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Conceptualizing Corporate Entrepreneurship Strategy

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Our knowledge of corporate entrepreneurship (CE) continues to expand. However, this knowledge remains quite fragmented and non-cumulative. Herein, we conceptualize CE strategy as a useful focal point for integrating and synthesizing key elements within CE's intellectual domain. The components of our CE strategy model include (1) the *antecedents* of CE strategy (i.e., individual entrepreneurial cognitions of the organization's members and external environmental conditions that invite entrepreneurial activity), (2) the *elements* of CE strategy (i.e., top management's entrepreneurial strategic vision for the firm, organizational architectures that encourage entrepreneurial processes and behavior, and the generic forms of entrepreneurial process that are reflected in entrepreneurial behavior), and (3) the *outcomes* of CE strategy (i.e., organizational outcomes resulting from entrepreneurial actions, including the development of competitive capability and strategic repositioning). We discuss how our model contributes to the CE literature, distinguish our model from prior models, and identify challenges future CE research should address.

Introduction

Conditions in the global business environment demand that established firms adopt entrepreneurial strategies (e.g., McGrath & MacMillan, 2000; Morris, Kuratko, & Covin, 2008) as a path to success. According to Cooper, Markman, and Niss (2000, p. 116), for example, "entrepreneurial strategies suggest ways to revitalize existing organizations and make them more innovative." As Amit, Brigham, and Markman (2000) observed, "entrepreneurial strategies allow people to be innovative, creative, and responsible for decisions that they make" (quoted in Meyer & Heppard, 2000, p. 10). From the perspective of organizational strategy, this outcome may be highly desirable. The reason for this is that diffusing strategic capabilities throughout firms and empowering individuals to leverage them is foundational to successfully developing and implementing strategies (Liedtka & Rosenblum, 1996). By pursuing entrepreneurial strategies, firms place themselves in positions to regularly and systematically recognize and exploit entrepreneurial

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opportunities (Eisenhardt, Brown, & Neck, 2000). In short, what entrepreneurial strategy does or can do for a firm has been a subject of much discussion (Ireland, Hitt, Camp, & Sexton, 2001; Kuratko, Ireland, Covin, & Hornsby, 2005).

Zahra, Jennings, and Kuratko's (1999) review of the corporate entrepreneurship (CE) literature concluded with the observation that a need exists to explore different conceptualizations of firm-level entrepreneurship. Entrepreneurial strategy is arguably a core construct within the CE literature and a specific manifestation of firm-level entrepreneurship. Cooper et al. (2000, p. 120) asserted that "entrepreneurial strategy has begun to be viewed as a potential source of firms' competitive advantage, a way in which established firms can develop capabilities that are central to their continuing success."

In spite of its potential importance, a precise specification of what entrepreneurial strategy *is* has been elusive for scholars. Hitt stated, "It is difficult to provide a precise definition of entrepreneurial strategy . . ." (quoted in Meyer & Heppard, 2000, p. 5). Likewise, Eisenhardt commented, "The term entrepreneurial strategy may signal too many different things to people, and trying to label strategies as entrepreneurial can be awkward" (quoted in Meyer & Heppard, 2000, p. 6).

A fair amount of evidence supports Eisenhardt's claim. For example, Amit et al. (2000) defined entrepreneurial strategy as a largely internal, organizational phenomenon: "When we discuss entrepreneurial strategies, we are focusing primarily on the internal organization of the firm rather than on the more complex notion of dynamic competitive strategies" (quoted in Meyer & Heppard, 2000, p. 9). By contrast, Morris et al. (2008, p. 198) state the following: ". . . the application of entrepreneurial thinking to the firm's core strategy is primarily dealing with the following external questions. Where are the unfulfilled spaces in the marketplace? How can the firm differentiate itself on a sustained basis? Where can we lead the customer?"

To some, such as Russell and Russell (1992, p. 640), entrepreneurial strategy is a possible element of the larger corporate strategy: ". . . an entrepreneurial strategy involves a persistent, organizationally sanctioned pattern of innovation-related activities and resource allocations that compose one component of the firm's comprehensive corporate strategy." To others, such as Barney (quoted in Meyer & Heppard, 2000, p. 11), "If you define entrepreneurship as the process of creating economic rents, then entrepreneurial strategy and entrepreneurship are essentially synonymous. Any rent-generating strategy is entrepreneurial." Some scholars use the term entrepreneurial strategy to refer to a specific strategy (e.g., Mintzberg & Waters, 1985). Others (e.g., Drucker, 1985; Johnson & Van de Ven, 2002; Kazanjian, Drazin, & Glynn, 2002; Murray, 1984) conceive of entrepreneurial strategy as being manifested in many forms. A net effect of the disparate ways in which entrepreneurial strategy has been depicted in the literature is the failure of this literature to produce satisfyingly cumulative knowledge on the topic. Moreover, those who might seek to enact entrepreneurial strategies in their firms are virtually guaranteed to be confused by the array of ideas in the literature.

Before examining its component parts, we think it is important to place our model contextually. In this regard, we can note that we do *not* seek to use this model to represent how entrepreneurship commonly intervenes or interfaces with an organization's strategic processes. As Burgelman (1983) cogently argued, entrepreneurial initiatives commonly occur as unplanned by-products of an organization's deliberate and spontaneous actions. Thus, the occurrence of autonomous entrepreneurial actions within a firm's strategic processes or the validation of such initiatives through those processes does not necessarily signify the presence of a CE strategy. Rather, consistent with the strategic entrepreneurship concept (Ireland & Webb, 2007b; Ireland, Hitt, & Sirmon, 2003), we argue that CE strategy implies that a firm's strategic intent (Hamel & Prahalad, 1989) is to continuously and deliberately leverage entrepreneurial opportunities (Shane & Venkataraman, 2000) for growth- and advantage-seeking purposes. Thus, while evidence of entrepreneurial initiatives can be located in many and perhaps most established organizations, the mere presence or ubiquity of those initiatives should not be interpreted as evidence that a CE strategy is in use. As we are proposing the concept, CE strategy implies a level of purposefulness and intentionality with respect to entrepreneurial initiatives that is anything other than inevitable.

Given the evidence cited earlier and the status of the field's knowledge about corporate entrepreneurship as strategy, we seek to present a model of corporate entrepreneurial strategy (herein labeled CE strategy to distinguish it from the strategy of independent new ventures). We define CE strategy as *a vision-directed, organization-wide reliance on entrepreneurial behavior that purposefully and continuously rejuvenates the organization and shapes the scope of its operations through the recognition and exploitation of entrepreneurial opportunity*.[1] The specific purpose of our work is to outline a model depicting (1) the individual (i.e., person-based) and environmental antecedents of a CE strategy, (2) the most salient elements of a CE strategy (and the relationships among these elements), and (3) the organizational outcomes associated with using a CE strategy. In the context we are describing here then, we seek to depict corporate entrepreneurship as a distinct, identifiable type of strategy, bring a significant degree of clarity to the matter of how CE strategy might be conceptualized and, thereby, provide a useful reference point for future theoretical explorations and managerial actions.

Our paper proceeds as follows. We first discuss the principal ways in which our model of CE strategy is distinct from existing models of entrepreneurial phenomena in established organizations. We then introduce the key constructs of CE strategy and propose specific linkages between the various components of CE strategy as well as linkages between those CE strategy components and their antecedents and consequences. The paper closes with summary comments as well as suggestions for future research.

Prior Models of Entrepreneurial Phenomena in Established Organizations

Sharma and Chrisman (1999, p. 18) define CE as "the process whereby an individual or a group of individuals, in association with an existing organization, create a new organization or instigate renewal or innovation within that organization." Various models of CE appear in the scholarly literature. The proposed model of CE strategy is distinct from prior models of entrepreneurial phenomena in established organizations in four important aspects—the behavioral dimension, the locus of entrepreneurship, the philosophical justification, and CE as a unique and identifiable strategy. We briefly consider nine prior models.[2] These models are summarized in Table 1. They are reviewed on the basis of five criteria—the focal entrepreneurial phenomenon, the locus of entrepreneurship, the

1. Entrepreneurial opportunities can be either discovered or created (Alvarez & Barney, 2005, 2008; Lumpkin & Lichtenstein, 2005). In the current manuscript, opportunity recognition is conceived of as the larger entrepreneurial process within which both opportunity discovery and opportunity creation occur.
2. Additional models of CE-related phenomena can be found throughout the entrepreneurship and strategy literatures. Examples include those of Antoncic (2003), Block and MacMillan (1993), Floyd and Wooldridge (1999), Hayton (2005), Ireland et al. (2003), Morris et al. (2008), and Sathe (2003). The specific models reviewed herein are representative of the diverse foci of CE models appearing in the literature. Two of the models discussed here—those of Covin and Slevin (1991) and Lumpkin and Dess (1996)—are reviewed in detail because of their relatively greater overall similarity and relevance to the specific focus of the proposed CE strategy model.

