t-1}$, where industry is defined as firms with the same four-digit SIC codes). Hence, the industry-adjusted advertising intensity for a focal firm can be expressed as (a focal firm's advertising intensity$_t$ – the focal firm's advertising intensity$_{t-1}$) – (industry median advertising intensity$_t$ – industry median advertising intensity$_{t-1}$). We further took absolute values of these variables along the six indicators and standardized them within our sample ($M = 0$, $SD = 1$). The average of the six standardized absolute values formed our measure of strategic changes.

Independent and Moderating Variables

CEO newness. CEO newness denotes the extent to which a CEO is new or recent to a focal firm via various top management positions including director, heir apparent, and CEO.

To reflect this nature, we measured CEO newness using the inverse sum of top executive experiences that a new CEO had prior to CEO appointment and the length of his or her tenure in the current CEO position. All these components are specific to a focal firm. The measure can be expressed as

$$\frac{1}{\textit{CEO Tenure} + \textit{Board Experience} + \textit{Heir Apparent Experience}}, \qquad (1)$$

where CEO tenure is the number of years a CEO has held the office, prior board experience refers to the number of years that a new CEO served as a director in a focal firm before CEO appointment, and prior heir apparent experience is the length of time that a new CEO worked as a COO or president in the focal firm prior to CEO appointment. As in Cannella and Shen's study (2001: 258), an executive was recognized as an heir apparent if he or she held a COO or president position in a focal firm and was younger than the incumbent CEO. Similarly, an executive was identified as having prior board experience if he or she was a director in a focal firm prior to the CEO appointment. In our data, we find that approximately 25% of new CEOs were heirs apparent in focal firms and that 30% of new CEOs had prior board experiences in their firms. Additionally, our data indicate a considerable variation in CEO tenure ($M = 6.61$, $SD = 7.04$), in prior board experience within a focal firm ($M = 1.37$, $SD = 3.18$), and in prior heir apparent experience within the focal firm ($M = 1.52$, $SD = 1.44$), implying the need of considering a new CEO's prior experiences besides CEO tenure. Thus, our CEO newness measure intends to provide a more comprehensive assessment of a new CEO's top management experience within a focal firm.

This measure assigns an equal weight to the three components since they collectively capture the amount of top management experience that a new CEO may develop within a focal firm. Even if there is an overlap in prior experiences, it seems reasonable to sum them since a new CEO with both board experience and heir apparent experience is considered to be more receptive to the focal firm's prior paradigm than a new CEO with only either type of experience. To avoid an incidence where the denominator is zero, we coded CEO tenure as 1 during the first year of a new CEO's office. We documented a new CEO's change decisions throughout his or her office. In our Results section, we conducted additional tests examining whether or not the measure is robust.

Strategic distance (between a focal firm and a new CEO's previous firm). Per Westphal et al. (2001), we used the six suggested financial indicators to measure the strategic distance between a focal firm and a new CEO's previous firm. Similar to our measure of strategic changes, we obtained the ratios and calculated the absolute values of the differences between a focal firm and a new CEO's previous firm along these six variables. We traced the resource allocation patterns of the focal firm and a new CEO's previous firm prior to CEO succession. To ensure that the ratios were not severely affected by short-term fluctuations, the ratios were four-year averaged ($t - 1$, $t - 2$, $t - 3$, and $t - 4$) prior to CEO succession. As an illustration, if Company X hired an executive as a new CEO in year 2000 who was from Company Y, then the strategic distance between Company X and Company Y was based on the average absolute differences of the ratios during the years from 1996 to 1999. We took the absolute values of the differences for each ratio, and a sum of the six absolute difference ratios formed our measure of strategic difference. The higher the value, the greater the strategic distance between two firms.

