J PROD INNOV MANAG 2013;30(5):812–820 © 2013 Product Development & Management Association DOI: 10.1111/jpim.12031

## **Corporate Entrepreneurship: State-of-the-Art Research and a Future Research Agenda**

Andrew Corbett, Jeffrey G. Covin, Gina C. O'Connor, and Christopher L. Tucci

### Introduction

anagers and management scholars have traditionally embraced the premise that sustainable competitive advantage must be developed by firms to achieve and perpetuate competitive superiority. The validity of the notion that competitive advantages are sustainable began to be questioned toward the end of the 20th century as the dual forces of technological change and globalization heightened competition and eroded bases-sometimes long-established bases-for competitive superiority (Bettis and Hitt, 1995). Innovation began to be regarded as inherent to effective management practice, and the premise that competitive advantage must be renewed replaced the premise that competitive advantage is sustainable. The recognized need for renewal led managers and management scholars to consider how entrepreneurial processes might be enacted within established organizations for the purposes of achieving and perpetuating competitive superiority (Covin and Slevin, 2002). Thus, an interest in corporate entrepreneurship (CE) was born. CE seeks to renew established organizations, thereby facilitating their viability and competitiveness through the utilization of various innovation-based initiatives.

The recognized scope of the CE domain has expanded significantly over the past few decades. Early CE scholars (e.g., Hill and Hlavacek, 1972; Peterson and Berger, 1971) often adopted somewhat ambiguous views of the domain of CE in the sense that what was considered entrepreneurial about the phenomenon under investigation was either not explicitly defined or was not differentiated from other phenomena commonly associated with innovation in organizations (e.g., new product development). Guth and Ginsberg's (1990) insights added needed clarity to the matter of the CE domain by advocating that CE be viewed as encompassing two categories of phenomena: corporate venturing, which entails "the birth of new businesses within existing organizations" (p. 5) and strategic renewal, which entails "the transformation of organizations through renewal of the key ideas on which they are built" (p. 5). Sharma and Chrisman (1999, p. 18) subsequently defined CE as "the process whereby an individual or group of individuals, in association with an existing organization, create a new organization or instigate renewal or innovation within that organization." Similar to Guth and Ginsberg (1990), in Sharma and Chrisman's (1999) typology, CE includes both corporate venturing and strategic renewal, but innovation "of the Schumpeter (1934) variety" is also recognized, i.e., "the introduction of an original invention or idea into a commercially usable form that is new to the marketplace and has the potential to transform the competitive environment as well as the organization" (p. 19).

The most recent conceptualizations of CE have further expanded its scope. Morris, Kuratko, and Covin (2011) and Phan, Wright, Ucbasaran, and Tan (2009) propose two categories of phenomena as representing the domain of CE: corporate venturing and strategic entrepreneurship. While the label corporate venturing is used in reference to the same new business phenomena alluded to in prior typologies, the strategic entrepreneurship category of CE refers to a wide variety of specific phenomena that include, among others, strategic renewal and the Schumpeterian (disruptive) innovation phenomenon to which Sharma and Chrisman (1999) refer. Additionally, strategic entrepreneurship as part of the CE construct recognizes not only the disruptive aspect of Schumpeterian innovation, but also the generative, path creating, new business creation aspect that may be inherent in breakthrough innovation, where firms struggle to understand how to execute opportunities in the face of high levels of uncertainty on multiple dimensions (O'Connor and Rice, forthcoming). In particular, the strategic entrepreneurship category of CE includes a broad array of entrepreneurial initiatives that do not necessarily involve new businesses being added to the corporation. The recognized forms of strategic entrepreneurship-strategic renewal, sustained regeneration, domain redefinition, organizational

Address correspondence to: Andrew Corbett, Entrepreneurship Division, Babson College, Babson Park, Masschusetts 02457. E-mail: acorbett@babson.edu. Tel: 781-239-5798.

Authors listed in alphabetical order.

rejuvenation, and business model reconstruction—all involve the exhibition of organizationally consequential innovations that are adopted in pursuit of competitive advantage (Covin and Kuratko, 2010; Ireland, Hitt, and Sirmon, 2003).

As conceptualizations of the CE domain have morphed over the years, interest in two related phenomena has paralleled CE's theoretical development. These concepts are corporate venture capital (CVC) and entrepreneurial orientation (EO). CVC funds are sometimes used to finance internal entrepreneurial initiatives (Miles and Covin, 2002), but are more commonly employed for the purpose of acquiring an equity interest in or ownership of an externally originating (i.e., independent) new venture (Dushnitsky, 2006; Ginsberg, Hasan, and Tucci, 2011). EO has been described as the engine that drives specific acts of CE (cf. Morris et al., 2011) and is commonly conceptualized as either the concurrent exhibition of behaviors reflecting risk taking, innovativeness, and proactiveness or as the domain of activity that includes the dimensions of risk taking, innovativeness, proactiveness, autonomy, and competitive aggressiveness (Covin and Lumpkin, 2011).

