ARTICLES

Strategic Entrepreneurship:

Creating Value for Individuals, Organizations, and Society

by Michael A. Hitt, R. Duane Ireland, David G. Sirmon, and Cheryl A. Trahms

Executive Overview

The foci of strategic entrepreneurship (SE) are broad and rich, building on research from multiple disciplines such as economics, psychology, and sociology, along with other subdisciplines in management including organizational behavior and organization theory. Herein, we examine the contributions of strategic management and entrepreneurship to SE. Building on a previous model of SE, we develop an input-process-output model to extend our understanding of the SE construct. We examine the resource inputs into SE, such as individual knowledge and skills. In addition, we explore the resource orchestration processes that are important for SE and the outcomes, including creating value for customers, building wealth for stockholders, and creating benefits for other stakeholders, especially for society at large. Individual entrepreneurs also benefit through financial wealth, but other outcomes such as personal satisfaction and fulfillment of personal needs (e.g., self-actualization) may be of equal or even greater importance. Therefore, we incorporate in the model of SE multilevel outcomes that motivate entrepreneurs.

An important scholarly question with significant practical relevance in the current and projected economic environments is how firms can create value, an end goal of both strategic management and entrepreneurship (Bruyat & Julien, 2001; Meyer, 1991). In particular, how do firms create and sustain a competitive advantage while simultaneously identifying and exploiting new opportunities? This is the primary question on which strategic entrepreneurship (SE) is based, placing it at the nexus of strategic management and entrepreneurship. Thus, SE is concerned with advantage-seeking and opportunity-seeking behaviors resulting in value for

individuals, organizations, and/or society. This means that SE involves actions taken to exploit current advantages while concurrently exploring new opportunities that sustain an entity's ability to create value across time. The need to understand how new ventures can achieve and sustain success by exploiting one or more competitive advantages and how large established firms can become more entrepreneurial provides incentives to theoretically explain and empirically explore the SE construct.

Work on SE began in earnest early in the 21st century (Hitt, Ireland, Camp, & Sexton, 2001; Ireland, Hitt, Camp, & Sexton, 2001). Ireland,

* Michael A. Hitt (mhitt@mays.tamu.edu) is Distinguished Professor, Joe B. Foster '56 Chair in Business Leadership, Management Department, Mays School of Business, Texas A&M University.

R. Duane Ireland (direland@mays.tamu.edu) is Distinguished Professor, Conn Chair in New Ventures Leadership, Management Department, Mays School of Business, Texas A&M University.

David G. Sirmon (dsirmon@mays.tamu.edu) is Pamela M. and Barent W. Cater '77 Faculty Research Fellow and Assistant Professor, Management Department, Mays School of Business, Texas A&M University.

Cheryl A. Trahms (ctrahms@mays.tamu.edu) is a Ph.D. Student and Research Assistant, Management Department, Mays School of Business, Texas A&M University.

Hitt, and Sirmon (2003) developed an initial model of SE with four key dimensions: (1) the entrepreneurial mindset, culture, and leadership, (2) the strategic management of organizational resources, (3) application of creativity, and (4) development of innovation. Based on additional research and critical examination of the SE construct, Kyrgidou and Hughes (2010) suggested that this model lacked the robustness required to capture the gestalt of SE. Supporting this assertion is recent evidence suggesting that SE is broader in scope, multilevel, and more dynamic (Chiles, Bluedorn, & Gupta, 2007; Hitt, Beamish, Jackson, & Mathieu, 2007; Rindova, Barry, & Ketchen, 2009) than was originally conceptualized.

To contribute to the continuing development of this young and dynamic field of inquiry requires a richer model of SE. Thus, we extend the original SE model to incorporate a multilevel and broader domain (see Shepherd, 2011). The enhanced model of strategic entrepreneurship presented herein integrates environmental influences, explains how resources are managed in the process of SE to create value across time, and describes several different outcomes, thereby providing a more complete view of SE.

The new model, discussions of resource orchestration, and unique outcomes of SE produce a number of valuable and important questions warranting scholarly examination to advance our knowledge about SE and its application in organizations.

Integration of the Relevant Research

Strategic management and entrepreneurship are separate disciplines offering unique opportunities for scholarly inquiry as well as insights that inform managerial and entrepreneurial practice (Schendel & Hitt, 2007). As a foundation for SE, we briefly summarize relevant research in these two domains.

Strategic Management

Creating competitive advantages and wealth are at the core of strategic management (Chen, Fairchild, Freeman, Harris, & Venkataraman, 2010). Andrews (1971) defined corporate strategy as a pattern of organizational decisions that

evolves with the purpose of achieving an array of objectives that are important to a firm's stakeholders. Hitt, Ireland, and Hoskisson (2011, p. 6) defined strategic management as "the full set of commitments, decisions, and actions required for a firm to achieve strategic competitiveness and earn above-average returns." With a strong focus on outcomes, Makadok and Coff (2002) suggested that strategic management's purpose is to positively influence the firm's ability to generate profits.

Strategic management scholars seek to understand the causes of performance differentials across firms (Ireland et al., 2003; Schendel & Hofer, 1978). Effective competitive positioning is a primary factor influencing a firm's ability to create value and wealth for stakeholders and the broader society (Ketchen, Ireland, & Snow, 2007; Porter, 1980). Similarly, the firm's idiosyncratic stock of resources influences efforts to achieve these outcomes (Barney, 1991). Learning how to acquire, bundle, and leverage the firm's idiosyncratic resources is critical to achieving a competitive advantage and creating value (Chen, 1996; Sirmon, Hitt, & Ireland, 2007).

Entrepreneurship

Entrepreneurship is a developing discipline that has begun to blossom in recent years, yet there is a lack of agreement on precisely what constitutes entrepreneurship (Rauch, Wiklund, Lumpkin, & Frese, 2009). One definition frames the activities required for entrepreneurship to be engaged. In this context, Davidsson (2005, p. 80) offered what he labeled as three partly overlapping views of entrepreneurial activities: "(1) entrepreneurship is starting and running one's own firm; (2) entrepreneurship is the creation of new organizations; and (3) entrepreneurship is ... the creation of newto-the-market economic activity." Criticizing the tendency for scholars to define the entrepreneurship domain strictly in terms of the entrepreneur and what he or she does, Shane and Venkataraman (2000, p. 218) offered a more expansive definition, saying that the "field of entrepreneurship [is] the scholarly examination of how, by whom, and with what effects opportunities to create future goods and services are discovered,

evaluated, and exploited." Thus, Shane and Venkataraman argued that entrepreneurship involves sources of opportunities; the processes of discovery, evaluation, and exploitation of opportunities; and the set of individuals who discover, evaluate, and exploit opportunities. Consistent with the Shane and Venkataraman definition, Hitt et al. (2001, p. 480) defined entrepreneurship as "the identification and exploitation of previously unexploited opportunities." Ireland et al. (2001, p. 51) expanded this definition primarily to include a focus on wealth creation as an outcome of entrepreneurship: "We define entrepreneurship as a contextspecific social process through which individuals and teams create wealth by bringing together unique packages of resources to exploit marketplace opportunities."

However, to generate wealth first requires creating value. Entrepreneurs create value by leveraging innovation to exploit new opportunities and to create new product-market domains (Miles, 2005). More specifically, "value creation is the act of obtaining rents (widely defined as financial, social, or personal) that exceed the total costs (which may or may not include average rates of return for a particular industry) associated with that acquisition" (Bamford, 2005, p. 48). Therefore, generating wealth through value creation is entrepreneurship's central function (Knight, 1921).

Strategic Entrepreneurship

As our discussion shows, strategic management and entrepreneurship are concerned with creating value and wealth. In the main, entrepreneurship contributes to a firm's efforts to create value and subsequently wealth primarily by identifying opportunities that can be exploited in a marketplace, while strategic management contributes to valueand wealth-creation efforts primarily by forming the competitive advantages that are the foundation on which a firm competes in a marketplace. Therefore, entrepreneurship involves identifying and exploiting opportunities, and strategic management involves creating and sustaining one or more competitive advantages as the path through which opportunities are exploited. Thus, both strategic management and entrepreneurship "are concerned about growth, creating value for customers, and subsequently creating wealth for owners" (Hitt & Ireland, 2005, p. 228). A significant amount of scholarship focuses on the need for firm outcomes to create wealth only or primarily for shareholders. SE expands the scope to which a firm's wealth-creating outcomes can apply to multiple stakeholders, including society at large (Schendel & Hitt, 2007).