Table 1

Models of Entrepreneurial Phenomena in Established Organizations

	Model characteristics				
Model	Focal entrepreneurial phenomenon	Locus of entrepreneurship	Relationship between entrepreneurial phenomenon and strategy	Causally adjacent antecedents of the entrepreneurial phenomenon	Causally adjacent outcomes of the entrepreneurial phenomenon
Burgelman (1983)	ICV	Corporate management, new venture division management, group leader/venture manager	Corporate strategy can be extended to accommodate new business activities resulting from ICV	Structural context—organizational and administrative mechanisms used implement the current corporate strategy	Corporate strategy changes
Covin and Slevin (1991)	EO	Not specified	Reciprocal relationship between EO and strategy	Firm performance, strategic variables, environmental variables, managerial and organizational variables	Firm performance, strategic variables, environmental variables, managerial and organizational variables
Dess et al. (2003)	Sustained regeneration, organizational rejuvenation, strategic renewal, domain redefinition	Not specified	Not specified	Prior organizational knowledge	Acquisitive and experimental organizational learning
Floyd and Lane (2000)	Strategic renewal (SR)	Top-, middle-, and operating-level managers	SR process leads to changes in strategy	Macroenvironment, competitive environment, organizational control systems	Macroenvironment, competitive environment, organizational control systems
Guth and Ginsberg (1990)	ICV and SR	Not specified	Strategy directly affects ICV and SR	Environmental variables, strategic leaders, organization conduct/form variables, firm performance	Firm performance
Hornsby et al. (1993)	Individual-level entrepreneurial behavior	Individuals/organizational members	Not specified	Organizational characteristics, individual characteristics, precipitating event	Business/feasibility planning
Kuratko et al. (2004)	Individual-level entrepreneurial behavior	Individuals/organizational members	Individual-level entrepreneurial behavior affects and is affected by strategy, both indirectly (organization is mediator)	Organizational antecedents—rewards, management support, resources, organizational boundaries, work discretion/autonomy	Intrinsic and extrinsic individual-level outcomes, financial and behavioral organizational-level outcomes
Kuratko, Ireland, et al. (2005)	Individual-level entrepreneurial behavior	Middle-level managers	Not specified	Organizational antecedents—management support, work discretion/autonomy, rewards/reinforcements, time availability, organizational boundaries	Various possible individual- and organizational-level outcomes
Lumpkin and Dess (1996)	EO	Not specified	Strategy and EO are distinct, non-causally related phenomena	Not specified	Firm performance

ICV, Internal corporate venturing; EO, entrepreneurial orientation; SR, strategic renewal.

relationship between the entrepreneurial phenomenon and strategy, the causally adjacent antecedents of the entrepreneurial phenomenon, and the causally adjacent outcomes of the entrepreneurial phenomenon.

Guth and Ginsberg's (1990) model depicts some possible determinants and effects of the CE phenomena of corporate venturing and strategic renewal. Their model is very general in that it does not distinguish between the causes and effects of these two entrepreneurial phenomena that, they argue, constitute CE's domain. Importantly, in the Guth and Ginsberg (1990) model, CE is not portrayed as a strategy but as a set of phenomena that exist separate from strategy. Along with structure, process, and core values and beliefs, strategy is identified as an organizational-level driver of CE in this model.

The specific CE phenomena of internal corporate venturing and strategic renewal are the foci of Burgelman's (1983) and Floyd and Lane's (2000) models, respectively. Both of these models are process-focused. That is, they depict how the venturing and renewal processes manifest themselves within organizations, with a particular focus on the roles and behaviors of various levels of management within the entrepreneurial phenomena of interest. Why the entrepreneurial phenomena of venturing or renewal come about as well as their ultimate effects are not of particular concern in these conceptualizations. In essence, the Burgelman (1983) and Floyd and Lane (2000) models illuminate the workings *within* the venturing and renewal boxes, as depicted in the Guth and Ginsberg (1990) model. As with the Guth and Ginsberg model, strategy is exogenous to Burgelman's and Floyd and Lane's depictions of how the venturing and renewal processes, respectively, operate.

An alternative representation of the domain of CE is adopted in the Dess et al. (2003) model of how knowledge is created through four types of CE activity. Specifically, rather than adopting Guth and Ginsberg's (1990) categorization scheme of corporate venturing and strategic renewal for describing the phenomena of CE, Dess et al. base their CE model on the four forms of CE proposed by Covin and Miles (1999)—namely, sustained regeneration, organizational rejuvenation, strategic renewal, and domain redefinition. The Dess et al. model outlines how acquisitive and experimental learning processes mediate the relationships between the aforementioned CE forms and the emergence of specific types of knowledge (i.e., technical, integrative, and exploitive). Firm strategy is neither an explicit nor implied component of the Dess et al. model. Rather, this model is tightly focused on exploring the causal interrelationships between specific CE forms and organizational learning.

The Hornsby et al. (1993) model of the determinants of new venture championing behavior is similar to the Burgelman (1983) model in that it focuses on the specific CE phenomenon of internal corporate venturing. The Hornsby et al. model, however, is more limited in scope, focusing on what causes individuals to "act intrapreneurially." This sole focus on the individual (albeit within a larger organizational context) clearly distinguishes the Hornsby et al. model from the current model's focus on CE as an identifiable, distinct strategy.

Variations on the Hornsby et al. (1993) model have been proposed by Kuratko et al. (2004) and Kuratko, Ireland, et al. (2005). Specifically, the Kuratko et al. (2004) model extends that of Hornsby et al. by depicting individuals' and organizations' evaluations of entrepreneurial outcomes as determinants of future individual-level entrepreneurial behavior. The Kuratko, Ireland, et al. (2005) model retains this evaluative process component and is focused more specifically on the antecedents and outcomes of middle-level managers' entrepreneurial behavior. As with the Hornsby et al. model, neither of these latter models is intended to depict CE as a strategic construct.

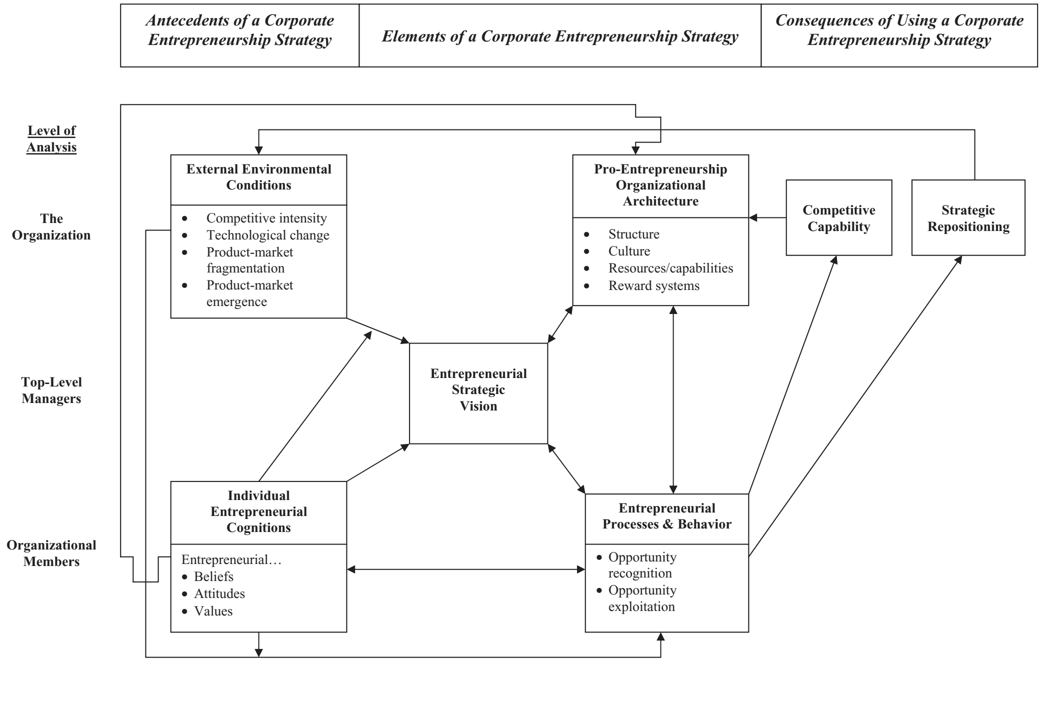
Covin and Slevin's (1991) and Lumpkin and Dess's (1996) models have the greatest similarity to the one we present in this paper. These authors modeled the antecedents and/or consequences of the organizational-level phenomenon of entrepreneurial orientation (EO), defined by Lumpkin and Dess (p. 136) as "the processes, practices, and decision-making activities that lead to new entry." The current model of a CE strategy differs from these two commonly cited models of EO in four important ways—(1) by conceptualizing EO as an organizational state or quality, (2) by specifying organizational locations from which entrepreneurial behavior and processes may emerge, (3) by explicitly specifying a philosophical component of a CE strategy, and (4) by specifying that organizations can pursue entrepreneurship as a separate and identifiable strategy.