Collectively, the preceding observations on the extensive scope of the CE domain and its related phenomena suggest that CE is an area of scholarly inquiry that invites new insights from a variety of perspectives on the matter of how established organizations might best respond to the entrepreneurial imperatives they face and opportunities confronting them. Toward this end, this special issue of *JPIM* is offered as a forum for the dissemination of cutting-edge CE research that advances knowledge along trajectories of recognized importance. The specific foci of the papers in this special issue include many of the aforementioned phenomena. The criteria used for selecting papers for this special issue were that the research must

#### **BIOGRAPHICAL SKETCHES**

<u>Dr. Andrew Corbett</u> is an Associate Professor of Entrepreneurship and Faculty Director of the John E. & Alice L. Butler Venture Accelerator at Babson College.

<u>Dr. Jeffrey G. Covin</u> is the Samuel & Pauline Glaubinger Professor of Entrepreneurship at Indiana University.

<u>Dr. Gina C. O'Connor</u> is a Professor of Marketing, Associate Dean for Academic Affairs, and Faculty Director of the Severino Center for Technological Entrepreneurship at the Lally School of Management & Technology at Rensselaer Polytechnic Institute.

<u>Dr. Christopher L. Tucci</u> is Professor of Management of Technology at the Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland, where he holds the Chair in Corporate Strategy & Innovation.

be of the highest quality, representative of a variety of topics within the CE domain, and of likely interest to *JPIM* readers. The 30 submitted manuscripts were distributed roughly evenly among the four editors, and no editor handled a manuscript from a colleague or coauthor. The editors consulted each other at the end of the first round to read all of the referee reports and make editorial decisions for resubmission versus rejection. In total, eight papers are included in this special issue, as summarized below.

#### Papers in this Special Issue

As suggested above, the primary criteria for publication in leading scholarly outlets are the rigor and thoroughness of the research under consideration. This special issue was no exception, and what was so satisfying to us was the breadth of issues investigated by the manuscripts that ultimately rose through the review process.

Specifically, we have a handful of papers that focus on the individual level of analysis and the role that top management team (TMT) members and others can have on the performance of new internal ventures (Crockett, McGee, and Payne, 2013; Heavey and Simsek, 2013; Van Doorn, Jansen, Van den Bosch, and Volberda, 2013). We also have one paper that treats the causality in the reverse direction, examining the effect corporate new venture failures can have on the individuals responsible for their development and execution (Shepherd, Haynie, and Patzelt, 2013). At the firm level, we have included two papers that examine the parent-new firm relationship from a strategic (Garrett and Neubaum, 2013) and financial investment perspective (Wadhwa and Basu, 2013). This special issue also includes a measurement paper describing a research instrument measuring critical factors influencing an organization's entrepreneurial activities and outcomes (Hornsby, Kuratko, Holt, and Wales, 2013). Our final paper (Basu and Wadhwa, 2013) examines the phenomenon of CVC investment for strategic renewal purposes, with a focus on industry-level considerations. As such, beyond having tight, rigorous papers, we are pleased to present a set of papers that examines the spectrum of CE from the individual level of analysis through the venture, firm, and the industry levels of analysis. Here, we provide a summary and brief commentary on each of the papers.

The Van Doorn, Jansen, Van den Bosch, and Volberda paper contributes to the well-established research stream that explores the relationship between EO and firm performance by demonstrating the relevance of senior team attributes and environmental dynamism to this rela814

tionship. In particular, Van Doorn and his colleagues leverage insights from the attention-based perspective to hypothesize that senior team heterogeneity and senior team shared vision will positively moderate the EOperformance relationship. Additionally, they hypothesize that EO, the assessed senior team attributes, and environmental dynamism will interactively affect performance such that higher levels of dynamism will (1) decrease the positive effect of senior team heterogeneity on the EO-performance relationship and (2) increase the positive effect of senior team shared vision on the EO-performance relationship. Survey data were collected from 346 Dutch firms operating in a wide variety of industries. Firm performance was assessed using a subjective measure and corroborated through correlations with objective secondary data. Results indicate that, consistent with prior research, EO is a significant and positive predictor of firm performance. Senior team heterogeneity and senior team shared vision also exhibit positive relationships with performance. The authors find that senior team heterogeneity significantly strengthens the positive EO-performance relationship, while senior team shared vision has no significant effect on this relationship. As hypothesized, the effects of senior team attributes on the EO-performance relationship were found to vary under differing levels of environmental dynamism, with dynamism positively affecting the EO-performance relationship among firms with higher levels of senior team shared vision and negatively affecting the EO-performance relationship among firms with higher levels of senior team heterogeneity. Overall, the Van Doorn et al. study contributes to research in the EO domain by recognizing that EO cannot be adequately understood as a driver of firm performance without considering the role of a firm's TMT in establishing and leveraging such an orientation.