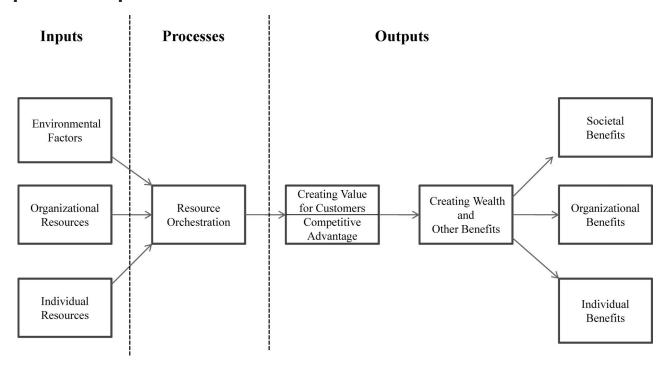
SE allows those leading and managing firms to simultaneously address the dual challenges of exploiting current competitive advantages (the purview of strategic management) while exploring for opportunities (the purview of entrepreneurship) for which future competitive advantages can be developed and used as the path to value and wealth creation. Because "concentrating on either strategy or entrepreneurship to the exclusion of the other enhances the probability of firm ineffectiveness or even failure" (Ketchen et al., 2007, p. 372), SE involves both entrepreneurship's opportunity-seeking behaviors and strategic management's advantage-seeking behaviors and is useful for all organizations, including family-oriented firms (Sirmon & Hitt, 2003; Webb, Ketchen, & Ireland, 2010). Relatively speaking, successfully using SE challenges large, established firms to learn how to become more entrepreneurial and challenges smaller entrepreneurial ventures to learn how to become more strategic.

An Input-Process-Output Model of Strategic Entrepreneurship

ere, we build on the initial model of SE (Ireland et al., 2003) and draw insights from previous research to present a multilevel input-process-output model for the purpose of providing a richer understanding of the SE construct. The SE model we advance incorporates environmental, organizational, and individual foci into the dynamic process of simultaneous opportunity- and advantage-seeking behaviors. When used effectively, these behaviors create value for societies, organizations, and individuals.

The SE model presented in Figure 1 identifies three dimensions: resource/factor inputs, resource orchestration processes, and outputs. The first di-

Figure 1
Input-Process-Output Model of SE



mension specifies the resources/factors serving as the SE process inputs at different levels, including environmental factors, organizational factors, and individual resources. Second, we examine the SErelated actions or processes in the firm, specifically focusing on the orchestration of its resources and the entrepreneurial actions that are used to protect and exploit current resources while simultaneously exploring for new resources with valuecreating potential. These actions occur primarily at the firm level. Last, we examine outcomes, which vary across levels. Specifically, we focus on the creation of value for society, organizations, and individuals. These benefits include societal enhancements, wealth, knowledge, and opportunity. First, we discuss the inputs of the extended SE model.

Inputs: Resources/Factors

Environmental Factors

The firm's external environment affects its ability and the ability of individuals to discover or create opportunities and, subsequently, their ability to exploit those opportunities as a foundation for competitive success. The relationship between the external environment and the firm affects performance (Keats & Hitt, 1988) and long-term survival (Dess & Beard, 1984). In addition to the perspectives associated with traditional organizational theories such as ecological theory (Hannan & Freeman, 1984, 1989) and evolutionary theory (Winter, 2005), an entrepreneurial perspective of this relationship proposes that an organization and those within it influence the environment (Smith & Cao, 2007). Munificence, dynamism (and the uncertainty resulting from it), and interconnectedness are important environmental factors for SE.

Environmental munificence facilitates acquiring resources and identifying opportunities as well as the ability to exploit the resources and opportunities to create competitive advantage. Organizations seek out environmental munificence, which refers to the level of resources in a particular environment that can support sustained growth, stability, and survival (Dess & Beard, 1984). Munificence allows firms to acquire resources such as raw materials, financial capital, labor, and customers (Aldrich, 1979; Castrogiovanni, 1991) and intangible assets such as an

industry's or geographic region's tacit knowledge (Agarwal, Audretsch, & Sarkar, 2007).

The munificence of an environment (e.g., geographic region) is context-specific for the firm. Moreover, entrepreneurially minded individuals gain access to resources in the environment to generate competitive advantage and create value by engaging in entrepreneurial bricolage. Baker and Nelson (2005) identified three characteristics that affect how perceptions of resources influence the successful interaction between a firm and its environment. First, firms are idiosyncratic in what they perceive to be value-creating resources. Second, firms tend to gain differential benefits from resources based on their leaders' creative judgments and actions. Third, because of the nature of the first two attributes, firms can capitalize on resources that other organizations deem to have less value-creating potential. Thus, even resourceconstrained environments can be perceived as munificent by some firms. An example is the intangible assets that leak into the environment when firms fail to commercialize knowledge they hold (Agarwal et al., 2007). As knowledge is rarely idiosyncratic to one organization, it is difficult to avoid leakage and protect against appropriation by competitors. This knowledge spillover allows individuals and firms to appropriate knowledge that can be used to create firm capabilities. These capabilities are then used to gain a competitive advantage that subsequently leads to performance gains (DeCarolis & Deeds, 1999; Grant, 1996), resulting in the economic growth of a region and the expansion of an industry (Agarwal et al., 2007).

The environment many firms face is inherently dynamic, thereby producing uncertainty (Barnard, 1938). Uncertainty (and the willingness to bear uncertainty) (McMullen & Shepherd, 2006) simultaneously poses threats and reveals opportunities. Because of uncertainty, the quality of information available to firms and individuals is limited, reducing their ability to assess present and future environmental states. In addition, an inability to access robust information about conditions in the external environment creates ambiguity during the strategic decision-making process (e.g., decision makers lack adequate knowledge for

identifying and exploiting new opportunities). However, research has shown that environmental dynamism has a positive relationship with new venture creation (Aldrich, 2000) and innovation through the stimulation of exploration (Wang & Li, 2008).

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Gaglio and Katz (2001) suggest that individuals who act entrepreneurially seek opportunities in dynamic markets, using their knowledge stocks and ability to perceive and deal with uncertainty. The ability to operate under conditions of uncertainty may also be based on an individual's motivation and risk propensity (Baum & Locke, 2004). Alternatively, radical innovations produced by entrepreneurial firms often serve as a catalyst for or at least contribute to more dynamic and potentially more munificent environments.

In dynamic environments, some firms use relationships to gain access to needed resources from partners and then bundle them to exploit opportunities. In addition, firms may use cooperative strategies such as alliances to build capabilities that facilitate the building of a competitive advantage. Theories of interconnectedness including networks and social capital explain the paths firms follow to build capabilities in this manner.

Building on organizational learning, resource-based, and real options theories, Ketchen et al. (2007) argued that collaborative innovation, in which large and small firms share ideas, knowledge, expertise, and opportunities, supports SE. Small firms are able to use creativity to create unique innovation while minimizing the liabilities associated with their small size and newness. Alternatively, because of slack resources, large firms are able to explore opportunities outside their traditional domain and leverage existing business practices in doing so.

Organizational Resources

Culture and top leadership are perhaps the resources that are the most idiosyncratic to a specific organization. Effective leadership is required to develop and grow new ventures and to entrepreneurially lead established corporations. Leaders understand the importance of developing and supporting a culture through which the entrepreneurial actions necessary to achieve profitable growth

are established (Kuratko, Ireland, Covin, & Hornsby, 2005). "[An] entrepreneurial culture is one in which new ideas and creativity are expected, risk taking is encouraged, failure is tolerated, learning is promoted, product, process and administrative innovations are championed, and continuous change is viewed as a conveyor of opportunities" (Ireland et al., 2003, p. 970). Thus, entrepreneurial leadership is the ability to influence others to emphasize opportunity-seeking and advantage-seeking behaviors (Covin & Slevin, 2002).

Entrepreneurial leaders create visionary scenarios that can be used to assemble and mobilize a supporting group in the firm that is committed to opportunity discovery and exploitation (Gupta, Macmillan, & Surie, 2004). The leader and the organizational culture are interdependent; they are symbiotic, with the leader's judgments affecting the organizational culture and cultural attributes influencing a leader's future decisions and actions. In this manner, an "entrepreneurial loop" occurs between a leader's ability to identify an opportunity and the attributes of organizational culture that positively influence pursuing it (Shepherd, Patzelt, & Haynie, 2009).

Individual Resources

Financial capital (a tangible resource) and social and human capital (intangible resources) are necessary to engage in SE (Ireland et al., 2003). Alone, financial capital is relatively less important than social and human capital for achieving, and especially for sustaining, a competitive advantage; however, financial capital is often crucial for acquiring or creating the resources necessary to exploit opportunities. For example, new ventures and firms with stronger financial positions in early developmental stages are more likely to survive, grow, and experience higher performance (Chaddad & Reuer, 2009). In addition, established firms with strong financial resources have slack, which can facilitate the development of innovations (Kim, Kim, & Lee, 2008).

The firm's social capital is the sum of its internal social capital (relationships between individuals) and its external social capital (relationships between external organizations and individuals in the focal firm). It facilitates actions taken to ac-

cess additional resources and to build and leverage capabilities to achieve a competitive advantage (Hitt, Lee, & Yucel, 2002). Thus, specific social skills influence individuals' ability not only to acquire knowledge and resources, but to create and/or identify opportunities. Baron and Markman (2000, 2003) suggest that social skills—for example, reputation and expansion of social networks—play a significant role in the success of individuals and their new ventures by attracting resources such as financial capital and key employees.