Industry similarity. Industry similarity is a dichotomous variable differentiating new CEOs hired from the same industry and those hired from a distant industry. In developing this variable, we manually searched over 3,000 company 10K reports, proxy statements, and other public resources to trace new CEOs' prior employers. SIC codes have been widely used to indicate executives' origins and movements (Harris & Helfat, 1997; Sturman, Walsh, & Cheramie, 2008). Following Bailey and Helfat (2003) and Zhang and Rajagopalan (2003), we used four-digit SIC codes in defining industry boundaries. Thus, industry similarity was coded as 1 if a new CEO's previous firm shares the same SIC code with a focal firm, and 0 otherwise.

Control Variables

Our model includes a number of control variables. First, we controlled for *CEO age* and *CEO education* because older and less educated CEOs have been found to initiate fewer changes (Datta et al., 2003). Second, since poorly performing firms are likely to initiate changes to turn the situation around, we controlled for *firm performance* (measured using return on assets). Third, our model includes *firm age* (with a log-transformation), *firm size* (firm sales), *board size,* and *outside director* (the ratio of outside directors on the board). Fourth, strategic changes may be influenced by a firm's status since high-status firms may be more able to resist external pressure and less likely to change. To account for this tendency, we measured *firm status* using Bonacich's (1987) eigenvector centrality, consistent with prior studies (Podolny, 1993; Yang et al., 2010). In creating this variable, we first constructed the broad computer industry networks using industry membership (Rowley, Behrens, & Krackhardt, 2000). We then built these networks based on a comprehensive search of alliances formed by computer firms. We used the SDC Platinum database and the Dow Jones News Retrieval Service to track collaborations among computer firms. We employed the UCINET 6 software program to process the network matrices and calculate a firm's status (Borgatti, Everett, & Freeman, 2002). Fifth, we controlled for *industry uncertainty,* defined as the fluctuation of industry sales (Bergh & Lawless, 1998). Lastly, we included a vector of year and industry dummies in our model.

Model Specification

Our models have two issues that require further attention and care. First, firms' appointments of new CEOs may be influenced by unobservable attributes, and statistical models that fail to consider this issue may potentially commit self-selection bias. To correct this bias, we used Heckman's (1979) two-stage model. Our first stage is a probit model with CEO succession as the outcome variable (1 = CEO succession, 0 = no CEO succession). Following Zajac

Table 1
Descriptive Statistics and Correlations

Variables	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12
1. Strategic changes	0.00	1.00	–											
2. CEO newness	0.25	0.27	.10	–										
3. Strategic distance	0.11	1.39	.08	.17	–									
4. Industry similarity	0.13	0.33	.07	.04	.03	–								
5. CEO age	50.73	8.44	–.01	–.18	.04	–.05	–							
6. CEO education	4.28	1.34	–.01	–.07	–.02	.10	.18	–						
7. Firm performance	–0.30	2.36	–.11	–.14	–.01	.04	.06	.01	–					
8. Firm age	2.60	0.76	–.02	–.18	.02	–.08	.34	–.11	.15	–				
9. Firm size	4.60	2.46	–.07	–.12	–.03	.01	.07	–.05	.41	.27	–			
10. Board size	6.92	2.78	.06	–.02	–.01	.00	.15	.01	.16	.28	.58	–		
11. Outside director	0.78	0.15	–.01	.10	.03	.10	.10	–.04	.07	.10	.25	.39	–	
12. Firm status	1.83	5.76	–.06	–.05	–.02	.01	–.05	.04	.09	.10	.43	.21	.11	–
13. Industry uncertainty	0.06	0.37	–.04	–.08	.01	–.03	.11	–.03	.05	.06	–.06	–.07	–.03	–.05

Note: Correlations with absolute values greater than .07 are significant at $p < .05$.

and Westphal (1996), the explanatory variables include firm performance, firm size, board size, outside director, industry uncertainty, CEO duality, length of the prior interval between successions (measured in years), length of time since prior succession, cumulative CEO succession frequency observed during the period, and year and industry dummies. We used a data set of 2,102 firm-year pairs, including firms that experienced CEO successions and those that did not, for the probit model. The results are presented in the appendix. Per Hamilton and Nickerson (2003), we calculated an inverse Mills ratio by using the results of the probit model. This variable was taken into our second stage as an additional control variable.[3] The second-stage model was a regression model where we test our hypotheses focusing on firms with new CEOs in office.