First, EO is an organizational state or quality that is defined in terms of several behavioral dimensions. Based on the pioneering work of Miller (1983), Covin and Slevin (1991) defined EO as implying the presence of organizational behavior reflecting risk-taking, innovativeness, and proactiveness. Lumpkin and Dess's (1996) model of EO adds competitive aggressiveness and autonomy to this list of attributes. By contrast, the CE strategy model shown in Figure 1 specifies not what the behavioral dimensions of EO are, but how the organizational state or quality that is EO is manifested across the organization by implementing a particular strategy. As such, an EO is subsumed within our model of CE strategy. However, unlike the current CE strategy model, existing EO models do not specify where to look for evidence of entrepreneurship within the organization.

Second, and similar to the preceding point, existing EO models identify no specific locus or loci of entrepreneurship. In particular, the question of where within the

Figure 1

An Integrative Model of Corporate Entrepreneurship Strategy



organization entrepreneurial behavioral and processes originate is not addressed. Rather, it is simply noted that in entrepreneurial organizations, "particular [entrepreneurial] behavioral patterns are recurring" (Covin & Slevin, 1991, p. 7). By contrast, the current model, by virtue of its depiction of CE strategy as having three distinct elements, clearly specifies a set of organizational locations from which entrepreneurial behavior and processes can be expected to emerge.

Third, in existing EO models, the presence of an entrepreneurial orientation is inferred from evidence of organizational behavior reflecting the risk-taking, innovativeness, proactiveness, competitive aggressiveness, and/or autonomy dimensions. Consistent with Lumpkin and Dess's (1996) definition of EO and Covin and Slevin's (1991, p. 8) assertions involving this phenomenon (e.g., "An organization's actions make it entrepreneurial"), organizational behavior is regarded as the means through which an EO can be recognized. By contrast, the current model of a CE strategy treats entrepreneurial behavior as but partial evidence of the presence of a CE strategy. The CE strategy phenomenon also has a philosophical component, represented by entrepreneurial strategic vision that accompanies and provides the value justification and stimulus for a pro-entrepreneurial organizational architecture as well as for entrepreneurial processes and behavior. While this philosophical justification for entrepreneurial behavior could be assumed to operate in models of EO, it is made explicit in the current model.

Fourth, and perhaps most importantly, current EO models (as with Guth and Ginsberg's [1990] CE model) explicitly depict strategy as a factor separate from EO. Lumpkin and Dess's (1996) model depicts strategy as a moderator of the EO–organizational performance relationship. Covin and Slevin's (1991) model does the same, but also notes that EO and strategy may be reciprocally related. The proposed CE strategy model, by contrast, *is* a model of a unique, identifiable strategy—entrepreneurial strategy as manifested in established organizations. The distinguishing premise of our model is that entrepreneurship can be pursued as an organizational strategy *per se*. This point is not novel to the current discussion. Recently, others have advanced the possibility that entrepreneurial strategy is a distinct type of organizational strategy (see Hitt, Ireland, Camp, & Sexton, 2002; Ireland & Webb, 2007b; Ireland et al., 2001, 2003; Meyer & Heppard, 2000). What distinguishes the current model is its depiction of how corporate entrepreneurship can be manifested as an identifiable strategy, as inferable from the presence of *patterns* of entrepreneurial behavior and an overall *perspective* that lends meaning to and directs that activity (Mintzberg, 1987a).

A Model of Corporate Entrepreneurship Strategy

As depicted in Figure 1, we believe that a CE strategy is manifested through the presence of three elements: an entrepreneurial strategic vision, a pro-entrepreneurship organizational architecture, and entrepreneurial processes and behavior as exhibited across the organizational hierarchy. Our conceptualization of CE as a strategy uses two of Mintzberg's (1987a,b) "five definitions of strategy"—strategy as perspective and strategy as pattern. As *perspective*, a CE strategy represents a shared ideology favoring the pursuit of competitive advantage principally through innovation and entrepreneurial behavior on a sustained basis (Russell, 1999). This ideology is reflected in the *entrepreneurial strategic vision* element of our model. As *pattern*, CE strategy denotes a continuous, consistent reliance on entrepreneurial behavior, "whether intended or not" (Mintzberg, 1987a, p. 12). The consistent behavior required to enact a CE strategy is captured in our model by *entrepreneurial processes and behavior*. Organizational architecture is the conduit used to assure congruence between perspective (the vision) and pattern (the consistent behaviors). In slightly different words, the pro-entrepreneurship organizational architecture shown in Figure 1 is a recursive path through which entrepreneurial vision and behaviors interact to create a CE strategy. In addition, the antecedents of CE strategy (i.e., individual entrepreneurial cognitions of the organization's members and external environmental conditions that invite entrepreneurial activity) and the outcomes of CE strategy (i.e., organizational outcomes resulting from entrepreneurial actions, including the development of competitive capability and strategic repositioning) are shown in the model.

The Antecedents

Individual Entrepreneurial Cognitions to Entrepreneurial Strategic Vision

Entrepreneurial cognitions are "the knowledge structures that people use to make assessments, judgments, or decisions involving opportunity evaluation, venture creation, and growth" (Mitchell et al., 2002, p. 97). The specific entrepreneurial cognitions of interest in the current model include individuals' beliefs, attitudes, and values regarding entrepreneurship. Entrepreneurial beliefs are the fundamental thoughts one harbors about entrepreneurship. When entrepreneurial beliefs are about matters for which evaluative judgments are made, they represent entrepreneurial attitudes. Long lasting, deeply held, and prescriptive or proscriptive entrepreneurial attitudes denote entrepreneurial values. We refer to entrepreneurial beliefs, attitudes, and values reflecting a positive disposition toward entrepreneurial phenomena as pro-entrepreneurship cognitions.

Consistent with what Meyer and Heppard (2000) refer to as an "entrepreneurial dominant logic," an entrepreneurial strategic vision represents a commitment to innovation and entrepreneurial processes and behavior that is expressed as the organization's philosophical modus operandi. Sometimes only defining areas in which opportunities are to be sought (Muzyka, De Koning, & Churchill, 1995), an effective entrepreneurial strategic vision is more a reflection of an entrepreneurial mind-set—or a way of thinking about business that captures the benefits of uncertainty (McGrath & MacMillan, 2000)—than a precursor to particular strategic commitments. Top-level managers articulating an entrepreneurial strategic vision seek to direct attitude and outlook more than specific behavior. An entrepreneurial strategic vision is the mechanism by which top-level managers paint the picture of the type of organization they hope to lead in the future—an organization that is opportunity-focused, innovative, and self-renewing.

A premise of the current model is that pro-entrepreneurship cognitions among top-level managers are essential to the emergence of an entrepreneurial strategic vision. The presence of pro-entrepreneurship cognitions suggests that individuals have broadly favorable thoughts about entrepreneurship as a phenomenon, and that these thoughts are non-context-specific—that is, they exist as "personal" cognitions rather than as products of the specific situations in which individuals may find themselves. Entrepreneurial strategic visions emerge when top-level managers' broadly favorable thoughts about entrepreneurship collectively assume a coherent form that has meaning and prescriptive value for the organization. In other words, the organization becomes the specific vehicle to which the non-context-specific pro-entrepreneurship cognitions are applied. The following proposition is offered:

> **Proposition 1:** The strength of top-level managers' pro-entrepreneurship cognitions is positively related to the emergence of an entrepreneurial strategic vision.