In a specific context, evidence indicates that an entrepreneur's social skills and social networks influence outcomes for both new ventures and established organizations (Baron & Tang, 2009; Batjargal et al., 2009). Additional evidence indicates that within the firm, individuals with well-developed social skills who recognize or create opportunities can gain acceptance for projects that require cross-divisional resources through social networks (Kleinbaum & Tushman, 2007). Actions taken to exploit an opportunity encourage others in the organization to collaborate, which in turn facilitates a social structure and culture conducive to subsequent opportunity-seeking behaviors.

Human capital is the set of individuals' capabilities, knowledge, and experience related to a task and the ability to increase the "capital" through learning (Dess & Lumpkin, 2001). Chandler (1962) wrote that of all resources available to firms, human resources are perhaps the most important; thus, idiosyncratic human capital can be central to a new venture's survival (Baker, Miner, & Easley, 2003) and an established firm's success. Tacit knowledge is particularly important in identifying entrepreneurial opportunities (McGrath & MacMillan, 2000) and in achieving a competitive advantage (Coff, 2002). Individuals' knowledge, skills, and abilities, along with their motivation and passion to perform, are important for a firm to exploit an opportunity and achieve an advantage as the sources of its long-term success.

The entrepreneurial mindset, composed of alertness, real option reasoning, and opportunity recognition, facilitates rapid sensing to identify and exploit opportunities, even those that are

highly uncertain (McGrath & MacMillan, 2000). Entrepreneurial alertness entails the ability to notice opportunities that have been hitherto overlooked and to do so without searching for them (Kirzner, 1979). However, being alert is a necessary but insufficient condition to effectively engaging in SE. In the SE framework, an individual must respond to numerous economic changes and innovations in a dynamic (and uncertain) environment. To make decisions, one needs a framework that helps to identify decision criteria, the available resources, and the value creation goals (Gaglio, 2004). Entrepreneurial cognition, or the knowledge structures driving assessments of opportunities (Holcomb, Ireland, Holmes, & Hitt, 2009), helps to differentiate the degree of risk involved with various opportunities (Baron, 2007) and thus to select the most appropriate one for the new venture (or established organization).

Real options logic suggests that real assets possess the same characteristics as financial options (Barney, 2002). This set of characteristics facilitates individuals' willingness to engage in risky (yet carefully evaluated) entrepreneurial activity through opportunity-seeking behavior. Real options have the potential to positively or negatively influence opportunity- and advantage-seeking behaviors. The nature of factors in the external environment at a point in time (e.g., bankruptcy laws) determines the maximum potential downside loss associated with a firm's risky investments, while the upside potential of these investments is commonly high. An entrepreneur-friendly bankruptcy law (i.e., one that allows reasonable conditions for continuing the new venture by allowing the restructuring of debt) encourages entrepreneurial activity and economic development (Lee, Peng, & Barney, 2007). Alternatively, strong bankruptcy laws (e.g., ones that make it difficult to continue the new venture after declaring bankruptcy) deter individual and firm risktaking behaviors.

Goal setting is significantly influenced by an individual's psychological factors. For example, passion, which in an entrepreneurial context is reflected in the entrepreneur's devotion and enthusiasm for a proposed business venture (Chen, Yoa, & Kotha, 2009), accounts for behaviors such

as unconventional risk taking, focused intensity, and belief in a dream (Cardon, Wincent, Singh, & Drnovsek, 2009). Entrepreneurial leaders' expression of passion for the new venture can motivate employees to create new ideas, take risks, and develop personal pride in the firm's goals. Therefore, passion contributes to entrepreneurial success because of the commitment and effort generated (Baum & Locke, 2004). Passion and the commitment it engenders contribute to entrepreneurial self-efficacy. Cassar and Freidman (2009) found that entrepreneurial self-efficacy has a significant influence on the commitment of both personal time and capital to discover (or create) and exploit entrepreneurial opportunities. For entrepreneurial leaders, high self-efficacy often contributes to enhanced revenue and employment growth in the firm (Baum & Locke, 2004). Passion and entrepreneurial self-efficacy motivate entrepreneurs to pursue and realize strategic and entrepreneurial goals that are central to SE.

Alvarez and Barney (2007) argued that there are two theories of entrepreneurial action: discovery of existing opportunities and creation of new opportunities. Thus, opportunity-seeking behavior could involve being alert to existing opportunities or creating new opportunities. The traditional perspective of the entrepreneurship process, focused on the discovery of an opportunity (Eckhard & Shane, 2003), relies on a notion of causation. Two individuals may have the same characteristics and resources; however, environmental variation may lead only one of the two to identify and exploit a particular opportunity (Alvarez & Barney, 2010). Identifying existing opportunities requires the entrepreneurial mindset.

However, creating opportunities involves different types of entrepreneurial actions: effectuation and creativity. Effectuation is based on the notion that firm growth relies on dynamic and interactive judgments in which the future is unpredictable yet controllable through human action, and the belief that the environment can be enacted through choice (Sarasvathy, 2008). Thus, cognitive ability to effectuate is used to create opportunities in the environment and to achieve short-term competitive advantages. Creativity affects the quality and quantity of innovations,

shaping both existing capabilities for competitive advantage and entrepreneurial opportunities (Ireland et al., 2003). Creativity in heterogeneous teams or organizations generally produces at least two outcomes. By connecting otherwise unconnected individuals, creative ideas are more easily translated into products (Obstfeld, 2005), and creative approaches may be more easily accepted (Shalley & Perry-Smith, 2008). Acceptance of creative approaches, in turn, fosters an entrepreneurial culture in the firm and construction of market niches in the environment over time.

Next, we describe the processes component of the SE model.

Resource Orchestration Processes

Research indicates that competitive advantage results from controlling valuable and rare resources. Yet, while control of such resources is necessary for competitive advantage, leaders must take further actions for the advantages to be developed and exploited and hopefully sustained over time (Crook, Ketchen, Combs, & Todd, 2008; Grimm, Lee, & Smith, 2006). Resource orchestration, an emerging stream of work that is grounded in resource-based theory (RBT) and dynamic capabilities literature, focuses attention on these actions (Sirmon, Hitt, Ireland, & Gilbert, 2011). Resource orchestration is based primarily on the conceptual work of Sirmon et al. (2007) and Helfat et al. (2007).

Resource orchestration is concerned with the actions leaders take to facilitate efforts to effectively manage the firm's resources. Primary among these are actions to structure the firm's resource portfolio, bundle resources into capabilities, and leverage the capabilities to create value for customers, thereby achieving a competitive advantage for the firm. More specifically, structuring includes acquiring, accumulating, and divesting resources; bundling involves stabilizing existing capabilities, enriching current capabilities, and pioneering new capabilities. Leveraging requires a sequence of actions including mobilizing capabilities to form requisite capability configurations, coordinating the integrated capability configurations, and deploying these configurations with a resource advantage strategy, a market opportunity strategy, or an entrepreneurial strategy. Importantly, although each action and related subprocesses are useful, properly synchronizing the resource orchestration actions positively influences the realized outcomes.

An emerging body of empirical evidence supports resource orchestration's validity as a means of managing a firm's resources to gain maximum value from them. For example, Ndofor, Sirmon, and He's (2011) results showed that managerial actions mediate the resource/performance linkage. These findings suggest the importance of the leader's role in realizing the full potential from a firm's resources. In support, Sirmon, Gove, and Hitt (2008) showed not only that leaders' contextspecific resource bundling and deployment actions affect performance, but that the importance of their actions increases as rivals' resource portfolios approach parity. However, leaders' actions must be comprehensive in synchronizing the various resource orchestration actions (Sirmon & Hitt, 2009) while simultaneously addressing both capability strengths and weaknesses to realize competitive advantages that help them pursue future opportunities (Sirmon, Hitt, Arregle, & Campbell, 2010).

Next, we discuss each major resource orchestration action within a strategic entrepreneurship context.

Structuring

Among the three subprocesses of structuring, acquiring resources is arguably the most important for young firms. Young firms often operate at a resource disadvantage (Mosakowski, 2002) and must work to overcome it. Research indicates that the entrepreneur's "story" strongly affects young firms' acquisitions of resources (Gartner, 2007). Martens, Jennings, and Jennings (2007) provided evidence that capital infusion increases when an entrepreneur's narrative offers prospective investors 1) an identity for the firm, 2) logic as to how the firm will exploit its opportunity, and 3) information indicating how the firm's intended actions are appropriate for its current environment. Moreover, they concluded that an effective narrative has significant influence, such that a change in narrative quality (what they termed a "unit of change") increased investment by millions of dollars. Beyond capital investment, Zott and Huy (2007) found that entrepreneurs' "symbolic actions" speak loudly to a wide array of resource providers. More specifically, they found that demonstrating personal credibility, professional organization, achievement, and relational aptitude not only resulted in higher levels of capital investment, but also helped entrepreneurs attract talented human capital and assemble a sufficient customer base.