Second, it is important to study whether a random effects model or fixed effects model is most appropriate for our estimation. Since the Hausman test was significant ($\chi^2 = 34.40, p < .01$), the fixed effects model was justified and therefore adopted. We performed the estimations in Stata V.10. All independent variables and control variables were lagged for one year in order to avoid simultaneity bias.

Results

Table 1 presents our descriptive statistics; for brevity, year and industry dummies were included but not reported. We created the interaction terms using the mean-centering approach. Collinearity is not a serious concern because all the variance inflation factors in our estimations are well below the recommended threshold of 10. Table 2 presents our results; Model 1 contains the control variables, Model 2 adds CEO newness, and Models 3 and 4 further examine the interaction effects concerning the boundary condition of CEO newness. All models are significant ($p < .01$), showing that our explanatory variables have significant explanatory power. Moreover, the inverse Mills ratio is positive and significant across models

Table 2
Estimates of Strategic Changes

Variables (hypothesis and expected sign)	Model 1		Model 2		Model 3		Model 4	
Constant	1.083**	(0.333)	0.868*	(0.350)	0.748*	(0.352)	0.724*	(0.357)
CEO age	0.001	(0.003)	0.002	(0.003)	0.002	(0.003)	0.002	(0.003)
CEO education	–0.012	(0.020)	–0.012	(0.020)	–0.010	(0.020)	–0.007	(0.020)
Firm performance	–0.140*	(0.070)	–0.150*	(0.070)	–0.151*	(0.070)	–0.155*	(0.070)
Firm age	0.058	(0.052)	0.073	(0.052)	0.002	(0.003)	0.068	(0.052)
Firm size	0.006	(0.018)	0.005	(0.018)	0.004	(0.018)	0.002	(0.018)
Board size	0.006	(0.011)	0.007	(0.011)	0.008	(0.018)	0.009	(0.011)
Outside director	–0.400*	(0.185)	–0.366*	(0.185)	–0.359†	(0.184)	–0.349†	(0.184)
Firm status	–0.001	(0.005)	–0.001	(0.005)	–0.001	(0.005)	–0.001	(0.005)
Industry uncertainty	0.003	(0.059)	0.004	(0.059)	0.003	(0.058)	0.003	(0.059)
Inverse Mills ratio	0.550**	(0.148)	0.493**	(0.147)	0.447**	(0.148)	0.437**	(0.148)
Independent variables								
Strategic distance	0.018†	(0.011)	0.020†	(0.011)	0.014	(0.019)	0.012	(0.019)
Industry similarity	0.086	(0.055)	0.091†	(0.055)	0.089	(0.055)	0.102†	(0.058)
CEO newness (H1+)			0.076*	(0.045)	0.094*	(0.045)	0.098*	(0.046)
CEO Newness × Strategic Distance (H2+)					0.062*	(0.029)	0.060*	(0.031)
Strategic Distance × Industry Similarity							0.095	(0.108)
CEO Newness × Strategic Distance × Industry Similarity (H3+)							0.011	(0.019)
No. of observations	558		558		558		558	
F	4.10**		5.28**		5.57**		5.88**	
R^2	.185		.209		.228		.231	

Note: Standard errors are in parentheses. Year and industry dummies are included but not reported.
†$p < .10$. *$p < .05$. **$p < .01$ (two-tailed).