Individual Entrepreneurial Cognitions to Pro-Entrepreneurship Organizational Architecture

Pro-entrepreneurship cognitions are not solely within the cognitive domain of top-level managers. Rather, managerial and non-managerial persons throughout organizations can manifest them. When pro-entrepreneurship cognitions are broadly descriptive of members, they are reflected in the organization's culture. "The way we do things around here" and, reflecting greater intentionality of behavior, "The way we expect to do things around here" describe organizational culture (Weick & Sutcliffe, 2001). More formally, culture reflects shared basic assumptions that a collective body has developed to denote appropriate ways to identify and cope with issues and opportunities (Schein, 1985).

Just as the non-context-specific pro-entrepreneurship cognitions of top-level managers are expected to influence the emergence of an entrepreneurial strategic vision, the non-context-specific pro-entrepreneurship cognitions of the entire organizational membership are expected to influence the strength of cultural norms favoring entrepreneurial behavior. Again, the organization becomes the specific vehicle to which the non-context-specific pro-entrepreneurship cognitions are applied. As implied by the dual-headed arrow between the Individual Entrepreneurial Cognitions and the Pro-Entrepreneurship Organization Architecture boxes of Figure 1, an organization's culture may also affect its members' non-context-specific thoughts about entrepreneurship. Thus, a relationship of reciprocal causality is anticipated between organizational members' entrepreneurial cognitions and the presence of cultural norms favoring entrepreneurial behavior. The following proposition is offered:

> **Proposition 2:** The strength of organizational members' pro-entrepreneurship cognitions is positively related to the strength of cultural norms favoring entrepreneurial behavior.

Individual Entrepreneurial Cognitions to Entrepreneurial Processes and Behavior

While entrepreneurial behavior can be manifested through many specific actions, recognizing and exploiting opportunity are the essence of entrepreneurial behavior as well as the defining processes of entrepreneurship (Shane & Venkataraman, 2000). When an organization's members harbor pro-entrepreneurship cognitions, they will more likely recognize and seek to exploit entrepreneurial opportunities, defined by Eckhardt and Shane (2003, p. 336) as "situations in which new goods, services, raw materials, markets and organizing methods can be introduced through the formation of new means, ends, or means-ends relationships." The expectation that pro-entrepreneurship cognitions will lead to entrepreneurial opportunity recognition is consistent with arguments by Mitchell et al. (2002), Shane and Venkataraman, and Eckhardt and Shane that cognitions can predispose individuals toward recognizing entrepreneurial opportunity. The actual pursuit of opportunities is a function of how attractive they are to the individuals who recognized them—that is, a function of the strength of the individuals' pro-entrepreneurship cognitions. In short, the following proposition is offered:

> **Proposition 3 (a,b):** The strength of organizational members' pro-entrepreneurship cognitions is positively related to the probability that those individuals will (a) recognize entrepreneurial opportunities and (b) seek to exploit entrepreneurial opportunities.

External Environmental Conditions to Entrepreneurial Strategic Vision

Certain increasingly common environmental conditions can precipitate the perceived need for a CE strategy. Zahra (1991) argued that greater amounts of environmental hostility, dynamism, and heterogeneity call for a CE strategy. Similarly, Lumpkin and Dess (1996) suggested that firms facing rapidly changing, fast-paced competitive environments might be best served by implementing a CE strategy. The list of environmental conditions that can trigger entrepreneurial activity in established firms is quite extensive (see, for example, Kuratko et al., 2004; Sathe, 2003; Stopford & Baden-Fuller, 1994). Based on a review of literature in the areas of corporate entrepreneurship and organizational innovation, Schindehutte, Morris, and Kuratko (2000) identified no less than 40 "key triggers" of CE activity, roughly half of which would be considered "environmental" in nature.

We believe that an entrepreneurial strategic vision is a logical response to the presence of three often-related environmental conditions: competitive intensity, technological change, and evolving (fragmenting and/or emerging) product-market domains. Other environmental conditions could be antecedents to an entrepreneurial strategic vision. However, given the theoretical and empirical support for their significance, we focus on these three conditions as the principal external transformational triggers that can, in the presence of pro-entrepreneurship cognitions among top-level managers, lead to the emergence of an entrepreneurial strategic vision.

Competitive intensity is often associated with relative parity among firms competing in an industry (Porter, 1980). To break out of parity, firms must create and exploit some basis for competitive advantage. This frequently translates into an innovation imperative. That is, firms must pursue technological, product, market, strategic, or business model innovation, exploiting opportunities to compete on distinct and valued bases, or risk being pushed out of the market by rivals who do.

Technological change creates a situation where competitive advantage is short-lived. Barring strong appropriability regimes that protect technological knowledge, firms with technology-based competitive advantages often must scramble to exploit them before the forces of technological diffusion erode them (Teece, 1986). Metaphorically speaking, firms in such environments are on an innovation treadmill. They must continuously innovate to stay in the game, and they must innovate ahead of their competitors—in ways or arenas that markets value—to achieve competitive superiority.

The evolutionary forces of *fragmentation and emergence in the firm's product-market domain(s)* are the third external environmental condition that invites the emergence of an entrepreneurial strategic vision in organizations whose top-level managers harbor pro-entrepreneurship cognitions. Fragmenting product-market domains contribute to heightened environmental heterogeneity, an environmental dimension associated with the adoption of CE strategies (Miller & Friesen, 1984). In particular, fragmentation creates opportunities for successful new product introductions. By providing new product-based value propositions that more closely match the demand characteristics of evolving markets, firms can position their products to intersect with the evolutionary paths of their markets. Likewise, market emergence creates innovation opportunities. Such emergence can be an exogenous evolutionary force to which the firm using a CE strategy can react, preempting competitors in the pursuit of opportunity (Covin, Slevin, & Heeley, 2000).

Thus, intense competition, rapid technological change, and the conditions of product-market fragmentation and/or emergence individually and collectively define an environmental context conducive to the emergence of entrepreneurial opportunities. While such opportunities may be recognized and pursued by various levels of management within an organization, it is essential to the emergence of a CE strategy that top-level managers embrace the concept and promise of entrepreneurship as the organization's modus operandi. A recurring theme in the CE literature is that "the entrepreneurial message must flow from the top" (Higdon, 2000, p. 16). Top-level managers are recognized as the "purveyors of vision" (Heller, 1999) and shapers of corporate purpose (Bartlett & Ghoshal, 1997). Moreover, organizational members must understand the entrepreneurial vision from the perspective of senior management (Kuratko, Hornsby, Naffziger, & Montagno, 1993).

Of course, not all executives whose organizations face the environmental conditions described earlier will embrace an entrepreneurial strategic vision. Consistent with the concept of strategic choice (Child, 1972), the state of the environment cannot result in the emergence of an entrepreneurial strategic vision regardless of top-level managers' entrepreneurial cognitions. However, top-level managers' entrepreneurial cognitions can result in the emergence of an entrepreneurial strategic vision regardless of the state of the environment. Stated differently, the identified external environmental conditions will only influence the emergence of an entrepreneurial strategic vision when top-level managers' cognitions exhibit some degree of pro-entrepreneurship bias. The stronger this bias, the more likely it will be that the previously identified environmental conditions will be associated with the emergence of an entrepreneurial strategic vision as suggested in the following proposition:

> **Proposition 4 (a,b,c):** The (a) intensity of competition, (b) rapidity of technological change, and (c) extensiveness of product-market domain change (as reflected in product-market fragmentation and emergence rates) are positively related to the emergence of an entrepreneurial strategic vision among top-level managers.

> **Proposition 5 (a,b,c):** The (a) intensity of competition, (b) rapidity of technological change, and (c) extensiveness of product-market domain change (as reflected in product-market fragmentation and emergence rates) are more positively related to the emergence of an entrepreneurial strategic vision when top-level managers have strong pro-entrepreneurship cognitions than when those individuals do not have strong pro-entrepreneurship cognitions.

External Environmental Conditions to Entrepreneurial Processes and Behavior

An argument parallel to that advanced above also explains the anticipated relationship between organizational members' entrepreneurial behaviors and the external environmental conditions of competitive intensity, technological change, and product-market domain evolution. Specifically, just as entrepreneurial cognitions were argued to moderate the relationship between conditions in an organization's environment and the emergence of an entrepreneurial strategic vision, they will also likely moderate the relationship between conditions in an organization's environment and the processes of opportunity recognition and exploitation within which specific entrepreneurial behaviors occur.