Firms may also find it necessary to build resources internally (accumulate) as well as divest them. Divestment is an understudied phenomenon; however, it is critical in managing resources. Recent research indicates that reducing weaknesses may be more important for increasing performance than increasing a firm's strengths (Sirmon et al., 2010). In addition, Morrow, Sirmon, Hitt, and Holcomb (2007) provided evidence that divestment can be especially useful when firms attempt to recover from a performance crisis. Presumably, the divested resources create a weakness that when released removes a negative influence on firm performance (Shimizu & Hitt, 2005). Accumulating resources (knowledge, skills, reputation, etc.) often complements acquiring resources, thereby allowing firms to create unique resource portfolios.

Bundling

Bundling resources to form capabilities requires intentional actions. Often, capabilities are formed within functions such as manufacturing and marketing. Bundling requires knowledge while providing a rich learning context, especially tacit learning. For example, Kor and Leblebici (2005) found that bundling senior partners with less experienced associates in law firms positively affects performance. These results support Hitt, Bierman, Shimizu, and Kochhar's (2001) suggestion that bundling choices strongly affect the development of tacit knowledge. Thus, the choices leaders make regarding the bundling of resources to stabilize, enrich, or pioneer new capabilities are important to achieving and sustaining a competitive advantage (Lu, Zhou, Bruton, & Li, 2010).

Leveraging

Leveraging actions move the firm from the potential to create value to realizing value by deploying the capabilities to achieve competitive advantages. Leaders mobilize, coordinate, and deploy specific capabilities in particular market contexts by choosing and implementing a particular strategy. Of equal importance to choosing the strategy to follow is synchronizing the actions necessary for leveraging. Recent empirical work demonstrates that resource investment deviating from industry norms negatively affects performance, unless that deviation is synchronized with an appropriate leveraging strategy (Sirmon & Hitt, 2009). When matched to the appropriate strategy, greater investment deviations (in either direction from investment norms) lead to higher performance. Supporting these conclusions, Holcomb, Holmes, and Connelly's (2009) results showed that synchronization across the resource management processes is vital to developing a competitive advantage.

For synchronization to occur, leaders require sufficient information pertaining to the firm's external environment and internal organization as well as the ability to effectively process that information. Sleptsov and Anand's (2008) research suggested that having one without the other, or—as is more likely the case—when such information is not balanced, performance is negatively affected. Thus, feedback loops exist among structuring, bundling, and leveraging actions (Sirmon et al., 2007). Although we discuss these actions sequentially, in practice leaders can, and likely do, perform them in an iterative process.

The choice of sequencing or iteration among these actions may be based on the specific opportunity being considered. For instance, Choi and Shepherd (2004) found that the decision to exploit an opportunity was influenced by several factors, including knowledge of the customer, knowledge of the underlying technology offered, level of stakeholder support, and overall managerial experience. Moreover, an opportunity's attractiveness enhanced the effect of all of these factors, especially managerial experience. Thus, when potential entrepreneurs have a high level of stakeholder support that addresses much of their

resource acquisition concerns, they may be more likely to begin the resource orchestration sequence with structuring actions. On the other hand, an entrepreneur with knowledge about customer needs may be more likely to begin with a leveraging strategy and follow it with the bundling and structuring actions necessary to implement the strategy.

Value Creation and Appropriation

Regardless of the sequence, successfully exploiting an opportunity invites imitation from competitors. Several factors such as causal ambiguity and time diseconomies (Dierickx & Cool, 1989) can prevent or slow imitation; however, more proactive actions can also discourage imitation. Copyrights and patent protection are two important barriers entrepreneurs can use to protect or forestall others from appropriating value from their ideas and resources (Burgelman & Hitt, 2007). In fact, research in value appropriation and intellectual property protection is growing rapidly, especially because policy and competitive changes in the 1980s led to "patent races" (Ziedonis, 2004).

Research indicates that a firm's patenting strategies contribute several important outcomes to entrepreneurship, including alliance partner selection (Lavie, 2007) and IPO underpricing (Heeley, Matusik, & Jain, 2007), among others. Even more important, Ceccagnoli (2009) provided evidence that patent protection increases a firm's ability to appropriate rents from innovation. Moreover, nonconventional patenting strategies such as "preemptive patenting" can generate market power for firms that are following such strategies to avoid legal battles and other "hold-up" concerns that may be present in technologically intense industries (Ziedonis, 2004).

For the nascent firm or entrepreneur, patenting is not the only means to protect intellectual property. Coff (2011) described how Tony Fadell, the driver behind Apple's iPod, protected his interests when negotiating his employment relationship with Apple. Fadell first tried to create what was to become the iPod within his previous employer, Philips Electronics, and then within his own failed venture before joining Apple. Fadell was able to protect the assets he brought to Apple by struc-

turing his initial relationship as a contractor. As development successfully continued, he utilized his critical personal complementary assets (innovator and knowledge of the innovation) to change the relationship from contractor to senior executive with substantial equity. This arrangement led him to appropriate nearly \$38 million for the value he helped to create.

Thus, regardless of the means (e.g., patents, copyrights, or negotiated contracts), the protection of intellectual property and complementary resources is critical to the appropriation of value that resource orchestration creates. Next, we discuss the outcomes that result from using strategic entrepreneurship.

Outputs of Strategic Entrepreneurship Processes

The processes and actions that comprise SE generate several potential outcomes. Of course, the ultimate outcome is either forming a new venture firm or achieving competitive success (by creating value for customers of an established firm). Over time both of these outcomes are intended to create value for those holding equity in the firm. Creating wealth for owners is typically interpreted as "financial wealth," which is a primary goal. However, owners/entrepreneurs may also achieve other forms of wealth, such as "socioemotional wealth" (Berrone, Cruz, Gomez-Mejia, & Larraza-Kintana, 2010) and personal happiness. Yet we also expect the outcome(s) of SE to benefit society. Importantly, increasing the wealth of owners should contribute positively to additional economic activity (e.g., job creation, technological advancement, and economic stability and growth) and thereby benefit society, and there is potential for other social benefits as well. To achieve these longer term and major outcomes, several interim outcomes are likely to be critical, such as creating new technologies or developing innovations with value-creating potential. In addition, an interim and critically important outcome is achieving a competitive advantage. In fact, long-term survival is unlikely for a firm that is unable to achieve at least competitive parity. Innovation often contributes to a competitive advantage, but there are other activities necessary to achieving such an advantage (e.g., managing resources wisely and effectively as described in the previous section). Below, we discuss several of these outcomes.

Individual Benefits

Individual entrepreneurs gain value when engaging in strategic entrepreneurship. For example, they gain satisfaction in developing an independent business and creating value for customers. In addition, increases to the entrepreneur's financial wealth result from venture success. Thus, starting a new venture and operating it successfully likely satisfies several of the entrepreneur's needs, including self-actualization.

Individual entrepreneurs also learn when they develop and implement a new venture; as a result, they build their personal knowledge stocks. Baron and Henry (2010) argued that enhanced cognitive resources, which entrepreneurs acquire through sustained deliberate practice, strongly influence the success of their subsequent ventures. According to Baron and Henry, deliberate practice entails intense, persistent, and highly focused efforts to improve current performance. In taking these actions, entrepreneurs' knowledge stocks and other cognitive resources (e.g., perceptual acuity, memory) are enhanced, helping them to more accurately recognize, evaluate, and exploit business opportunities. This process can also apply to entrepreneurial leaders in established firms.

Organizational Benefits: Technology and Innovation

Creating new technology and innovation is crucial for many firms, regardless of their size or age. Of course, for a new entrepreneurial firm, it may be critical to break into an established market or to create a new market, developing a product that is highly differentiated from existing products and one that creates substantial value for customers. Often, this new product will be based on a highly novel, or what is sometimes referred to as a radical, innovation. In fact, the disequilibrium to which Schumpeter (1942) referred requires a novel innovation. Yet after firms have captured a market-leading position with an innovative product, they often then try to incrementally improve that product in order to stay ahead of competitors that are trying to imitate and improve the product to gain competitive parity or, ideally, competitive

advantage. The latter actions (incremental innovation and imitation by competitors) tend to move the market toward equilibrium (Kirzner, 1973).

To create a novel product often requires creativity and entrepreneurial approaches (Ward, 2004). In fact, Ward (2004) suggested that successful new ideas frequently achieve an effective balance between novelty and attributes that are familiar but attractive to customers. Creating novel (radical) innovation often requires a significant investment of time, effort, and frequently financial capital as well. To produce novel innovations, firms often must shift their focus from current products to future technologies and products (Sood & Tellis, 2005). Because firms rarely have the resources needed to achieve this type of innovation internally, they frequently search external sources to locate them. To do so, they may need to develop networks of partners that provide inputs to help develop the innovations (Hughes, Morgan, & Ireland, 2010), requiring them to become highly proficient at managing innovation networks (Dhanaraj & Parkhe, 2006). Frequently, new venture firms are more creative and thus can develop more novel innovations, while established firms are effective in adding new features to and improving their current products to maintain an advantage in the market. Therefore, partnerships between new venture firms and larger established firms can be productive because of the complementary capabilities held by each. In this way, the partnership helps the firms balance exploration and exploitation.