The Heavey and Simsek paper explores linkages among TMT characteristics and the exhibition of CE, as indicated through a firm's reliance on innovation, venturing, and renewal-focused activities. Acknowledging the roles of social and human capital among TMT members as drivers of firm action, Heavey and Simsek hypothesize that a firm's pursuit of CE is positively associated with TMT size, TMT tenure diversity, and TMT network size, and that these relationships will vary according to the level of perceived technological uncertainty in the industry within which the firm operates. Data were collected via a survey instrument from 99 small-to-medium-sized high-tech companies as a basis for hypothesis testing. Contrary to their hypothesis, Heavey and Simsek find that TMT size is inversely associated with a firm's exhibition of the three aforementioned CE elements, considered collectively. However, consistent with their other main effect hypotheses, Heavey and Simsek find that TMT diversity and TMT network size are positively associated with a firm's pursuit of CE. Regarding the moderating effects of technological uncertainty, Heavey and Simsek find that the negative effect of TMT size on CE is more pronounced under higher levels of perceived technological uncertainty, whereas the positive effect of TMT diversity on CE is more pronounced under lower levels of perceived technological uncertainty. Taken collectively, Heavey and Simsek's findings advance upper-echelon theory, information processing theory, and social network theory by demonstrating how, why, and under what environmental circumstances TMT characteristics can affect a firm's reliance on corporate entrepreneurial activities.

Crockett, McGee, and Payne tackle the important issue of the role that new ventures/business units/ divisions play in incumbent response to new threats or opportunities, such as "disruptive" innovations. The authors study a cross-sectional sample of daily newspapers and their ventures designed to exploit the Internet-a huge opportunity and threat to traditional newspapers-and examine characteristics of the new venture team's management such as vision, experience, and collective efficacy. These, separately and in concert with corporate characteristics such as EO, attention to the venture, and control over the venture, were hypothesized to contribute to the attainment of strategic and financial performance milestones. The authors find that vision and collective efficacy are positively related to performance, and that several corporate characteristics moderate the relationship between venture management characteristics and performance, thus highlighting how certain combinations of corporate policies and the people hired to manage new ventures may lead to superior venture performance. The study is important because it is one of the first to go beyond a small number of case studies to examine the role of new venture units to deal with disruptive innovations. In addition, the modeling approach developing the ideas of synergies and interdependencies between corporate policies and venture management team characteristics sheds new insight into corporate venture management.

To be an entrepreneur means dealing with failure, and it often means dealing with multiple failures. Failure is an accepted part of the entrepreneurial process and, as much as scholars and savvy leaders stress the positive aspect of failure (most notably, learning), it can still be taxing on individual entrepreneurs. With these notions as a backdrop, the Shepherd, Haynie, and Patzelt paper frames the issue of entrepreneurial failure in a unique light by (1) placing it in the context of the corporate environment and (2) examining the consequences of recurring project failures. Traditional, independent entrepreneurs can somewhat mollify the emotions and difficulty of failure by moving on to a new venture—one with a new context, a new environment, and new colleagues. But what about corporate entrepreneurs? These people find themselves at the center of an interesting paradox between the need for organizational rejuvenation, high failure rates, and the negative individual-level impacts that can come with endeavors into CE. Shepherd, Haynie, and Patzelt balance current scholarship that examines the financial benefits and costs of CE by looking at the negative impact that multiple failures can have on employees by investigating the emotional consequences of project failure, based upon a model of one's ability to regulate the emotions that come with CE. The authors offer an explanation for both how and why negative emotions accumulate across projects and how this accumulation is affected by the importance of the project, the individual's sensitivity to failure, and the ability to regulate negative emotions. The implications for both leaders of the organization and frontline corporate entrepreneurs abound as the work sheds light on organizational design, organizational stability, and the consequences of accumulated emotions on an employees motivation to leave the corporation.

The relationship between internal new ventures and their corporate parents are complex. TMTs and the senior leadership of the new venture can find themselves at odds with each other regarding many issues including resources, product plans, markets, and approach. Garrett and Neubaum's paper on top management support for internal corporate ventures (ICV) brings a unique perspective to some of these concerns by developing a dependency model that focuses on the effects that the ICV's autonomy and product difference from the parent have on the new venture's performance. This study's results add to theory by demonstrating how the unique context of ICVs creates dependency issues which corporate and venture managers must recognize to increase venture performance. The authors do so by collecting primary data on 145 distinct ICVs from 72 firms. How corporations balance their support for ICVs and how this support may change over time based upon the autonomy of the ICV are the issues brought to the fore in this paper.