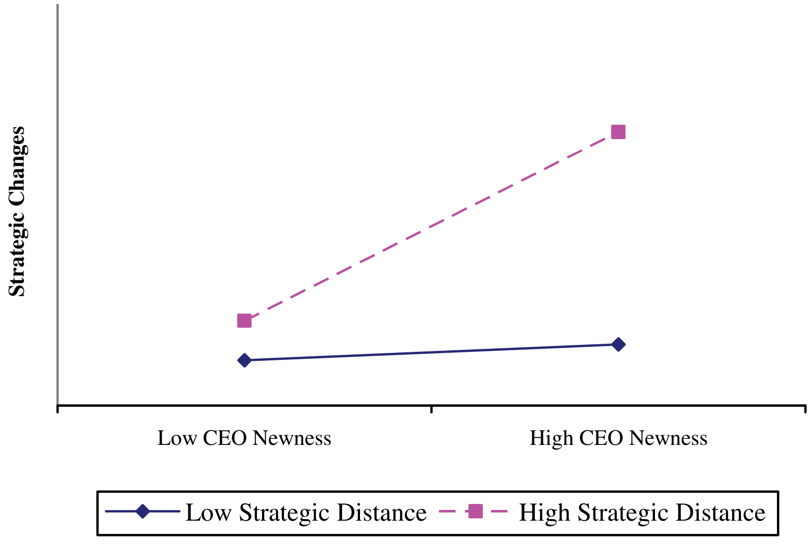
($p < .01$). This indicates that firms experiencing CEO successions are more likely to initiate strategic changes, confirming the need of controlling for the selection bias.

Hypothesis 1 contends that strategic changes are more likely when a CEO has a high level of newness. It predicts a positive relationship between CEO newness and strategic changes. In Model 2 we find a positive and significant coefficient for CEO newness ($\beta = .076, p < .05$), and Hypothesis 1 is therefore supported. This suggests that new CEOs with limited top executive experiences within the focal firms are more likely to initiate changes.

Hypothesis 2 argues that CEO newness is more positively related to strategic changes under the condition of a large strategic distance between a focal firm and a new CEO's previous firm. It predicts a positive interaction of CEO newness and strategic distance in affecting strategic changes. In Model 3 we find a positive and significant coefficient for the interaction of CEO newness and strategic distance ($\beta = .062$, $p < .05$); Hypothesis 2 is therefore supported. This indicates that new CEOs are more likely to initiate strategic changes when the focal firms' existing strategies considerably differ from those of their previous firms.

Hypothesis 3 contends that while CEO newness is positively related to strategic changes under the condition of a large strategic distance between a focal firm and a new CEO's previous firm, its impact will be stronger when the new CEO is hired from another firm in the same industry as opposed to another firm from a different industry. This hypothesis predicts a positive three-way interaction of CEO newness, strategic distance, and industry similarity.

Figure 1
Interaction of CEO Newness and Strategic Distance Between a Focal Firm and a New CEO's Previous Firm



According to our arguments, the expected sign is positive. As indicated in Model 4, although the coefficient is positive, as expected, it does not reach the significant level ($\beta = .011$, $p > .10$); Hypothesis 3 is not supported.

To gain more insights, we plotted the interaction effect of strategic distance and CEO newness in Figure 1. As shown in Figure 1, when the strategic distance between a focal firm and a new CEO's previous firm is at a high level, the relationship between CEO newness and strategic changes is more positive, thereby having a larger slope. When strategic distance between a focal firm and a new CEO's previous firm is at a low level, the relationship between CEO newness and strategic changes becomes less positive, resulting in a smaller slope. Together, this suggests that as CEO newness moves from one standard deviation below the mean to one standard deviation above, strategic changes significantly increase when a great strategic distance exists. Figure 1 therefore supports our Hypothesis 2.

Additional Analyses

We performed four additional analyses as robustness checks. First, as mentioned earlier, if CEO newness is conceptually distinctive, then empirical tests using independent CEO