Following a recent trend, many firms are building relationships with university technology development programs as an external source for new technologies and products. Simultaneously, an increasing number of universities have built technology transfer programs in which they develop new technologies and transfer them to the private sector for commercialization. As such, the university becomes a source of R&D for these businesses (Markman, Phan, Balkin, & Gianiodis, 2005). In these cases, the university generally is paid an initial fee for the technology and/or retains a percentage ownership in the technology/product.

Finally, some firms use acquisitions to gain

access to new technologies and new highly valuable innovations (Makri, Hitt, & Lane, 2010). Such acquisitions are common in the pharmaceutical industry and in other high-technology industries such as software development. Acquisitions are regularly practiced by a number of technology-oriented firms, including Microsoft and Cisco, with the intent of gaining access to new software ideas and technologies.

Firms seeking to develop new technologies must currently hold, develop, or have access to the necessary and relevant scientific knowledge. Science or scientific knowledge provides the base for developing and commercializing new technology (Makri et al., 2010). The recent emphasis on nanotechnologies is a prime example of highly popular and potentially valuable work that represents strategic entrepreneurial activity in many industrial and service sectors (Woolley & Rottner, 2008). An additional benefit of developing new technologies and innovation is the creation of new knowledge, which in turn frequently provides new market opportunities (to introduce a new product and even to create a new market) even across industries (Woolley, 2010). Such innovation or technology and the additional valuable knowledge spillover from developing the technology and/or innovation contribute to a competitive advantage.

Societal Benefits

Certainly, increasing owners' wealth can have positive societal benefits because it injects more financial capital into the economy and thereby promotes economic growth (Agarwal et al., 2007). Indeed, many have argued that entrepreneurial activity is a major contributor to economic development and growth, creating new jobs and enhanced market valuations (Baumol & Strom, 2007). Yet entrepreneurial activity can provide other benefits to society as well.

A new area of research referred to as social entrepreneurship examines how entrepreneurs develop enterprises with the intent of helping societal members, often those who are underprivileged and have low incomes (Kistruck, Webb, Ireland, & Sutter, 2011). This focus has become a significant and growing research area (Short, Moss, &

Lumpkin, 2009; Zahra, Rawhouser, Bhawe, Neubaum, & Hayton, 2008). Essentially, social entrepreneurs establish organizations to meet social needs in ways that improve the quality of life and increase human development over time (Zahra et al., 2008) while benefiting owners in ways that continue revenue flow and allow them to earn a return on their investment. Organizations created to engage in social entrepreneurship—and, more broadly, corporations engaging in socially responsible actions—serve a variety of stakeholders. Stakeholders represent a broader view of those affected by an organization (not limited to ownership). Thus, stakeholder theory supports much of this research concerned with social entrepreneurship (Mahoney, 2010; Surroca, Tribo, & Waddock, 2010).

Yet beyond the specific entrepreneurial activities designed to serve certain social needs, in line with SE and stakeholder theory, broader perspectives can be employed to achieve other types of outcomes, such as attempts to create new companies that enrich the natural environment and/or are designed to overcome or limit others' negative influences on the physical environment. For example, entrepreneurial efforts to harness wind power could have major long-term benefits to society by providing a clean energy source (Sine & Lee, 2009). In addition, novel innovations could be used to address a number of environmental problems (Adner & Kapoor, 2010). Many firms may take actions to reduce the negative influences their operations typically have on the environment with the hope of creating a positive greening effect (Delmas & Montes-Sancho, 2010).

Some have argued that entrepreneurial activities targeting areas of social need could lead to a marketization of nonprofit organizations in ways that do not truly satisfy societal needs (Eikenberry & Kluver, 2004). Although this concern is not without foundation and marketization could have negative outcomes, there are a number of positive examples of entrepreneurial efforts that provide major benefits to society, often substantially exceeding public organizations' capabilities to satisfy the needs (Hitt, 2005). For example, the KIPP (Knowledge Is Power Program) charter schools demonstrate how entrepreneurial efforts can gen-

erate significant benefits for society that exceed the benefits created by public educational organizations, providing education from prekindergarten through 12th grade. The organization uses a number of motivational tactics and largely serves children from underprivileged families. It has produced phenomenal results. The educational program offered is one of intense communal focus on specific goals, and the intent is to effectively prepare and encourage students to attend college after they graduate. In fact, 85% of those graduating from KIPP schools enter college—compared with approximately 40% of low-income students nationally who enter college after graduating from high school (Peterson, 2010).

Entrepreneurial activity can also have other societal benefits. For example, an enhanced focus on and resources allocated to entrepreneurial activity could increase the opportunities for women to pursue entrepreneurial undertakings. In fact, if the limitations are loosened and barriers to engaging in entrepreneurial activity for women and other disadvantaged groups are overcome, the resulting growth in entrepreneurial activity could eventually facilitate positive societal change by empowering more women and individuals from underprivileged families to become entrepreneurs and to gain access to the economic benefits that flow from successful entrepreneurial activities (Calas, Smircich, & Bourne, 2009). Thus, overall, entrepreneurial activity can help to build new economic, social, institutional, and cultural environments and thereby provide significant benefits to society (Rindova et al., 2009).

Discussion and Conclusions

The dynamic and complex competitive environments that have become increasingly common produce multiple challenges for firms seeking to create value and wealth. Uncertainty and ambiguity are but two of the outcomes in the current business environment. Strategic management and entrepreneurship are organizational processes firms use to reduce and/or take advantage of uncertainty and ambiguity and create more value and wealth. In essence, the intent of strategic management is to develop and successfully exploit competitive advantages. Increasingly, the need to

operate internationally, the necessity of making ethical decisions, and the importance of recognizing the criticality of consumers for successful strategies influence the decisions and actions the firm takes to form and exploit competitive advantages.

Entrepreneurship is concerned with recognizing opportunities that when effectively exploited through the firm's competitive advantages lead to enhanced value and wealth. Opportunities to produce innovative goods and services that create value for customers often are a product of market imperfections. Because competitors will eventually determine how to imitate a firm's value-creating competitive advantages, continuous innovation is the source of sustained value and wealth creation over time.

Strategic entrepreneurship allows the firm to apply its knowledge and capabilities in the current environmental context while exploring for opportunities to exploit in the future by applying new knowledge and new and/or enhanced capabilities. To be effective, SE demands that firms achieve a balance between the opportunity-seeking behaviors of "entrepreneurship" and the advantageseeking behaviors associated with "strategic management." To a degree, the entrepreneurship part of SE requires flexibility and novelty, while the strategic management part seeks stability and predictability. However, achieving this balance is challenging because firms have finite resources, meaning that trade-offs often must be made regarding the amount of resources allocated to exploiting current competitive advantages and those allocated to exploring for opportunities and new sources of advantage for the future. Achieving this balance requires an organizational structure capable of supporting the twin needs of exploitation and exploration. Future research should seek to clearly specify the characteristics of such a structure. This type of structure likely needs the attributes of an ambidextrous organization that allow it to simultaneously explore and exploit (Benner & Tushman, 2003). The most effective balance between exploring and exploiting may be partially dependent on the type of competitive environment in which the firm exists. Future research should examine the extent to which the competitive environment moderates the relationship between the balance achieved between exploitation and exploration and the firm's ability to create value over time.

To be sustained over time, even nonprofit entrepreneurial ventures such as KIPP must develop and maintain a competitive advantage. For example, if KIPP charter schools were not better than their public counterparts, they would be unable to sustain their activity. If they provide no viable benefits to customers beyond what competitors provide, they are unlikely to survive. Likewise, large established firms often have slack resources that have accrued from successful operations across time. Yet if these large organizations fail to engage in opportunity-seeking behaviors, an entrepreneurial firm (or a large competitor acting entrepreneurially) will introduce a better product that provides more value to customers and take their market away. The demise of Polaroid was accelerated by new competitors' introduction of digital cameras. Similarly, the unique approach to video rental introduced by Netflix eventually drove Blockbuster into bankruptcy.

Therefore, SE is relevant across the full life cycle of organizations, although historically, strategic management has largely been associated with mature organizations and entrepreneurship largely associated with young ventures. As such, SE implies a long-term view of value creation that results from simultaneously engaging in opportunity- and advantage-seeking behaviors. Because of this, the concept of SE poses a number of temporal research questions. For example, there is a need to conduct longitudinal research of new ventures as they mature to understand how the nature of entrepreneurial activities varies over time. How do organizations learn to manage resources in ways that appropriately and simultaneously serve their need to exploit today's advantages and explore for new opportunities to exploit?

Supporting this type of work is research to precisely detail and classify advantage-seeking behaviors and opportunity-seeking behaviors used in organizations. To what degree do these behaviors overlap and to what extent are they complementary? What methods should firms use to master both types of behaviors? Is it possible for individual business units and departments to excel at

both advantage- and opportunity-seeking behaviors within a single organization? In addition, what actions are required for new ventures to gain and especially sustain a competitive advantage?