The dependency model that is developed highlights the need for leaders to understand that how they manage their ICVs may need to change over time. The study finds support for some baseline relationships between top management support, initial strategic assets that are endowed to the venture, and its overall performance. Garrett and Neubaum also find that the positive relationship between top management support and the initial strategic asset endowment is weakened as the venture's autonomy increases. The relationship between the initial strategic asset endowment and performance is also weakened as similarity between the new venture's products and products of the parent's other businesses increases. The results suggest that corporate parents should be encouraged to strongly support their ICVs and endow them with the strategic assets and resources they need to excel at their birth. However, parents must also recognize the need to weigh the costs and benefits between granting resources and autonomy to their ICVs. Garrett and Neubaum also show us that ICVs seem to thrive best when they establish independence by pursuing market opportunities well outside those of their parents.

Continuing with the papers that examine the relationship of the firm to its new ventures, the Wadhwa and Basu paper explores the matter of what predicts the level of CVC investment by established firms in new ventures. The authors use arguments derived from the real options and interorganizational learning literatures to explain how the investor's degree of exploration (as assessed using a combined measure of technology- and marketrelated indicators) may affect initial investment levels. They hypothesize that the degree of exploration will have a U-shaped relationship with initial venture investment levels, and that this relationship will be moderated by the investor's experience diversity (as measured by the business sector diversity of the investor's portfolio companies) and the venture's prior affiliation with prominent venture capitalists (as assessed by the number of "prominent" venture capitalists that had invested in the venture prior to the first investment made in the venture by the focal corporate investor). Using a sample of 248 investments in private ventures in the computer, semiconductor, and telecommunication industries, Wadhwa and Basu find that the level of initial investment in private ventures first decreases and eventually increases as the investor's degree of exploration increases, thus supporting the hypothesized U-shaped relationship between these variables. Moreover, Wadhwa and Basu find that experience diversity has a linear (but not curvilinear) moderating effect on the exploration-investment relationship, while prominent prior venture capitalist involvement has a curvilinear (but not linear) moderating effect on this relationship. Overall, Wadhwa and Basu's paper significantly contributes to our knowledge of how and why corporate investors' initial investment levels in private ventures are affected by the degree to which those ventures operate in 816

novel technology and market spaces relative to those of the investing firms.

Finally, two papers focus on CE matters relevant at the strategic level. The paper by Hornsby, Kuratko, Holt, and Wales presents a measurement instrument designed to assess the readiness of both private and public sector organizations to successfully engage in CE. Starting with prior research on the CE Assessment Instrument, the authors seek to develop a more valid, parsimonious, and current instrument by performing three studies. In the first study, the authors explore the construct validity of the original instrument by subjecting each item to classification by a panel of working professionals in a graduate program for executives. During the process of classification, several original items were removed from the questionnaire due to lack of consensus, and other items were reclassified as representing different constructs as originally imagined. In the second study, the 24 items retained from the first study were given to two groups of professionals and subject to exploratory and confirmatory factor analyses, respectively. In the third study, the two groups from the prior round were merged in an analysis of convergent validity. In the end, the authors propose a better defended, shorter, and more useful 18-item instrument to measure organizational preparedness for CE, which should advance empirical research in the field as the questionnaire is widely adopted.

Finally, the Basu and Wadhwa paper examines the relationship between CVC investment activity and the exhibition of discontinuous strategic renewal, as revealed through shifts in firms' core businesses. Using insights from a real options perspective, Basu and Wadhwa hypothesize that CVC activity (i.e., five-year cumulative CVC investments) is negatively associated with firms' pursuit of discontinuous strategic renewal. Additionally, they hypothesize that the negative relationship between these variables will be stronger among firms operating in industries that exhibit greater levels of technological and competitive intensity as well as among firms possessing stronger technological and marketing capabilities. A panel data set for 477 firms from the 1990 Fortune 500 list was constructed for the 1990–2000 period as a basis for testing the hypotheses. Consistent with their primary hypothesis, Basu and Wadhwa's data set demonstrates that CVC investments do not result in firms withdrawing from their existing businesses. Moreover, the relationship between CVC investment activity and discontinuous renewal is particularly negative among firms in dynamic industries and for firms possessing strong internal capabilities. Basu and Wadhwa's research contributes significantly to the existing CE literature by demonstrating how some of the most commonly recognized forms of CE—namely, external corporate venturing via CVC investments and strategic renewal—are linked in practice. Additionally, their research advances a specific operationalization of strategic renewal that should well serve the needs of researchers interested in studying this important yet

### **Future Research Directions**

poorly understood phenomenon.

At the opening to this paper, we noted how the beginning of CE research stemmed from recognition that competitive advantage was not sustainable over time without some consistent form of renewal or regeneration (Covin and Slevin, 2002). Thus, over the past few decades, innovation has become an essential tool within the repertoire of all managers. At the same time, research in CE has moved from a description of the phenomenon, to more of an "advocacy" orientation (demonstrating that it can be useful) toward understanding the nuances of why firms may choose to develop CE initiatives and under what circumstances they might be successful.