Generally speaking, organizational members' pro-entrepreneurship cognitions facilitate recognizing entrepreneurial opportunity by enabling these individuals to be well attuned to the presence of such opportunity (Kuratko et al., 1993; McGrath & MacMillan, 2000). As noted earlier, competitive intensity, technological change, and product-market domain evolution will be conducive to the emergence of entrepreneurial opportunities. Thus, these environmental conditions should be most strongly associated with opportunity recognition among an organization's members when those members have pro-entrepreneurship cognitions. Such cognitions, reflecting favorability toward entrepreneurial phenomena, should also lead to efforts to exploit the entrepreneurial opportunities emerging from environments with the aforementioned characteristics. These expectations are formalized in the following propositions:

> **Proposition 6 (a,b,c):** The (a) intensity of competition, (b) rapidity of technological change, and (c) extensiveness of product-market domain change (as reflected in product-market fragmentation and emergence rates) are positively related to the probability that organizational members will recognize entrepreneurial opportunities.

> **Proposition 7 (a,b,c):** The (a) intensity of competition, (b) rapidity of technological change, and (c) extensiveness of product-market domain change (as reflected in product-market fragmentation and emergence rates) are more positively related to the probability that organizational members will recognize entrepreneurial opportunities when those members have strong pro-entrepreneurship cognitions than when those members do not have strong pro-entrepreneurship cognitions.

> **Proposition 8 (a,b,c):** The (a) intensity of competition, (b) rapidity of technological change, and (c) extensiveness of product-market domain change (as reflected in product-market fragmentation and emergence rates) are positively related to the probability that organizational members will seek to exploit entrepreneurial opportunities.

> **Proposition 9 (a,b,c):** The (a) intensity of competition, (b) rapidity of technological change, and (c) extensiveness of product-market domain change (as reflected in product-market fragmentation and emergence rates) are more positively related to the probability that organizational members will seek to exploit entrepreneurial opportunities when those members have strong pro-entrepreneurship cognitions than when those members do not have strong pro-entrepreneurship cognitions.

The Elements

Entrepreneurial Strategic Vision to Pro-Entrepreneurship Organizational Architecture

Top-level managers shoulder much of the responsibility for promoting entrepreneurial behavior when a CE strategy is used. They meet this responsibility, in part, by developing and communicating an entrepreneurial strategic vision. The responsibility for entrepreneurship, however, does not solely rest with senior management—it is a shared responsibility (Bartlett & Ghoshal, 1997; Covin & Slevin, 2002). Top-level managers must work to create organizational architectures in which entrepreneurial initiatives flourish without their direct involvement (Miles, Heppard, Miles, & Snow, 2000). As stated by McGrath and MacMillan (2000, p. 301), "Your most important job as an organizational leader is not to find new opportunities or to identify the critical competitive insights. Your task is to create an organization that does these things for you as a matter of course." In our model, a pro-entrepreneurship architecture is the organizational context through which the entrepreneurial strategic vision is translated into specific entrepreneurial processes and behaviors.

A pro-entrepreneurship organizational architecture is not a unique organizational form but an internal environment or organizational context exhibiting certain attributes that individually and collectively encourage entrepreneurial behavior. Partly because it involves integrating "hardware" elements (e.g., characteristics of organizational structure) with "software" elements (e.g., culture and climate) (Covin & Slevin, 2002), creating an effective architecture is often the most difficult part of crafting a successful CE strategy (Garvin, 2002). In the absence of an entrepreneurial strategic vision, pro-entrepreneurship organizational architectures are unlikely to take shape because there will be no overriding philosophical justification or perspective, endorsed by top management, that encourages entrepreneurial thought and action throughout the organization (Morris & Kuratko, 2002; Muzyka et al., 1995). In the presence of an entrepreneurial strategic vision, the organization's structure, culture, resources, and systems—elements that collectively define an organizational architecture—are likely to assume particular qualities.

Structure. Fundamentally, structure is an organization's arrangement of authority, communication, and workflow relationships. Logic dictates that executives with entrepreneurial strategic visions will favor structures with qualities or attributes believed to promote the realization of those visions. Fortunately, much is known about the structural attributes of the organizations through which executives often seek to realize their entrepreneurial visions (Cornwall & Perlman, 1990; Muzyka et al., 1995).

While many structural attributes have been empirically linked to innovation activity in organizations (see, for example, Lawrence & Lorsch, 1967; Mintzberg, 1979), perhaps the single aspect of structure that best defines entrepreneurial organizations is structural organicity. Organicity is the extent to which the organization's overall form can be characterized as organic or mechanistic, to use Burns and Stalker's (1961) labels. Greater organicity implies a proclivity toward such qualities as decentralized decision making, low formality, wide spans of control, expertise- (vs. position)-based power, process flexibility, free-flowing information networks, and loose adherence to rules and policies. Greater mechanization implies the opposite. Empirical linkages between structural organicity or aspects of structural organicity and the tendency of organizations to exhibit entrepreneurial behaviors have been demonstrated by, for example, Miller and Friesen (1984), Covin and Slevin (1988), Merz and Sauber (1995) and Barrett and Weinstein (1998). Consistent with their findings, we expect that entrepreneurial strategic visions will be associated with the structural quality of organicity.

Culture. The specific attributes of organizational cultures that support entrepreneurial behavior have been the focus of considerable theorizing as well as empirical research. For example, Cornwall and Perlman (1990) argued that emotional commitment; relentless attention to detail, structure, and process; and a desire by each person to earn the respect of her/his peers are associated with an entrepreneurial culture. According to Timmons (1999), being well organized, being highly committed to work and willing to accept responsibility for outcomes resulting from it, and a desire for high standards are among the attributes associated with an effective entrepreneurial culture. Hornsby, Kuratko, and Zahra (2002) found that cultures characterized by *management support* (the willingness of top-level managers to facilitate and support entrepreneurial behavior, including the championing of innovative ideas and providing resources necessary to pursue them) and *work discretion/autonomy* (the willingness of top-level managers to tolerate failure, provide decision-making latitude and freedom from excessive oversight, and to delegate authority and responsibility) promoted middle-level managers' entrepreneurial behavior.

Importantly, top-level managers' words and actions can significantly influence organizational culture (Kilmann, Saxton, & Serpa, 1985). Therefore, as top-level managers articulate and act upon an entrepreneurial strategic vision, it will likely affect the organization's cultural attributes, encouraging the formation of cultural norms favoring entrepreneurship. These norms may, in turn, reinforce organizational members' commitment to the entrepreneurial strategic vision.

Resources/Capabilities. Resources represent what an organization *has*. When a combination of resources enables an organization to accomplish a task, those resources are referred to as a capability. An *entrepreneurial capability* exists ". . . when an organization exhibits a systematic capacity to recognize and exploit opportunity" (Covin & Slevin, 2002, p. 311) that rivals haven't observed or have under-exploited (Hitt et al., 2002; Ireland et al., 2001).

Recognizing and exploiting entrepreneurial opportunities require different resource sets. For example, resources related to market and technology forecasting proficiency are needed to recognize opportunities while resources associated with flexibility and decision-making speed support exploiting recognized opportunities (Covin & Slevin, 2002). Entrepreneurial capability is strongest when grounded in idiosyncratic, heterogeneous opportunity recognition and exploitation resources that are valuable, rare, imperfectly imitable, and nonsubstitutable (Barney, 1991). Moreover, compared with tangible ones, intangible resources are more likely to be related to a strong entrepreneurial capability because they are socially complex and difficult for rivals to understand and imitate.

Of particular relevance to our model of CE strategy, the accumulation of resources and the capabilities they enable are a partial function top-level managers' decisions and actions (Grant, 1991). Executive decisions and actions will, in turn, reflect their visions for their organizations (Collins & Porras, 1996). Therefore, executives subscribing to an entrepreneurial strategic vision will likely encourage acquiring resources that collectively promote an entrepreneurial capability.

Reward Systems. Organizational systems can have a direct and immediate effect on the occurrence of entrepreneurial behavior. In particular, whether or not the reward system encourages risk taking and innovation has been shown to have a strong effect on individuals' tendencies to behave in entrepreneurial manners. Kuratko, Montagno, and Hornsby (1990) empirically identified "reward and resource availability" as a principal determinant of entrepreneurial behavior by middle- and first-level managers. Similar results have been reported in subsequent studies (e.g., Hornsby et al., 2002; Hornsby, Kuratko, & Montagno, 1999; Morris & Jones, 1995).

Reward systems are, of course, part of the organizational architecture top executives assist in creating. Whether formal or informal, reward systems will likely be influenced by the vision executives articulate for their organizations. Hence, consistent with the observations of Miles et al. (2000), entrepreneurial visions are likely to lead to reward systems that encourage entrepreneurial behaviors.