As described herein, SE is a multilevel concept in which resources may exist and/or be developed at the individual, organization, and societal levels. The organization bundles the resources to create capabilities and then leverages them to create value for customers (Sirmon et al., 2007). The outcomes of these activities can create benefits for individuals (entrepreneurs, managers, organizational employees, customers, etc.), organizations, and society. Yet very little research exists that crosses these levels. Most entrepreneurship research focuses on either the individual or the organizational level. More research is needed to understand the influence of the interaction of individual and organizational attributes on entrepreneurial activities and outcomes. In addition, we need to understand when and under what conditions the benefits at any one level become dominant motivators of entrepreneurial activities.

Another area warranting more research concerns the effects of societal-level institutions on entrepreneurial activities and outcomes. For example, how do informal institutions (e.g., a society's norms, values, and beliefs that determine the social acceptability of actions and their outcomes) and formal institutions (e.g., regulations and laws) affect entrepreneurial activity? Evidence suggests, for example, that the institutions associated with bottom-of-the-pyramid (BOP) markets¹ are characterized by three key factors: (1) underdeveloped formal institutions, (2) significant differences between the formal and informal institutional boundaries in BOP markets and in developed markets, and (3) differences or variances in formal and informal institutions within individual BOP markets (Kistruck et al., 2011).

How do underdeveloped formal institutions (in the form of poorly developed property rights laws and inadequate enforcement of contracts, among other factors) affect entrepreneurs' deci-

¹ Impoverished in nature, a BOP market is one in which the average wage earned is less than \$2 per day (Prahalad, 2004).

sions to establish ventures? What effect does the variance in different societies' norms, values, and beliefs have on a firm's ability to identify and exploit entrepreneurial opportunities? How do formal and informal institutions influence the importance and use of social networks by entrepreneurs? Essentially, more research is needed to understand how country-level formal institutions and societal culture affect entrepreneurial activities.

In addition, do the effects of formal and informal institutions on entrepreneurial activities vary between the formal economy and those in the informal economy, where the formal economy includes activities that are deemed legal by formal institutions and legitimate by informal institutions (Webb, Tihanyi, Ireland, & Sirmon, 2009)? Examining the effects of the boundaries established by formal and informal institutions within the context of formal and informal economies suggests a robust array of research questions concerning SE. For example, does SE create more or less value when used by firms competing in an informal economy compared to firms operating in the formal economy?

The SE construct encompasses an array of knowledge stocks. It draws on knowledge from multiple disciplines—most prominently, of course, from strategic management and entrepreneurship. The importance of innovation in the global economy, the significance of entrepreneurial activity for economic growth, and the critical value of strategic management for survival and success heighten SE's importance. Research on SE and constructs relevant to it has burgeoned in the first decade of the 21st century, as evidenced by the increasing number of journal special issues on the topic and the rapid development of the Strategic Entrepreneurship Journal. The research in this area over the next 10 years is likely to grow geometrically. This work and the model presented herein provide a base of support and suggest a robust set of opportunities for enriched inquiry regarding the effective use of strategic entrepreneurship and the benefits that can accrue to multiple stakeholders as a result.

References

- Adner, R., & Kapoor, R. (2010). Value creation in innovation ecosystems: How the structure of technological interdependence affects firm performance in new technology generations. Strategic Management Journal, 31(3), 306–333.
- Agarwal, R., Audretsch, D., & Sarkar, M. B. (2007). The process of creative construction: Knowledge spillovers, entrepreneurship and economic growth. *Strategic Entre-preneurship Journal*, 1(2), 263–286.
- Aldrich, H. E. (1979). Organizations and environments. Englewood Cliffs, NJ: Prentice Hall.
- Aldrich, H. (2000). Organizations evolving. Beverly Hills, CA: Sage.
- Alvarez, S. A., & Barney, J. B. (2007). Discovery and creation: Alternative theories of entrepreneurial action. *Strategic Entrepreneurship Journal*, 1(1), 11–26.
- Alvarez, S. A., & Barney, J. B. (2010). Entrepreneurship and epistemology: The philosophical underpinnings of the study of entrepreneurial opportunities. *Academy of Management Annals*, 4, 557–583.
- Andrews, K. R. (1971). The concept of corporate strategy. Homewood, IL: Irwin.
- Baker, T., Miner, A. S., & Easley, D. (2003). Improvising firms: Bricolage, retrospective interpretation and improvisational competencies in the founding process. *Research Policy*, 32(2), 255–276.
- Baker, T., & Nelson, R. (2005). Creating something from nothing: Resource construction through entrepreneurial bricolage. Administrative Science Quarterly, 50(3), 329– 366.
- Bamford, C. E. (2005). Creating value. In M. A. Hitt & R. D. Ireland (Eds.), *The Blackwell encyclopedia of management: Entrepreneurship* (pp. 48–50). Oxford, UK: Blackwell Publishers.
- Barnard, C. I. (1938). The functions of the executive. Cambridge, MA: Harvard University Press.
- Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Barney, J. B. (2002). Gaining and sustaining competitive advantage (2nd ed.). Upper Saddle River, NJ: Prentice Hall.
- Baron, R. A. (2007). Behavioral and cognitive factors in entrepreneurship: Entrepreneurs as the active element in new venture creation. *Strategic Entrepreneurship Journal*, 1(1–2), 167–182.
- Baron, R. A., & Henry, R. A. (2010). How entrepreneurs acquire the capacity to excel: Insights from research on expert performance. *Strategic Entrepreneurship Journal*, 4 (1), 49–65.
- Baron, R. A., & Markman, G. D. (2000). Beyond social capital: The role of social skills in entrepreneurs' success. Academy of Management Executive, 14(1), 106–116.
- Baron, R. A., & Markman, G. D. (2003). Beyond social capital: The role of entrepreneurs' social competence in their financial success. *Journal of Business Venturing*, 18(1), 41–60.
- Baron, R. A., & Tang, J. (2009). Entrepreneurs' social skills and new venture performance: Mediating mechanisms

- and cultural generality. Journal of Management, 35(2), 282-306.
- Batjargal, B., Tsui, A., Hitt, M. A., Arregle, J., Webb, J. W., & Miller, T. L. (2009). Women and men entrepreneurs' social networks and new venture performance across cultures. Academy of Management Proceedings.
- Baum, J. R., & Locke, E. A. (2004). The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth. *Journal of Applied Psychology*, 89(4), 587–598.
- Baumol, W. J., & Strom, R. J. (2007). Entrepreneurship and economic growth. Strategic Entrepreneurship Journal, 1(1–2), 233–237.
- Benner, M. J., & Tushman, M. L. (2003). Exploitation, exploration and process management: The productivity dilemma revisited. Academy of Management Review, 28 (2), 238–256.
- Berrone, P., Cruz, C., Gomez-Mejia, L., & Larraza-Kintana, M. (2010). Socioemotional wealth and corporate responses to institutional pressures: Do family-controlled firms pollute less? *Administrative Science Quarterly*, 55(1), 82–113.
- Bruyat, C., & Julien, P. (2001). Defining the field of research in entrepreneurship. *Journal of Business Venturing*, 16, 165–180.
- Burgelman, R. A., & Hitt, M. A. (2007). Entrepreneurial action, innovation and appropriability. *Strategic Entre- preneurship Journal*, 1(3–4), 349–352.
- Calas, M. B., Smircich, L., & Bourne, K. A. (2009). Extending the boundaries: Reframing entrepreneurship as social change through feminist perspectives. *Academy of Management Review*, 34, 552–569.
- Cardon, M., Wincent, J., Singh, J., & Drnovsek, J. (2009). The nature and experience of entrepreneurial passion. *Academy of Management Review*, 34(3), 511–532.
- Cassar, G., & Friedman, H. (2009). Does self-efficacy affect entrepreneurial investment? *Strategic Entrepreneurship Journal*, 3(3), 241–260.
- Castrogiovanni, G. J. (1991). Environmental munificence: A theoretical assessment. Academy of Management Review, 16(3), 542–565.
- Ceccagnoli, M. (2009). Appropriability, preemption, and firm performance. Strategic Management Journal, 30(1), 81–98.
- Chaddad, F., & Reuer, J. (2009). Investment dynamics and financial constraints in IPO firms. *Strategic Entrepreneurship Journal*, 3(1), 29–45.
- Chandler, A. D. (1962). Strategy and structure: Chapters in the history of the American industrial enterprise. Washington, DC: Beard Books.
- Chen, M.-J., Fairchild, G. B., Freeman, R. E., Harris, J. D., & Venkataraman, S. (2010). What is strategic management? Darden Business Publishing, UVA-S-0166.
- Chen, M.-J. (1996). Competitor analysis and inter-firm rivalry: Toward a theoretical integration. Academy of Management Review, 21(1), 100–134.
- Chen, X. P., Yao, X., & Kotha, S. (2009). Entrepreneur passion and preparedness in business plan presentations: A persuasion analysis of venture capitalists' funding decisions. Academy of Management Journal, 52(1), 199–214.