Table 3
Estimates of Strategic Changes: Additional Analyses

Variables	Model 5		Model 6	
Constant	0.981**	(0.349)	1.109**	(0.367)
CEO age	–0.001	(0.003)	–0.001	(0.003)
CEO education	–0.027	(0.021)	–0.013	(0.022)
Firm performance	–0.099*	(0.049)	–0.100*	(0.051)
Firm age	0.035	(0.054)	0.033	(0.054)
Firm size	0.024	(0.019)	0.025	(0.018)
Board size	0.008	(0.011)	0.007	(0.011)
Outside director	–0.276	(0.193)	–0.312†	(0.194)
Firm status	–0.001	(0.005)	–0.001	(0.005)
Industry uncertainty	–0.055	(0.061)	–0.028	(0.060)
Inverse Mills ratio	0.472**	(0.154)	0.597**	(0.152)
Strategic distance	–0.021	(0.012)	–0.021†	(0.011)
Industry similarity	0.082	(0.058)	0.087	(0.057)
Independent variables				
CEO tenure			–0.006†	(0.004)
Board experience			0.004	(0.010)
Heir apparent experience			0.024	(0.053)
No. of observations	558		558	
F	3.27**		3.47**	
R^2	.156		.157	

Note: Standard errors are in parentheses. Year dummies and industry dummies are not reported.
†$p < .10$. *$p < .05$. ** $p < .01$ (two-tailed).

newness components may account for a lower proportion of variance of strategic changes. Table 3 examines this issue where CEO newness is broken down into three independent components including CEO tenure, prior board experience, and heir apparent experience. In Table 3, Model 5 examines control variables, while Model 6 adds CEO tenure, board experience, and heir apparent experience. As shown in Model 6, the coefficient of CEO tenure is negative and marginally significant (β = –.006, $p < .10$), while the coefficients of board experience and heir apparent experience are insignificant. In particular, the explained variance of Model 6 ($R^2 = .157$; where CEO tenure is the main explanatory variable) is less than that of Model 2 ($R^2 = .209$; where CEO newness is the main explanatory variable). This suggests that all else being equal, CEO newness has greater explanatory power than the three independently examined components. This strengthens our confidence in concluding that it is useful to adopt the CEO newness concept for examining strategic changes.

Second, to make CEO tenure and the CEO newness measure comparable, we created the inverse CEO tenure (1/CEO tenure) as an alternative measure. Results using the inverse CEO tenure measure explain a smaller proportion of variance in strategic changes than do models using CEO newness. Third, we also experimented with different CEO newness measures. For instance, we used the inverse sum of CEO tenure and prior board experience (i.e., excluding heir apparent experience) and the inverse sum of CEO tenure and heir apparent experience (i.e., excluding prior board experience) as different CEO newness measures. Again, models using these two alternative measures exhibit smaller levels of explained variance than those reported in Table 2. Finally, to ensure that CEO newness differs from firm and industry tenure, we included a CEO's firm tenure and industry tenure as additional controls. The results with additional controls are consistent with our main findings.[4]

Discussion

A CEO has an important role in leading strategic changes (Carpenter, 2000; Miller & Shamsie, 2001). Within this stream, CEO tenure has long been an important predictor of strategic changes. An established argument in the literature is that new CEOs, with their fresh views and perspectives, are more likely to initiate changes. Then, as tenure increases, CEOs become entrenched, and their motivation for attempting new alternatives gradually decreases. Accordingly, strategic changes are less likely when a long-tenured CEO is in office. In this study, we argue that the emphasis of CEO tenure, although insightful and important, may have treated all new CEOs as having similar tendencies toward change, while giving limited attention to experiences and relationships developed prior to CEO appointment. Since new CEOs have acquired different experiences before CEO appointments, focusing on CEO tenure alone may not fully recognize the heterogeneity of new CEOs' prior experiences. We examined this issue by first developing a concept of CEO newness, contending that new CEOs are not born out of the vacuum and that whether CEOs are new or old to their firms is not determined solely by CEO tenure but also by their prior top executive experiences via the positions of director, COO, and president within the focal firms. Second, building on this assertion, we examined the boundary conditions of CEO newness. We contend that the impact of CEO newness on strategic changes is moderated by the strategic distance between a focal firm and a new CEO's previous firm as well as by industry similarity. Analyses of strategic changes undertaken by new CEOs in the U.S. computer industry lend support to our hypotheses, suggesting that CEO newness is a useful concept for studying firms' strategic changes.