In summary, the following proposition is offered regarding the anticipated relationships between entrepreneurial strategic vision and key structural, cultural, resource, and reward systems-related aspects of a pro-entrepreneurship organizational architecture:

> **Proposition 10 (a,b,c,d):** The presence of an entrepreneurial strategic vision as developed and communicated by top-level managers is positively related to (a) the degree of structural organicity, (b) the strength of cultural norms favoring entrepreneurial behavior, (c) the strength of the organization's entrepreneurial capability, and (d) the extent to which the organizational reward systems encourage entrepreneurial behavior.

Entrepreneurial Strategic Vision to Entrepreneurial Processes and Behavior

With an entrepreneurial strategic vision, entrepreneurial activity is the core, defining organizational attribute. These visions are molded by top-level managers harboring pro-entrepreneurship cognitions and reinforced by cultural norms favoring entrepreneurial behavior. Entrepreneurial strategic visions are realized when entrepreneurial processes of opportunity recognition and exploitation take place throughout a firm. These processes are enacted by the organization's membership through many specific entrepreneurial behaviors. As noted earlier, a pro-entrepreneurship architecture is the organizational vehicle that facilitates congruence between the entrepreneurial strategic vision and the specific entrepreneurial actions organizational members take.

An entrepreneurial strategic vision may also have a direct effect on entrepreneurial processes and behavior. Research suggests that an organization's membership can and often does react directly to the strategic vision espoused by top-level managers (Collins & Porras, 1996; Ireland & Hitt, 1999). As such, when an organization's top-level managers develop and clearly communicate an entrepreneurial strategic vision, organizational members will have encouragement, guidance, and a philosophical justification for entrepreneurial actions. Under such conditions, an entrepreneurial opportunity is more likely to be recognized and pursued (Kuratko, Ireland, & Hornsby, 2001). Manifestation of the entrepreneurial processes of opportunity recognition and exploitation throughout the organization may, in turn, reinforce top-level managers' commitment to an entrepreneurial strategic vision. The following proposition is offered:

> **Proposition 11 (a,b):** The presence of an entrepreneurial strategic vision is positively related to the probability that organizational members will (a) recognize entrepreneurial opportunities and (b) seek to exploit entrepreneurial opportunities.

Pro-Entrepreneurship Organizational Architecture to Entrepreneurial Processes and Behavior

As suggested earlier, pro-entrepreneurship cognitions among an organization's members will prompt recognizing and exploiting entrepreneurial opportunities. However, it takes the right set of organizational architecture attributes to perpetuate and reinforce recognizing and exploiting entrepreneurial opportunities. In particular, without structural organicity and strong entrepreneurial capabilities, as well as cultural norms and reward systems that encourage and support entrepreneurial behavior, systematically recognizing and exploiting entrepreneurial opportunities will not happen regardless of how intensely pro-entrepreneurship an organization's members may be. Consistent with this point, research has demonstrated that the degree to which an organization's architecture reflects pro-entrepreneurship attributes has great bearing on the extensiveness of entrepreneurial activity in the organization (Kuratko et al., 1990; Sathe, 1988). Our propositions are as follows:

> **Proposition 12 (a,b,c,d):** The (a) degree of structural organicity, (b) strength of cultural norms favoring entrepreneurial behavior, (c) strength of the organization's entrepreneurial capability, and (d) extent to which the organizational reward systems encourage entrepreneurial behavior are positively related to the probability that organizational members will recognize entrepreneurial opportunities.

> **Proposition 13 (a,b,c,d):** The (a) degree of structural organicity, (b) strength of cultural norms favoring entrepreneurial behavior, (c) strength of the organization's

entrepreneurial capability, and (d) extent to which the organizational reward systems encourage entrepreneurial behavior are positively related to the probability that organizational members will seek to exploit entrepreneurial opportunities.

The Outcomes

Entrepreneurial Process and Behavior to CE Strategy Outcomes

Entrepreneurial behavior results in various individual- and organizational-level outcomes. Individuals and organizations evaluate achieved outcomes and their consequences relative to incurred costs and opportunity costs. Resulting from these evaluations are decisions regarding the status (continuance, rejection, or modification) of personal entrepreneurial behavior (an individual-level issue) and the status (continuation, rejection, or modification) of the CE strategy (an organizational-level issue) (Kuratko, Hornsby, & Bishop, 2005). For individuals, the principal consequences to be evaluated concern the degree to which the organization recognized and rewarded their entrepreneurial behavior (Amit, Muller, & Cockburn, 1995; Kuratko, Hornsby, et al., 2005; Reynolds, 1987; Shane & Venkataraman, 2000).

For the organization, consequences primarily concern the degree to which using a CE strategy resulted in acceptable (or better) current performance and portends the possibility of acceptable (or better) future performance, where performance is defined in terms of the outcomes of interest. Our model emphasizes the organizational-level outcomes of CE strategy. There are two principal types of such outcomes: (1) capability development, and (2) strategic repositioning. We adopt this emphasis because our focus is on conditions and decisions that drive choices to form a CE strategy. In this context, we are relatively more concerned with strategic formulation issues than with strategic implementation issues.

Just as individual managers can acquire knowledge and skills through their entrepreneurial behaviors, organizations can learn and develop capabilities by implementing CE strategies. Enhanced competitive capability, in particular, often results from exploiting entrepreneurial opportunities. Competitive capability is the capacity of firms to create and sustain economically viable industry positions (Nelson, 1991; Teece, Pisano, & Shuen, 1997). Competitive capability is created as organizations use entrepreneurial initiatives to explore new technologies or product-market domains or exploit existing technologies or product-market domains. Such initiatives commonly facilitate creating useful organizational knowledge that forms the bedrock of organizational capabilities (Tidd & Taurins, 1999). As McGrath (1999) points out, even "failed" entrepreneurial initiatives can produce useful knowledge, thereby potentially enhancing an organization's ability to effectively compete. Of course, not all lessons gleaned from entrepreneurial initiatives will prove to be organizationally useful. And new, competitively relevant lessons cannot be expected from all entrepreneurial initiatives. Nonetheless, as argued by Zahra, Nielsen, and Bogner (1999, p. 170), "In many areas, CE activities can create new knowledge that can improve the firm's ability to respond to changes in its markets by enhancing the company's competencies and thus determine the results of competitive rivalries among firms."

Regarding strategic repositioning, the very act of implementing CE strategy through entrepreneurial behaviors can (1) place the firm (or portions thereof) in a new position within its pre-existing product-market domain(s), (2) alter the attributes of that domain(s), and/or (3) position the firm within a new product-market domain(s). Consistent with this point, Stopford and Baden-Fuller (1994) argue that the CE (in particular, the strategic renewal form of CE) enables firms to assume new strategic positions vis-à-vis competitors.

Likewise, Covin and Miles (1999, p. 53) assert that "major repositioning actions" are typical of established firms that engage in CE. In short, as suggested in our model of CE strategy, the following relationships are proposed:

> **Proposition 14 (a,b):** The exploitation of entrepreneurial opportunities is positively related to (a) the strength of the organization's competitive capability and (b) the realization of strategic repositioning.

CE Strategy Outcomes to Organizational and Environmental Conditions

The CE strategy outcomes of competitive capability changes and strategic repositioning effects can have direct and indirect effects, respectively, on future of CE strategy, as detailed as follows.

Competitive Capability to Pro-Entrepreneurship Organizational Architecture. Figure 1 suggests that competitive capability changes can directly impact future CE strategy through their effects on the organization's architecture. In particular, a firm's competitive capability will be inextricably tied to the entrepreneurial capability component of organizational architecture. Research suggests that exploiting entrepreneurial opportunities enables organizations to both strengthen existing capabilities and build new capabilities (Covin, Ireland, & Kuratko, 2003). These capability-building effects of opportunity exploitation are reflected in our CE strategy model. As organizations' competitive capabilities are being built by exploiting entrepreneurial opportunities, routines are being formed and processes developed that enable the organization to better mobilize its resources in pursuit of those entrepreneurial opportunities. These resource mobilization routines and processes allow the organization to be strategically responsive to conditions in its environmental context, thus creating and perpetuating a state of heightened competitiveness. Significantly, these same routines and processes, resulting as they do in an increased capacity of the organization to be strategically responsive, may better enable organizations to act on recognized entrepreneurial opportunities (Ireland et al., 2003; Zahra, Jennings, et al., 1999). Successfully exploiting such opportunities is, after all, a function of how effectively resources can be mobilized around their pursuit (Shane & Venkataraman, 2000). Thus, the same core strategic response capability that enables organizations to build and sustain competitiveness should also enable organizations to systematically and continuously exploit entrepreneurial opportunities. This implies that competitive capability and entrepreneurial capability will often be built together. The interdependence of competitive and entrepreneurial capability is reflected in the following proposition:

> **Proposition 15:** The strength of an organization's competitive capability is positively related to the strength of its pro-entrepreneurship organizational architecture.