- Chiles, T., Bluedorn, A. C., & Gupta, V. K. (2007). Beyond creative destruction and entrepreneurial discovery: A radical Austrian approach to entrepreneurship. *Organization Studies*, 28(4), 467–493.
- Choi, Y. R., & Shepherd, D. A. (2004). Entrepreneurs' decisions to exploit opportunities. *Journal of Management*, 30(3), 377–395.
- Coff, R. W. (2002). Human capital, shared expertise, and the likelihood of impasse in corporate acquisitions. *Journal of Management*, 28(1), 107–128.
- Coff, R. W. (in press). The co-evolution of rent appropriation and capability development. *Strategic Management Journal*.
- Covin, J. G., & Slevin, D. P. (2002). The entrepreneurial imperatives of strategic leadership. In M. A. Hitt, R. D. Ireland, S. M. Camp, & D. L. Sexton (Eds.), *Strategic entrepreneurship: Creating a new mindset* (pp. 309–327). Oxford, UK: Blackwell Publishers.
- Crook, T. R., Ketchen, D. J., Combs, J. G., & Todd, S. Y. (2008). Strategic resources and performance: A meta-analysis. Strategic Management Journal, 29(11), 1141–1154.
- Davidsson, P. (2005). Researching entrepreneurship. New York: Springer.
- DeCarolis, D. M., & Deeds, D. L. (1999). The impact of stocks and flows of organizational knowledge on firm performance: An empirical investigation of the biotechnology industry. *Strategic Management Journal*, 20(10), 953–968.
- Delmas, N. A., & Montes-Sancho, M. J. (in press). Voluntary agreements to improve environmental quality: Symbolic and substantive cooperation. *Strategic Management Journal*.
- Dess, G., & Beard, D. (1984). Dimensions of organizational task environments. *Administrative Science Quarterly*, 29(1), 52–73.
- Dess, G. G., & Lumpkin, G. T. (2001). Emerging issues in strategy process research. In M. A. Hitt, R. E. Freeman, & J. S. Harrison (Eds.), *Handbook of strategic management* (pp. 3–34). Oxford, UK: Blackwell Publishers.
- Dhanaraj, C., & Parkhe, A. (2006). Orchestrating innovation networks. Academy of Management Review, 31(3), 659–669.
- Dierickx, I., & Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science*, 35(12), 1504–1511.
- Eckhard, J., & Shane, S. A. (2003). Opportunities and entrepreneurship. *Journal of Management*, 29(3), 333–349.
- Eikenberry, A. M., & Kluver, J. D. (2004). The marketization of the nonprofit sector: Civil society at risk? *Public Administration Review*, 64(2), 132–140.
- Gaglio, C. M. (2004). The role of counterfactual thinking in the opportunity identification process. *Entrepreneurship Theory and Practice*, 28(6), 533–552.
- Gaglio, C. M., & Katz, J. (2001). The psychological basis of opportunity identification: Entrepreneurial alertness. *Journal of Small Business Economics*, 16(2), 95–111.
- Gartner, W. B. (2007). Entrepreneurial narrative and a

- science of the imagination. *Journal of Business Venturing*, 22(5), 613–627.
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. Strategic Management Journal, 17(1), 109–122.
- Grimm, C., Lee, H., & Smith K. (2006). Strategy as action: Industry rivalry and coordination. Oxford, UK: Oxford University Press.
- Gupta, V., MacMillan, I. C., & Surie, G. (2004). Entrepreneurial leadership: Developing and measuring a cross-cultural construct. *Journal of Business Venturing*, 19(2), 241–260.
- Hannan, M. T., & Freeman, I. H. (1984). Structural inertia and organizational change. *American Sociological Review*, 49(2), 149–164.
- Hannan, M. T., & Freeman, I. H. (1989). Organizational ecology. Cambridge, MA: Harvard University Press.
- Heeley, M. B., Matusik, S. F., & Jain, N. (2007). Innovation, appropriability, and the underpricing of initial public offerings. Academy of Management Journal, 50(1), 209–225.
- Helfat, C., Finkelstein, S., Mitchell, W., Peteraf, M., Singh, H., Teece, D., & Winter, S. (2007). Dynamic capabilities: Understanding strategic change in organizations. Oxford, UK: Blackwell Publishers.
- Hitt, M. A. (2005). Management theory and research: Potential contribution to public policy and public organizations. *Academy of Management Journal*, 48(6), 963–966.
- Hitt, M. A., Beamish, P. W., Jackson, S. E., & Mathieu, J. E. (2007). Building theoretical and empirical bridges across levels: Multilevel research in management. Academy of Management Journal, 50(6), 1385–1399.
- Hitt, M. A., Bierman, L., Shimizu, K., & Kochhar, R. (2001). Direct and moderating effects of human capital on strategy and performance in professional service firms: A resource-based perspective. Academy of Management Journal, 44(1), 13–28.
- Hitt, M. A., & Ireland, R. D. (2005). Strategic entrepreneurship. In M. A. Hitt & R. D. Ireland, (Eds.), *The Blackwell encyclopedia of management: Entrepreneurship* (pp. 228–231). Oxford, UK: Blackwell Publishers.
- Hitt, M. A., Ireland, R. D., Camp, S. M., & Sexton, D. L. (2001). Strategic entrepreneurship: Strategies for wealth creation. Strategic Management Journal, 22(3–4), 479– 491.
- Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (2011). Strategic management: Competitiveness and globalization (9th ed.). Mason, OH: Thomson South-Western.
- Hitt, M. A., Lee, H., & Yucel, E. (2002). The importance of social capital to the management of multinational enterprises: Relational networks among Asian and Western firms. Asia Pacific Journal of Management, 19(2–3), 353–372.
- Hofer, C. W., & Schendel, D. (1978). Strategy formulation: Analytical concepts. St. Paul, MN: West Publishing.
- Holcomb, T. R., Holmes, R. M., & Connelly, B. (2009). Making the most of what you have: Managerial ability as a source of resource value creation. Strategic Management Journal, 30(5), 457–485.
- Holcomb, T. R., Ireland, R. D., Holmes, R. M., & Hitt, M. A. (2009). Architecture of entrepreneurial learning:

- Exploring the line between heuristics, cognition, and action. Entrepreneurship Theory and Practice, 33(1), 167–192.
- Hughes, M., Morgan, R. E., & Ireland, R. D. (2010). Social capital and learning from network relationships (Working Paper). Nottingham, UK: University of Nottingham.
- Ireland, R. D., Hitt, M. A., Camp, S. M., & Sexton, D. L. (2001). Integrating entrepreneurship and strategic management actions to create wealth. *Academy of Management Executive*, 15(1), 49–63.
- Ireland, R. D., Hitt, M. A., & Sirmon, D. G. (2003). Strategic entrepreneurship: The construct and its dimensions. *Journal of Management*, 29(6), 963–989.
- Keats, B. W., & Hitt, M. A. (1988). A causal model of linkages among environmental dimensions, macro organizational characteristics, and performance. Academy of Management Journal, 31(3), 570–598.
- Ketchen, D. J., Ireland, R. D., & Snow, C. C. (2007). Strategic entrepreneurship, collaborative innovation, and wealth creation. *Strategic Entrepreneurship Journal*, 1(3–4), 371–385.
- Kim, H., Kim, H., & Lee, P. (2008). Ownership structure and the relationship between financial slack and R&D investments. *Organization Science*, 19(3), 404–418.
- Kirzner, I. M. (1973). Competition and entrepreneurship. Chicago: University of Chicago Press.
- Kirzner, I. M. (1979). Perception, opportunity, and profit. Chicago: University of Chicago Press.
- Kistruck, G., Webb, J. W., Ireland, R. D., & Sutter, C. (in press). Microfranchising in base-of-the-pyramid markets: Institutional challenges and adaptations to the franchise model. *Entrepreneurship Theory and Practice*.
- Kleinbaum, A. M., & Tushman, M. L. (2007). Building bridges: The social structure of interdependent innovation. Strategic Entrepreneurship Journal, 1(1–2), 103–122.
- Knight, F. H. (1921). Risk, uncertainty, and profit. Boston: Houghton Mifflin.
- Kor, Y. Y., & Leblebici. H. (2005). How do interdependencies among human-capital deployment, development, and diversification strategies affect firms' financial performance? Strategic Management Journal, 26(10), 967–985.
- Kuratko, D. F., Ireland, R. D., Covin, J. G., & Hornsby, J. S. (2005). A model of middle-level managers' entrepreneurial behavior. *Entrepreneurship: Theory and Practice*, 29(6), 699–716.
- Kyrgidou, L. P., & Hughes, M. (2010). Strategic entrepreneurship: Origins, core elements and research directions. European Business Review, 22(1), 43–63.
- Lavie, D. (2007). Alliance portfolios and firm performance: A study of value creation and appropriation in the U.S. software industry. *Strategic Management Journal*, 28(12), 1187–1212.
- Lee, S. H., Peng, M. W., & Barney, J. B. (2007). Bankruptcy law and entrepreneurship development: A real options perspective. Academy of Management Review, 32(1), 257–272.
- Lu, Y., Zhou, L., Bruton, G., & Li, W. (2010). Capabilities as a mediator linking resources and the international performance of entrepreneurial firms in an emerging