This distinction helps us understand future research directions for the field as whole. Obviously, at this point in time, descriptions of the phenomenon are probably less likely to have an impact, and even advocacy studies that demonstrate an isolated performance benefit for a firm or a cross-sectional group of firms may be running their course in moving the field forward. However, when we start understanding which kinds of firms adopt CE initiatives, how they make those decisions, the best way to structure them, and the boundary conditions of when they are and are not successful or appropriate, we will be influencing both theory and practice of entrepreneurship and innovation management. Specifically, we know intuitively that CE is not all good, all the time, and there must be some limits to its adoption and usefulness. We thus propose the following areas that we feel could be developed further: (1) internal processes of how CE evolves, is adopted, and is successful; (2) explanation and prediction of CE adoption; and (3) prediction of high-performing governance choices.

#### Internal Processes

The focus on the individual is one important dynamic within the process of CE. To us, it was refreshing to see its emergence in some of the papers in this issue as it recaptures some of the original focus of strategic management research. Over the years, unfortunately, some strategy research has become overly focused on numbers evolving into "an exercise in comparative statistics" (Pettigrew, 1992, p. 5) as opposed to an investigation of a process. When fields of study evolve, this splintering can happen and is, perhaps, understandable as scholars focus on specific niches of research. When one shifts from the broad field of strategy to the area of CE research, we sometimes need a reminder that the managers in the firm—individuals who espouse entrepreneurial thought and action—cannot be put to the sideline of our inquiries.

The roots of strategic management began with a focus on the importance of the top manager's role in developing and guiding the current execution and future strategic direction of the organization (Andrews, 1980; Barnard, 1938). The emphasis on entrepreneurial behavior and action that is necessitated by CE allows us to recall this origin of the field and its emphasis on the role of the individual in corporate strategy. Quite succinctly, Schendel and Hofer (1979) stated, "A model that fails to place entrepreneurial choice at the center of the managerial universe is one that is incapable of providing a mechanism for renewing the firm beyond its originally intended purpose" (p. 6).

As research into strategy, innovation, and entrepreneurship continues to intertwine (Hitt, Ireland, Camp, and Sexton, 2001; Ireland et al., 2003), we see a strong need for research that examines the effect of individuals on all forms of CE (Hitt, Ireland, Sirmon, and Trahms, 2011), as well as the effects of CE on individuals' career pathways. However we term it or however we measure it—as individuals, teams, managers, intrapreneurs, or more broadly as human capital-the human element within the process of CE is what ultimately sustains or recaptures competitive advantage for the firm. Only by attending to the recruitment, development, and retention of people skilled and practiced in CE endeavors can companies hope to build sophisticated capabilities and expertise in this increasingly important activity. In today's knowledge economy, organizational success most often comes from a firm's intangibles (Faems, Van Looy, and Debackere, 2005). Assets such as brand, reputation, knowledge, and know-how are conferred to a firm through individuals who are able to harness their skills and abilities into organizational resources and capabilities. It is from these knowledge, skills, and abilities of individuals that the platform for CE within the organization is formed. Going forward, scholars may want to examine emerging roles, responsibilities, and unique skill sets associated not only with CE projects but with an institutionalized CE capability. Investigation of role definition and job design issues associated with CE may provide additional avenues for theory development regarding organizational capability for innovation. Scholarly investigation of how organizations can attract, cultivate, and manage human capital in a way that allows for continuous CE efforts within the corporation and for continued capture of those practices that allow companies to improve their CE capabilities appears to be an important frontier in the investigation of the link between human capital and the development of a CE capability. While Shepherd, Haynie and Patzelt's paper in this issue begins to address some of the career path concerns associated with engagement in CE activities, much more work needs to be undertaken in this critical domain of inquiry.

Besides human capital management, many other internal processes associated with CE remain understudied. Project management processes for ICV, assimilation processes of new ventures into the mainstream organization, resource allocation processes to a CE portfolio, and portfolio governance are but a few that warrant scholarly attention.

# Incidence and Adoption, Including When NOT to Adopt

Another important step in a better understanding of CE centers on predicting whether the phenomenon in question happens or when it is most likely to occur. Here potential future research could link effectively with other literatures on the scope of the firm and offer a theory-based explanation and empirical tests of adoption incidence. For the results to make a contribution to the field, the research must include the boundary conditions of when *not* to undertake a CE initiative. In contrast with the challenges inherent in the prior section, which was focused more on internal processes, this research stream could tackle some of the issues of the role external structures play in promoting CE.