Strategic Repositioning to External Environmental Conditions. Strategic repositioning effects will indirectly impact CE strategy by altering the external environmental conditions that organizational members may examine when considering the appropriateness of such strategy. The impact of strategic repositioning on these external environmental conditions can be understood through considering what strategic repositioning does to or for a firm. Specifically, strategic repositioning can change the relationships among competitors in an industry by strategically locating the firm within a newly defined competitive space (Stopford & Baden-Fuller, 1990). The assumption of new competitive positions reflects content changes in a firm's strategy and impacts with whom the firm competes.

Strategic repositioning can also imply the creation of changes to the defining characteristics of a firm's competitive space, as would be typical of firms whose strategies represent novel industry recipes (Spender, 1989) that reflect strategic innovation (Markides, 1998) or value innovation (Kim & Mauborgne, 1997). Alternatively, and consistent with Covin and Miles's (1999) "domain redefinition" form of CE, strategic repositioning can place firms in entirely new competitive spaces.

The effects of each of these repositioning possibilities will be a disruption of the status quo within an industry. With such disruption, there are inevitably industry winners and losers. More importantly, such disruptions prompt causal chains of competitive action and reaction (Chen, 1996), and industry dynamism and uncertainty will often prompt firm-level innovation in a positive feedback cycle (Grimm & Smith, 1997; Miller & Friesen, 1984). The realization of strategic repositioning as a result of exploiting entrepreneurial opportunities thus represents a change to the competitive landscape. Plausible external responses may include altered levels of competitive intensity, technological change, and product-market domain evolution. In short, the following proposition is offered:

> **Proposition 16 (a,b,c):** The realization of strategic repositioning by an organization is related to external environmental changes involving (a) the intensity of competition, (b) the rapidity of technological change, and (c) product-market domain evolution (as reflected in product-market fragmentation and emergence rates).

As a final comment on our model, it might be noted that the interpretations and causal attributions made by an organization's top managers may be of particular significance to perpetuating CE strategy. Top managers must believe that positive outcomes for themselves and their organizations can be linked back to the presence of CE strategies. In the absence of such beliefs, and recognizing that a CE strategy begins with top management's entrepreneurial cognitions and entrepreneurial strategic vision, top-level managers will likely choose to de-emphasize entrepreneurship as the defining element of the firm's corporate strategy. Thus, the external environmental conditions that provide a congenial context for the enactment of CE strategies cannot guarantee that such strategies, if adopted, will be sustained over time (Ireland et al., 2003).

Discussion and Conclusion

Herein, we have outlined a model of the antecedents, elements, and consequences of CE as an identifiable strategy. The current model is in some ways similar to existing strategy models grounded in evolutionary theory (Nelson & Winter, 1982). For example, like Lovas and Ghoshal's (2000) model of strategy as guided evolution, the current model recognizes the roles of administrative systems (as reflected in a pro-entrepreneurship organizational architecture), an objective function for the organization (as reflected in an entrepreneurial strategic vision), and individual units of selection (as reflected in entrepreneurial processes and behavior) as elements that define the evolutionary path of the organization. Nonetheless, it would be misleading to claim that evolutionary theory is the theoretical foundation upon which the proposed CE strategy model is built. Given the diversity of constructs, levels of analysis, and relationships explored in the proposed model, it is doubtful that a single theory or small set of theories can be offered that can support all of the model's propositions. Because of this, future researchers are justified in taking a multi-theoretic approach to test the individual propositions of our model (Ireland & Webb, 2007a).

That said, strong theoretical support of the multi-level and interconnected nature of entrepreneurial processes in established firms is provided by Dutta and Crossan's (2005)

"4I" framework. They describe the multilevel phenomena of entrepreneurial opportunity recognition and exploitation as follows:

> . . . learning begins when individuals develop an intuition *[the first I]* with respect to a business opportunity on the basis of their prior experience and recognition of patterns as external events unfold. The individual uses these patterns to make sense of what is going on—to interpret an insight or an idea and to put it into words. Individual interpretation *[the second I]* can be strengthened or reinforced by sharing it with a group who can then engage in joint exploration, interpretation, and integration *[the third I]* of the idea, to develop it into a shared understanding of a feasible business proposition. Over time, shared understanding can be institutionalized *[the fourth I]* at the organizational level in the form of systems, structures, strategy, and procedures, for example. (Dutta & Crossan, 2005, pp. 434–5)

In short, Dutta and Crossan's (2005) 4I framework provides a theoretical justification for linking individual-level entrepreneurial cognitions and organizational-level entrepreneurial outcomes. Of particular note, Dutta and Crossan explicitly argue that individual-level intuitions and interpretations of business opportunities can become institutionalized in the form of organizational-level *strategies*. As such, the 4I framework supports the theoretical defensibility of treating CE strategy as a multilevel construct.

Summarizing our model, we propose that individual entrepreneurial cognitions and external environmental conditions are the initial impetus for adopting a CE strategy, and outcomes are assessed to provide justification for a CE strategy's continuance, modification, or rejection. CE strategy is reflected in three elements: an entrepreneurial strategic vision, a pro-entrepreneurship organizational architecture, and entrepreneurial processes and behavior as exhibited throughout the organization. With varying degrees of intensity, CE strategies become routine in deeply entrepreneurial firms (e.g., Eisenhardt et al., 2000; Muzyka et al., 1995; Sathe, 1988). However, this is not to suggest that managers in organizations with CE strategies will necessarily be unconscious of those strategies. It is just that CE strategy cannot simply be consciously chosen and quickly enacted. This is so because CE strategy requires more than a decision, act, or event. It requires congruence between the entrepreneurial vision of the organization's leaders and the entrepreneurial actions of those throughout the organization, as facilitated through the existence of a pro-entrepreneurship organizational architecture.

CE strategy also requires consistency in approach and regularity in behavior. As argued by Mintzberg (1987b, p. 29), "strategy is a concept rooted in *stability*." Therefore, firms with CE strategies must engage in entrepreneurial behavior on a relatively regular or continuous basis. Obviously, how extensively firms must engage in entrepreneurial behavior before the presence of a CE strategy can be claimed is a matter of degree. At one end of the continuum is stability—the absence of innovation—with chaos—overwhelming innovation—being at the other. Baden-Fuller and Volberda (1997, p. 99) rightfully assert, we believe that

> Resolving the paradox of change and preservation means recognizing that continuous renewal inside a complex firm is misleading. Too much change will lead to chaos, loss of cultural glue, fatigue, and organizational breakdown (Volberda, 1996). While in the short term, organizations that are chaotic can survive, in the longer term they are likely to collapse (Stacey, 1995).

Eisenhardt et al. (2000) perhaps best captured where firms with CE strategies lie along the "innovation" continuum in their observations concerning "competing on the entrepreneurial edge." Firms with CE strategies remain close to the "edge of time," judiciously balancing the exploitation of current entrepreneurial opportunities with the search for future entrepreneurial opportunities. Such firms are always near chaos, both strategically and structurally, but they have the wisdom and discipline to recognize the possibility of and avoid the type of collapse to which Baden-Fuller and Volberda (1997) refer.

To summarize, the *core* position we take herein is that CE strategy can be regarded as a specific type of strategy. To possess such a strategy, firms must *significantly* display the three foundational elements of an entrepreneurial strategic vision, a pro-entrepreneurship organizational architecture, and entrepreneurial processes and behavior as exhibited throughout the organization. The absence or weakness of any of these elements would indicate that CE strategy does not exist in a firm.

Nonetheless, the reality or manifestation of CE strategy is not as "clean" as that of some other corporate strategies. For example, an acquisition strategy is unequivocal in its existence or lack thereof. That is, the parent firm either acquires all or portions of (as reflected in partial equity investments) an external business or it does not. However, in the case of CE strategy, the individual foundational elements can exhibit varying degrees of intensity and/or organizational pervasiveness. As such, it is possible to conceive of the CE strategy as identifiable along three separate continua reflecting the aforementioned foundational elements. Positions at the "low" ends of these continua would indicate little or weak evidence of the element's existence; positions at the "high" end would indicate abundant or strong evidence of the element's existence. The strength of the evidence needed to claim the presence of a CE strategy is inherently a judgment call on the observer's part.