- economy. Journal of International Business Studies, 41(3), 419–436.
- Mahoney, J. T. (2010). Towards a stakeholder theory of strategic management (Working Paper). Champaign-Urbana, IL: University of Illinois.
- Makadok, R., & Coff, R. (2002). The theory of value and the value of theory: Breaking new ground versus reinventing the wheel. Academy of Management Review, 27(1), 10–13.
- Markman, G. D., Phan, P. P., Balkin, D. B., & Gianiodis, P. T. (2005). Entrepreneurship and university-based technology transfer. *Journal of Business Venturing*, 20(2), 241–263.
- Makri, M., Hitt, M. A., & Lane, P. (2010). Complementary technologies, knowledge relatedness and invention outcomes in high-technology mergers and acquisitions. *Strategic Management Journal*, 31(6), 602–628.
- Martens, M. L., Jennings, J. E., & Jennings, P. D. (2007). Do the stories they tell get them the money they need? The role of entrepreneurial narratives in resource acquisition. *Academy of Management Journal*, 50(5), 1107–1132.
- McGrath, R. G., & MacMillan, I. C. (2000). The entrepreneurial mindset. Boston: Harvard Business School Press.
- McMullen, J. S., & Shepherd, D. A. (2006). Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. *Academy of Management Review*, 31(1), 132–152.
- Meyer, A. D. (1991). What is strategy's distinctive competence? *Journal of Management*, 17(4), 821–833.
- Miles, M. P. (2005). Competitive advantage. In M. A. Hitt & R. D. Ireland (Eds.), The Blackwell encyclopedia of management: Entrepreneurship (pp. 36–37). Oxford, UK: Blackwell Publishers.
- Morrow, J. L., Sirmon, D. G., Hitt, M. A., & Holcomb, T. R. (2007). Creating value in the face of declining performance: Firm strategies and organizational recovery. *Strategic Management Journal*, 28(3), 271–283.
- Mosakowski, E. (2002). Overcoming resource disadvantages in entrepreneurial firms: When less is more. In M. A. Hitt, R. D. Ireland, S. M. Camp, & D. L. Sexton (Eds.), Strategic entrepreneurship: Creating a new integrated mindset (pp. 106–126). Oxford, UK: Blackwell Publishers.
- Ndofor, H. A., Sirmon, D. G., & He, X. (in press). Firm resources, competitive actions and performance: Investigating a mediated model with evidence from the invitro diagnostics industry. *Strategic Management Journal*.
- Obstfeld, D. (2005). Social networks, the *tertius iungens* orientation, and involvement in innovation. *Administrative Science Quarterly*, 50(1), 100–130.
- Peterson, M. (2010, February 15). "Good to Great" hits grade school. Business Week, pp. 56–58.
- Porter, M. E. (1980). Competitive strategy. Free Press: New York
- Prahalad, C. K. (2004). The fortune at the bottom of the pyramid: Eradicating poverty through profits. Upper Saddle River, NJ: Wharton School Publishing.
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and sugges-

- tions for the future. Entrepreneurship Theory and Practice, 33(3), 761–787.
- Rindova, V., Barry, D., & Ketchen, D. J. (2009). Entrepreneuring as emancipation. Academy of Management Review, 34(3), 477–491.
- Sarasvathy, S. D. (2008). Effectuation: Elements of entrepreneurial expertise. Cheltenham, UK: Edward Elgar.
- Schendel, D., & Hitt, M. A. (2007). Comments from the editors: Introduction to volume 1. Strategic Entrepreneurship Journal, 1(1–2), 1–6.
- Schendel, D., & Hofer, C. W. (1978). Strategic management: A new view of business policy and planning. Boston: Little Brown.
- Schumpeter, J. A. (1942). Capitalism, socialism, and democracy. New York: Harper.
- Shalley, C. E., & Perry-Smith, J. E. (2008). The emergence of team creative cognition: The role of diverse outside ties, socio-cognitive network centrality, and team evaluation. Strategic Entrepreneurship Journal, 2(1), 23–41.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. Academy of Management Review, 25(1), 217–226.
- Shepherd, D. A. (2011). Multilevel entrepreneurship research: Opportunities for studying entrepreneurial decision making. *Journal of Management*, 37, 412–420.
- Shepherd, D. A., Patzelt, H., & Haynie, J. M. (2009). Entrepreneurial spirals: Deviation-amplifying loops of an entrepreneurial mindset and organizational culture. *Entrepreneurship Theory and Practice*, 33(1), 1–24.
- Shimizu, K., & Hitt, M. A. (2005). What constrains or facilitates divestitures of formerly acquired firms? The effect of organizational inertia. *Journal of Management*, 31(1), 50–72.
- Short, J. C., Moss, T. G., & Lumpkin, G. T. (2009). Research in social entrepreneurship: Past contributions and future opportunities. *Strategic Entrepreneurship Journal*, 3(2), 161–194.
- Sine, W. D., & Lee, B. H. (2009). Tilting at windmills? The environmental movement and the emergence of the U.S. wind energy sector. *Administrative Science Quarterly*, 54(1), 123–155.
- Sirmon, D. G., Gove, S., & Hitt, M. A. (2008). Resource management in dyadic competitive rivalry: The effects of resource bundling and deployment. Academy of Management Journal, 51(5), 919–935.
- Sirmon, D. G., & Hitt, M. A. (2003). Managing resources: Linking unique resources, management and wealth creation in family firms. *Entrepreneurship Theory and Practice*, 27(4), 339–358.
- Sirmon, D. G., & Hitt, M. A. (2009). Contingencies within dynamic managerial capabilities: Interdependent effects of resource investment and deployment on firm performance. Strategic Management Journal, 30(13), 1375–1394.
- Sirmon, D. G., Hitt, M. A., Arregle, J. L., & Campbell, J. T. (2010). Capability strengths and weaknesses in dynamic markets: Investigating the bases of temporary competitive advantage. Strategic Management Journal, 31(13), 1386–1409.
- Sirmon, D. G., Hitt, M. A., & Ireland, R. D. (2007).

- Managing firm resources in dynamic environments to create value: Looking inside the black box. Academy of Management Review, 32(1), 273–292.
- Sirmon, D. G., Hitt, M. A., Ireland, R. D., & Gilbert, B. (in press). Resource orchestration to create competitive advantage: Breadth, depth and life cycle effects. *Journal of Management*.
- Sleptsov, A., & Anand, J. (2008). Exercising entrepreneurial opportunities: The role of information-gathering and information-processing capabilities of the firm. *Strategic Entrepreneurship Journal*, 2(4), 265–267.
- Smith, K., & Cao, Q. (2007). An entrepreneurial perspective on the firm-environment relationship. *Strategic Entrepreneurship Journal*, 1(3–4), 316–329.
- Sood, A., & Tellis, G. J. (2005). Technological evolution and radical innovation. *Journal of Marketing*, 69(1), 152–168.
- Surroca, J., Tribo, J. A., & Waddock, S. (2010). Corporate responsibility and financial performance: The role of intangible resources. *Strategic Management Journal*, 31(5), 463–490.
- Wang, H., & Li, J. (2008). Untangling the effects of overexploration and overexploitation on organizational performance: The moderating role of environmental dynamism. *Journal of Management*, 34(5), 925–951.
- Ward, T. B. (2004). Cognition, creativity, and entrepreneurship. *Journal of Business Venturing*, 19(2), 173–188.
- Webb, J. W., Ketchen, D. J., & Ireland, R. D. (2010).

Strategic entrepreneurship within family-controlled firms: Opportunities and challenges. *Journal of Family Business Strategy*, 1(2), 67–77.

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- Webb, J. W., Tihanyi, L., Ireland, R. D., & Sirmon, D. G. (2009). You say illegal, I say legitimate: Entrepreneurship in the informal economy. Academy of Management Review, 34(3), 492–510.
- Winter, S. G. (2005). Developing evolutionary theory for economics and management. In K. G. Smith & M. A. Hitt (Eds.), *Great minds in management* (pp. 509–546). Oxford, UK: Oxford University Press.
- Woolley, J. L. (2010). Technology emergence through entrepreneurship across multiple industries. *Strategic Entre- preneurship Journal*, 4(1), 1–21.
- Woolley, J. L., & Rottner, R. M. (2008). Innovation policy and nanotechnology entrepreneurship. *Entrepreneurship Theory & Practice*, 32(5), 791–811.
- Zahra, S. A., Rawhouser, H. N., Bhawe, N., Neubaum, D. O., & Hayton, J. C. (2008). Globalization of social entrepreneurship opportunities. *Strategic Entrepreneurship Journal*, 2(1), 117–131.
- Ziedonis, R. H. (2004). Don't fence me in: Fragmented markets for technology and the patent acquisition strategies of firms. *Management Science*, 50(6), 804–820.
- Zott, C., & Huy, Q. N. (2007). How entrepreneurs use symbolic management to acquire resources. *Administrative Science Quarterly*, 52(1), 70–105.

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