Most research to-date in this area has focused on the role power and politics play in choosing optimal structures for CE initiatives. In that sense, it shares common ground with the literature on disruptive technology/ disruptive innovation, as discussed in the paper by Crockett, McGee, and Payne (2013) in this issue. Adherents of disruptive innovation principles (e.g., Christensen and Overdorf, 2000; Christensen and Raynor, 2003) would undoubtedly recognize the ideas that the venture designed to address a disruptive market should be placed in a separate unit shielded from the politics of the parent organization. Some questions that might benefit from 818

future research into the fusion of these literatures would include: Even if we agree that disruptive CE ventures should be placed in spin-off structures, what about nondisruptive innovation ventures? What about nondisruptive pure cannibalization ventures? What aspects of power and politics lead to spin-off structures for which type of CE characteristics?

However, different theoretical lenses could also be employed in this research. For example, the predictions of transaction cost economics (TCE) could be applied to understand the role of "externalizing" CE ventures, when that would be both appropriate and inappropriate. Factors may include asset specificity between the venture and the corporate parent, potential for the venture to hold up the parent and other contractual hazards, market relation between the venture and the parent, the degree of uncertainty of the venture's outcomes, the necessity for frequency of interaction, and many other factors. Thus CE and firm boundaries could be a ripe area for exploration.

From the point of view of the corporate parent, there could be more linkage with the literatures on ambidexterity (Tushman and O'Reilly, 1996), exploration/ exploitation (Levinthal and March, 1993; March, 1991), and local/distant search (Afuah and Tucci, 2012; Katila and Ahuja, 2002; Nelson and Winter, 1982). There has been a fair amount of prior work on tying exploration/ exploitation to CE initiatives (e.g., Schildt, Maula, and Keil, 2005), as well as some work in tying CE initiatives with the need for ambidexterity (e.g., Burgers, Jansen, Van den Bosch, and Volberda, 2009) but the theoretical underpinnings of how CE helps address those needs has been less developed. For example, do CE ventures tap into specialized knowledge of markets or technology that might be considered too "distant" for the corporate parent? Does the fact that the venture is "spawned" from within help bridge a distant search? Are CE initiatives more likely when oriented toward exploration, or exploitation?

In this sense, CE may take a page from the long literature in strategic alliances, which moved over the years from describing the incidence of alliances, to linking with other literatures such as TCE, exploration/exploitation, resource-based view, evolutionary economics, and so on, to describe when alliance forms may or may not be adopted.

#### "Optimal" Governance and Performance Implications of CE Choices

Previous research shows that successful CE efforts require different roles (O'Connor and McDermott, 2004)

as the concept of CE is not a singular activity but one that can be seen as requiring multiple competencies (Leifer et al., 2000; O'Connor, Leifer, Paulson, and Peters, 2008). But how should corporations organize their human capital assets for continued success (O'Connor, Corbett, and Pierantozzi, 2009)? Attempting to develop new ventures in large existing organizations is fundamentally different than in "independent" start-ups, as individuals in corporate contexts are encumbered by a host of issues (Corbett and Hmieleski, 2007). So, what structure can be employed (O'Connor et al., 2009) to allow individual corporate entrepreneurs to develop processes that can be most successful and to learn best from the inevitable project failures that are part of CE (Corbett, Neck, and DeTienne, 2007)? This leads inevitably to choices on how CE initiatives are structured and governed; and to understand that, one must understand when they are successful. This brings us to the holy grail of phenomenological research, which is a causal explanation of the phenomenon under question, with the ability to predict (imperfectly, of course) how well a CE initiative is likely to do under certain circumstances and governance choices.

There are obviously methodological constraints in operation here, as firms do not flip coins to decide whether to adopt CE initiatives, nor do they roll dice to determine their structure. Thus future research could tackle this issue head on by looking for natural experiments such as sudden unexpected legal changes or other changes in an industries environment; by seeking matched pairs of firms that adopted and did not adopt (even in small numbers); or matching firms that adopted unsuccessfully and successfully; or other ways of teasing out sample selection issues (we tend to study firms that successfully adopt CE in the most extreme view of the problem to-date).

What we would like to move toward would be a better understanding of the combination of circumstances, structure, processes, and firm characteristics that lead to successful outcomes for the corporate parent. These could include mandate of the CE initiative (strategic renewal, sustained regeneration, domain redefinition, organizational rejuvenation, or business model reconstruction [Morris et al., 2011]), market competition, firm boundaries, organizational form of the venture, governance/systems/compensation, technology, type of innovation, whether oriented toward exploration/ exploitation, and so on. In essence, this line of inquiry would move scholars toward a theory of innovation management in which CE plays an important role as a key tool in the manager's innovation toolkit.