This research makes two important contributions to the literature. First, we develop the CEO newness concept by integrating a new CEO's top management experiences within a focal firm. While Hambrick and Mason (1984: 199) argued that executives' careers have a profound impact on their decisions, this argument, to the best of our knowledge, has not been formally considered in the research of strategic changes. Fortunately, subsequent research, including that by Tushman and Romanelli (1985) and Bigley and Wiersema (2002), provided inspiration. Tushman and Romanelli (1985) argued that board experience provides formal and informal interactions that allow an executive to understand and accept a firm's social context. Bigley and Wiersema (2002) found that prior heir apparent experience within a focal firm significantly influences a new CEO's tendency toward change. Our conceptualization of CEO newness complements these insights. Importantly, since tenure operates within a layer of social systems, it may have "additive effects" on executives' decisions (Finkelstein et al., 2009: 89). Accordingly, we conceive of CEO newness as linking prior top management experiences to CEO tenure. From our perspective, CEO newness makes a contribution by highlighting the continuous and history-dependent nature of managerial experiences. Consistent with our argument, our findings indicate that new CEOs with fewer top executive experiences within their firms are more likely to enact change. This shows that extensive top executive experiences increase a new CEO's familiarity with a firm, in turn making his or her perspective less fresh and reducing the likelihood of strategic changes.

Second, in addition to experiences within a focal firm, new CEOs may bring external experiences from their previous firms that may further affect their tendencies toward change. New CEOs in focal firms that adopted different strategies from their previous firms may have acquired greater motivation to utilize their perspectives. To examine this issue, we consider the strategic distance between a focal firm and a new CEO's previous firm, arguing that the strategic distance between the two firms may further increase the CEO's tendency toward change. This argument is supported by our findings, and this makes a contribution by considering the nature of a new CEO's *external* experiences, beyond the insider–outsider dichotomy. Under the insider–outsider dichotomy, the nature of a new CEO's experiences may not be fully recognized. While outsiders generally bring fresh perspectives, it remains less clear whether or not the strategic orientations of their experiences are truly different from those of focal firms. Our study provides a more nuanced investigation of a new CEO's external experiences.

Our findings have implications for both researchers and practitioners. On the one hand, the conceptualization of CEO newness suggests that it is important to view an executive's career in a continuous manner, particularly for explaining strategic changes. Since top executives are responsible for a firm's strategies and the interactions among executives provide a unique context for decision making (Carpenter et al., 2004; Tushman & Romanelli, 1985), prior experiences as an heir apparent and/or as a director within a focal firm offer an executive tacit knowledge of the focal firm. However, extensive top management experiences within a focal firm may decrease the freshness of a new CEO's perspective, reducing the CEO's tendency toward change. It is therefore important to incorporate prior top management experiences in addition to CEO tenure into considerations.

CEO newness also has implications for practitioners. For instance, boards of directors often resort to CEO succession when calling for new strategic directions. A suggestion based on our main findings is that boards may need to consider not only CEO tenure but also a new CEO's prior top executive experiences when evaluating the CEO's tendency toward change. A CEO who has extensive prior top management experiences within the focal firm may have a lower inclination to undertake strategic changes. Moreover, a new CEO's tendency toward change is shaped by the strategic distance between a focal firm and the CEO's previous firm. A more comprehensive examination of CEO experiences is therefore needed for boards of directors.

We argue that, in addition to strategic distance, industry similarity between a focal firm and a new CEO's previous firm may matter. We posit that when a focal firm and a new CEO's previous firm are in the same industry it is less costly for a new CEO to utilize his or her existing skills in the focal firm. Industry similarity is therefore hypothesized to strengthen the interaction effect of CEO newness and strategic distance on strategic changes. However, our results do not support this hypothesis. A possible explanation is that although industry boundary matters, it may be less influential in a highly turbulent environment such as the computer industry examined in our study. Future research can continue this inquiry by investigating less turbulent industries.