Contributions to the CE Literature

We believe that our model contributes to the growing literature on CE in several ways. First, our model brings specificity to the concept of CE strategy, a concept that is inconsistently depicted, ambiguously described, and quite often, simply undefined in the academic literature. We used five criteria (focal entrepreneurial phenomena, the locus of entrepreneurship, the relationship between entrepreneurial phenomenon and strategy, the causally adjacent antecedents of the entrepreneurial phenomenon, and the causally adjacent outcomes of the entrepreneurial phenomenon), to highlight the differences among existing conceptualizations of entrepreneurial phenomena in organizations (we summarize the results of this effort in Table 1). Some concepts associated with CE are used in fairly consistent manners in the literature. Corporate venturing, for example, is usually used to refer to the same phenomenon (i.e., new business creation in the corporate context). A perusal of the CE literature reveals that CE strategy, or more commonly, entrepreneurial strategy, is a label attached to quite a variety of phenomena or not attached to specific phenomena at all (see, for example, the scholarly compilations by Meyer and Heppard [2000] and Hitt et al. [2002]). Through its identification of the specific elements of CE strategy, our model adds substance to the concept and thereby may facilitate its understanding.

Second, our model demonstrates that for CE to operate as a strategy, it must "run deep" within organizations. Top managers are increasingly recognizing the need to respond to the entrepreneurial imperatives created by their competitive landscapes (Ireland & Hitt, 1999). Our model suggests that minimal responses to these entrepreneurial imperatives, reflecting superficial commitments to CE strategy, are bound to fail. Moreover, while top-level managers can instigate CE strategy, they cannot dictate it. Research indicates that those at the middle and lower ranks of an organization have important roles to play in implementing a CE strategy (Kuratko, Ireland, et al., 2005).

Without sustained and strong commitment from these lower levels of the organization, entrepreneurial behavior will never be a defining characteristic of the organization as is required by CE strategy.

Third, our model ties together those elements of CE strategy that the extant literature suggests go together. The novelty in our model is not in its individual elements, but in the configuration of these elements in a new model in which CE strategy is not simply represented by a single "box." Indeed, others have talked about the importance to entrepreneurial strategy of entrepreneurial strategic visions, or pro-entrepreneurship organizational architectures, or entrepreneurial processes and behaviors that cross levels of the organizational hierarchy. However, to our knowledge, no existing model or theoretical framework depicts the elements of CE strategy as holistically as does the current model.

Fourth, our model implies that a possible lack of robustness is a key vulnerability of CE strategy. Specifically, CE strategy will be hard to create, and perhaps, even harder to perpetuate in organizations. The presence of certain external environmental conditions may be sufficient to prompt an organization's leaders into exploring the possibility of adopting a CE strategy. However, the commitment of individuals throughout the organization to making CE strategy work and the realization of personal and organizational entrepreneurial outcomes that reinforce this commitment will be necessary to ensure that entrepreneurial behavior becomes a defining aspect of the organization. Breakdowns in any of the three elements of CE strategy, or in linkages between or among these elements, would undermine the viability of such strategy. Moreover, alignments must be created in evaluation and reward systems such that congruence is achieved in the entrepreneurial behaviors induced at the individual and organizational levels. Thus, while external conditions may be increasingly conducive to adopting CE strategies, we harbor no illusions that the effective implementation of these strategies will be easily accomplished.

Implications for Research and Practice

Beyond the aforementioned direct contributions of our model, our depiction of CE as an identifiable organizational strategy has two important implications for CE research and practice. First, the model implies that fit between different pairs and collectively among all of the elements of a CE strategy is a prerequisite to success. In this sense, the elements of entrepreneurial strategic vision, pro-entrepreneurship organizational architecture, and entrepreneurial processes and behavior represent the core *work* associated with use of a CE strategy. Supporting this work and increasing the likelihood of its success is the degree of fit between and among the elements. Indeed, to varying degrees, the paper's propositions suggest a bundle of "fits" that are necessary for CE success. As suggested earlier, breakdowns in any of the model's specified relationships could substantially reduce the probability of CE strategy enactment and success. Symmetrical and effective information flows would support efforts to achieve fit among a CE strategy's elements as would the organization's ability to codify knowledge learned through using CE strategy. Knowledge-management systems, through which parties are responsible for ensuring that organizational members have access to information needed to use a CE strategy, could also facilitate developing and maintaining fit among a CE strategy's elements.

The model's second implication concerns the guidance that is implied for firms interested in understanding the concept of CE strategy as an initial step. We offer two issues warranting consideration in this respect. First, the firm wishing to adopt a CE strategy should recognize that, perhaps to a greater degree than when using other strategies (e.g., diversification, differentiation, cost leadership, etc.), the primary activities associated with successful entrepreneurship (i.e., recognizing opportunities) must be integrated with the primary activities associated with successful strategic management (i.e., exploiting opportunities) if a CE strategy is to be effective. Thus, an effective CE strategy results from the firm's ability to take entrepreneurial actions within the context of a strategic perspective (Hitt et al., 2002; Ireland & Webb, 2007b; Ireland et al., 2001). Firms considering the possibility of using a CE strategy should carefully analyze their ability to think strategically when acting entrepreneurially. Strategic thinking influences the formation of an entrepreneurial strategic vision as well as the making of decisions regarding the nature of a firm's pro-entrepreneurship organizational architecture. Entrepreneurial actions are the bedrock of entrepreneurial processes and behavior. The second area of guidance our model suggests is the need to effectively manage the firm's resources. The success of a CE strategy is more probable when a firm has the skills required to structure (accumulate and strategically divest), bundle (successfully combine), and leverage (mobilize and deploy) its resources (Sirmon, Hitt, & Ireland, 2007). Somewhat related to the issue of fit that we examined earlier, a CE strategy's effectiveness and efficiency is enhanced when resources are properly managed.

Research Challenges

Greater understanding of CE as a particular type of organizational strategy will emerge as scholars complete empirical studies examining the phenomenon. The propositions associated with the current model are possible sources for empirical studies. Effectively dealing with the sample and measurement challenges inherent to this topic will be critical to obtaining valid insights from empirical work. Two research challenges and some possible ways in which they might be addressed are identified.

First, researchers must be able to operationally identify samples of firms that exhibit CE strategies to various degrees (thus minimizing the "restriction of range" problem within the sample). Of particular difficulty will be identifying firms exhibiting highly entrepreneurial CE strategies. This will be a challenge because of two of the aforementioned points: (1) CE strategies may not be robust, and (2) continuously evolving organizations such as those employing highly entrepreneurial CE strategies may be vulnerable to collapse. Thus, firms with highly entrepreneurial CE strategies may be few in number. As a possible solution to the sample identification challenge, researchers are encouraged to consider three preliminary sample screens: new product introduction rate, new line-of-business introduction rate (controlling for growth through acquisition), and high rankings on industry reputational surveys regarding innovation and entrepreneurship-related matters over an extended period of time. While somewhat blunt metrics for the purpose of assessing a firm's innovativeness, it would be unusual for firms with highly entrepreneurial CE strategies to not score high on one or more of these metrics.

Second, researchers must be able to verify the presence and strength of an entrepreneurial strategic vision as a defining mind-set shared by the organization's top managers. Vision is a phenomenon that is undoubtedly easier to conceptualize than measure. Judgment calls would need to be made regarding such questions as "How should vision consensus be evaluated?" "Who must share the vision?" and "What constitutes defensible evidence of a vision's presence?" As an initial thought concerning the final question, certainly, pronouncements of a "pro-entrepreneurship" nature by an organization's executives to the organization's membership would be expected if those members were to understand the vision from the executives' perspective, as required by a CE strategy. Such pronouncements could be written or oral, but researchers would need to be able document them through secondary sources, ideally over a period of several years.

To conclude, many organizations are choosing to embrace entrepreneurial behavior as a defining element of their corporate strategies as well they should, given the conditions in their external environments. How such strategies differ from more traditionally recognized corporate strategies has only recently become the subject of broad discussion, and much remains to be learned about the matter. Toward this end, this paper offers a novel model that depicts the "workings" of CE as a unique, identifiable organizational strategy. Hopefully, this model provides some cohesion to the currently fragmented knowledge base within the CE domain and can serve as one framework on which future CE theory can be built.

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