To conclude, if one drills down to its core, sustained competitive advantage is driven by CE which is built from the knowledge, skills, and abilities of individuals. As we move the field of CE research forward on a number of fronts, we see it as a crucial responsibility to keep the individual actor present and understand internal processes and mechanisms by which CE is successfully developed. Papers in this volume address how individuals decide to make investments, the relationships built between parents and new ventures, and the decisionmaking of the TMT with respect to venturing. We also see a need to move from isolated examples of successful CE to a better understanding of boundary conditions of when it should and should not be attempted. Furthermore, as in all research related to strategic management, one needs to keep in mind that to make informed strategic choices for a corporation, the manager must understand or have intuition about when certain practices are likely to be successful and the best way to organize to arrive at a successful outcome for the firm as a whole. The papers in this special issue challenge us to move toward a more complete and nuanced understanding of this exciting phenomenon, and we hope the readers of JPIM will enjoy reading them as much as we enjoyed the editorial process that brought them before you today.

#### References

- Afuah, A., and C. L. Tucci. 2012. Crowdsourcing as a solution to distant search. *Academy of Management Review* 37 (3): 355–75.
- Andrews, K. R. 1980. *The concept of corporate strategy*. Homewood, IL: Irwin.
- Barnard, C. 1938. The function of the executive. Cambridge, MA: Harvard University Press.
- Basu, S., and A. Wadhwa. 2013. External venturing and discontinuous strategic renewal: An options perspective. *Journal of Product Innovation Management*, doi:10.1111/jpim.12039.
- Bettis, R. A., and M. A. Hitt. 1995. The new competitive landscape. *Strategic Management Journal* 16 (Summer Special Issue): 7–19.
- Burgers, H. H., J. J. P. Jansen, F. A. J. Van den Bosch, and H. W. Volberda. 2009. Structural differentiation and corporate venturing: The moderating role of formal and informal integration mechanisms. *Journal of Business Venturing* 24 (3): 206–20.
- Christensen, C. M., and M. Overdorf. 2000. Meeting the challenge of disruptive change. *Harvard Business Review* 78 (2): 66–76.
- Christensen, C. M., and M. E. Raynor. 2003. *The innovator's solution:* Creating and sustaining successful growth. Boston, MA: Harvard Business School Press.
- Corbett, A. C., and K. M. Hmieleski. 2007. The conflicting cognitions of corporate entrepreneurs. *Entrepreneurship Theory and Practice* 31 (1): 103–21.
- Corbett, A. C., H. M. Neck, and D. R. DeTienne. 2007. How corporate entrepreneurs learn from fledgling initiative: Entrepreneurial cognition and the development of a termination script. *Entrepreneurship: Theory* and Practice 31 (6): 829–52.
- Covin, J. G., and D. F. Kuratko. 2010. The concept of corporate entrepreneurship. In *Encyclopedia of technology and innovation management*, ed. V. K. Narayanan and G. C. O'Connor 207–14. Oxford: Blackwell Publishers.

- Covin, J. G., and G. T. Lumpkin. 2011. Entrepreneurial orientation theory and research: Reflections on a needed construct. *Entrepreneurship Theory and Practice* 35 (5): 855–72.
- Covin, J. G., and D. P. Slevin. 2002. The entrepreneurial imperatives of strategic leadership. In *Strategic entrepreneurship: Creating a new mindset*, ed. M. A. Hitt, R. D. Ireland, S. M. Camp, and D. L. Sexton 309–27. Oxford: Blackwell Publishers.
- Crockett, D. R., J. E. McGee, and G. T. Payne. 2013. Employing new business divisions to exploit disruptive innovations: The interplay between characteristics of the corporation and those of the venture management team. *Journal of Product Innovation Management*, doi:10.1111/jpim.12034.
- Dushnitsky, G. 2006. Corporate venture capital: Past evidence and future directions. In Oxford handbook of entrepreneurship, ed. M. Casson, B. Yeung, A. Basu, and N. Wadeson 387–431. New York: Oxford University Press.
- Faems, D., B. Van Looy, and K. Debackere. 2005. Interorganizational collaboration and innovation: Toward a portfolio approach. *Journal of Product Innovation Management* 22 (3): 238–50.
- Garrett, R. P. Jr., and D. O. Neubaum. 2013. Top management support and Initial strategic assets: A dependency model for internal corporate venture performance. *Journal of Product Innovation Management*, doi:10.1111/jpim.12036.
- Ginsberg, A., I. Hasan, and C. L. Tucci. 2011. The influence of corporate venture capital investment on the likelihood of attracting a prestigious underwriter: An empirical investigation. *Advances in Financial Economics* 14: 165–201.
- Guth, W. D., and A. Ginsberg. 1990. Guest editor's introduction: Corporate entrepreneurship. *Strategic Management Journal* 11 (Summer): 5– 15.
- Heavey, C., and Z. Simsek. 2013. Top management compositional effects on corporateentrepreneurship: The moderating role of perceived technological uncertainty. *Journal of Product Innovation Management*, doi:10.1111/jpim.12033.
- Hill, R. M., and J. D. Hlavacek. 1972. The venture team: A new concept in marketing organizations. *Journal of Marketing* 36 (3): 44–50.
- Hitt, M. A., R. D. Ireland, S. M. Camp, and D. L. Sexton. 2001. Strategic entrepreneurship: Entrepreneurial strategies for wealth creation. *Strategic Management Journal* 22 (6–7): 479–91.
- Hitt, M. A., R. D. Ireland, D. G. Sirmon, and C. Trahms. 2011. Strategic entrepreneurship: Creating value for individuals, organizations and society. Academy of Management Perspectives 25 (2): 57– 75.
- Hornsby, J. S., D. F. Kuratko, D. T. Holt, and W. J. Wales. 2013. Assessing a measurement of organizational preparedness for corporate entrepreneurship. *Journal of Product Innovation Management*, doi:10.1111/ jpim.12038.
- Ireland, R. D., M. A. Hitt, and D. G. Sirmon. 2003. A model of strategic entrepreneurship: The construct and its dimensions. *Journal of Man*agement 29 (6): 963–89.
- Katila, R., and G. Ahuja. 2002. Something old, something new: A longitudinal study of search behavior and new product innovation. Academy of Management Journal 45 (6): 1183–94.
- Leifer, R., C. McDermott, G. C. O'Connor, L. Peters, M. Rice, and R. W. Veryzer. 2000. *Radical innovation: How mature firms can outsmart upstarts*. Boston, MA: Harvard Business School Press.
- Levinthal, D. A., and J. G. March. 1993. The myopia of learning. *Strategic Management Journal* 14 (1): 95–112.
- March, J. G. 1991. Exploration and exploitation in organizational learning. Organization Science 2 (1): 71–87.
- Miles, M. P., and J. G. Covin. 2002. Exploring the practice of corporate venturing: Some common forms and their organizational implications. *Entrepreneurship Theory and Practice* 26 (3): 21–40.
- Morris, M. H., D. F. Kuratko, and J. G. Covin. 2011. Corporate entrepreneurship and innovation (3rd ed.). Mason, OH: South-Western, Cengage Learning.