Our study has several limitations that provide opportunities for future research. First, our research design primarily utilizes secondary data. We do not directly measure CEOs' tendencies toward change, but instead rely on CEO experience indicators as a proxy. Due to the "inherent limitations" to this approach (Priem, Lyon, & Dess, 1999), the extent to which a CEO's perspective is affected by his or her prior experience may remain a "black box problem" (Lawrence, 1997). We encourage future research to adopt other methods, such as surveys or interviews, to assess CEOs' perspectives. Second, although strategic changes are the focus of our study, we by no means intend to say that more strategic changes are necessarily beneficial to firms. Since firms must move out of their comfort zones during the change process, strategic changes may be challenging and potentially counterproductive for firm performance. Future research can study the performance consequences of strategic changes across a new CEO's life cycle and examine whether or not the strategic distance between a focal firm and the new CEO's previous firm has performance implications. Third, our research was undertaken in the United States, where CEOs generally have greater discretion (Crossland & Hambrick, 2007). Although the single-industry/single-country research design allows us to control for unobservable factors, it remains in question whether or not our findings hold in culturally and institutionally dissimilar environments. Studies examining a distinctive environment can be an interesting extension of our research. Finally, in addition to CEOs, strategic changes may be initiated by boards of directors, which may influence new CEOs' change decisions (Westphal & Fredrickson, 2001). It will be interesting to see studies that assess boards' potential impacts on firms' strategic changes throughout new CEOs' office.

Conclusion

Although CEO tenure is an established and significant predictor of strategic changes, it has the potential limitation of not being able to adequately recognize a new CEO's previous experiences. In response, our study proposes a concept of CEO newness, contending that incorporating a new CEO's prior top management experiences within a focal firm via the positions of director, COO, and president —in addition to CEO tenure—can provide a more complete assessment of the CEO's tendency toward change. We also argue that the influence of CEO newness on strategic changes may be contingent on the strategic distance between a focal firm and a new CEO's previous firm as well as the industry similarity between the two firms. By analyzing a sample of new CEOs in U.S. computer firms, we find support for our hypotheses. The results not only suggest the usefulness of CEO newness but also indicate the importance of considering the nature of a new CEO's experiences within his or her previous firm. In conclusion, we hope our arguments and findings will spur further research investigating a new CEO's previous experiences and analyzing their impact on strategic decisions.

Appendix

Probit Model of CEO Succession

Variables	Estimates	
Constant	–0.971*	(0.456)
Firm performance	–0.048**	(0.016)
Firm size	–0.002	(0.021)
Board size	0.024	(0.022)
Outside director	0.576†	(0.316)
Industry uncertainty	0.082	(0.098)
CEO duality	–0.270**	(0.078)
Length of prior succession interval	–0.025**	(0.008)
Length of time since prior succession	–0.012	(0.009)
Cumulative succession frequency	–0.139*	(0.055)
No. of observations	2,102	
χ^2	43.36**	
R^2	.051	

Note: Standard errors are in parentheses. Year dummies and industry dummies are not reported.
†$p < .10$. *$p < .05$. **$p < .01$ (two-tailed).

Notes

1. See http://www.zoominfo.com/.

2. In unreported analyses, we followed the latter approach to create a composite measure of strategic changes and obtained qualitatively similar results.

3. Results based on an alternative Heckman model, which examines the likelihood of outsider succession (1 = outsider succession, 0 = otherwise), are consistent with our main findings. We thank an anonymous reviewer for suggesting this analysis.

4. We conducted additional analyses for examining other potential boundary conditions of CEO newness. Specifically, we tested our models by splitting the sample according to the median level of CEO tenure and the median level of firm performance. The subsample analyses show that CEO newness has a greater impact on strategic changes when CEOs are in an early phase of their office (i.e., CEO tenure is below the sample median). We also found that CEO newness is more positively related to strategic changes when firm performance is more satisfactory (i.e., firm performance is above the sample median). We thank an anonymous reviewer for suggesting these additional analyses.

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