- Nelson, R. R., and S. J. Winter. 1982. An evolutionary theory of economic change. Cambridge, MA: Harvard University Press.
- O'Connor, G. C., A. C. Corbett, and R. Pierantozzi. 2009. Create three distinct career paths for innovation. *Harvard Business Review* 87 (12): 78–80.
- O'Connor, G. C., R. Leifer, A. S. Paulson, and L. Peters. 2008. *Grabbing lightning: Building a capability for breakthrough innovation*. San Francisco, CA: Jossey-Bass.
- O'Connor, G. C., and C. McDermott. 2004. The human side of radical innovation. *Journal of Engineering and Technology Management* 21 (1): 11–30.
- O'Connor, G. C., and M. P. Rice. forthcoming. A comprehensive model of uncertainty for radical innovation. *Journal of Product Innovation Management*. In press.
- Peterson, R., and D. Berger. 1971. Entrepreneurship in organizations: Evidence from the popular music industry. *Administrative Science Quarterly* 16 (1): 97–106.
- Pettigrew, A. 1992. The character and significance of strategy process research. *Strategic Management Journal* 13: 39–60.
- Phan, P. H., M. Wright, D. Ucbasaran, and W. Tan. 2009. Corporate entrepreneurship: Current research and future directions. *Journal of Business Venturing* 24 (3): 197–205.
- Schendel, D., and C. Hofer. 1979. Strategy management: A new view of business policy and planning. Boston, MA: Little Brown.

- Schildt, H. A., M. V. J. Maula, and T. Keil. 2005. Explorative and exploitative learning from external corporate ventures. *Entrepreneurship Theory and Practice* 29 (4): 493–515.
- Schumpeter, J. A. 1934. *The theory of economic development*. Brunswick, NJ: Transaction Publishers.
- Sharma, P., and J. J. Chrisman. 1999. Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship. *Entrepreneur*ship Theory and Practice 23 (3): 11–27.
- Shepherd, D. A., J. M. Haynie, and H. Patzelt. 2013. Project failures arising from corporate entrepreneurship: Impact of multiple project failures on employees' accumulated emotions, learning, and motivation. *Journal of Product Innovation Management*, doi:10.1111/jpim.12035.
- Tushman, M. L., and C. A. O'Reilly. 1996. Ambidextrous organizations: Managing evolutionary and revolutionary change. *California Management Review* 38 (4): 8–30.
- Van Doorn, S., J. P. Jansen, F. A. J. Van den Bosch, and H. W. Volberda. 2013. Entrepreneurial orientation and firm performance: Drawing attention to the senior team. *Journal of Product Innovation Management*, doi:10.1111/jpim.12032.
- Wadhwa, A., and S. Basu. 2013. Exploration and resource commitments in unequal partnerships: An examination of corporate venture capital investments. *Journal of Product Innovation Management*, doi:10.1111/ jpim.12037.