CORPORATE ENTREPRENEURSHIP

Tobias Kollmann and Christoph Stöckmann

University of Duisburg-Essen

rowth, innovation, and flexibility are the main traits associated with entrepreneurship. Both theorists and practitioners consider these traits as desirable not only for entrepreneurial ventures, but also for established corporations. In the Schumpeterian view, however, the transition from a new venture to an established firm is associated with a descent of entrepreneurial spirit and an ascent of bureaucratic management. The integration of theories of organizational design and entrepreneurship results in the concept of corporate entrepreneurship (CE) that focuses on entrepreneurial behavior in larger established organizations.

The concept of CE has gained considerable recognition over the past three decades. Its popularity stems from the varied contributions CE can make to a firm's financial and nonfinancial performance. Thus, CE can improve financial indicators of performance, such as returns on assets and company growth. With regard to nonfinancial outcomes, CE facilitates collaboration, the renewal of operations, and the creation of new products, services, and processes, thus improving the firm's competitive position. Moreover, CE activates organizational learning that is crucial for acquiring new competencies and capabilities that facilitate the exploration of new growth options beyond its traditional markets and industries.

However, the expansion of the term entrepreneurship beyond its classical use raises several questions that will be answered in this chapter:

- Which environmental and organizational conditions call for CE?
- What are the strategic intents that CE aims at, and which internal key variables affect the design and outcomes of CE? How can CE be managed appropriately?
- How does CE affect firm performance, and what factors influence the CE-performance relationship?

BACKGROUND

A new competitive environment is taking shape in the 21st century. The following paragraphs discuss the resulting challenges for business development in the 21st century and align these to the current situation of established organizations.

21st-Century Competitive Environment Challenges

Managers today face major strategic discontinuities that are changing the nature of competition. The technological revolution and increase in globalization represent major challenges to companies' ability to remain competitive. For instance, the digital revolution in the form of electronic business processes conducted via the Internet is altering the fundamentals of how companies run their businesses. The recent strategic discontinuities include the elimination of

industry boundaries, coalescence between industrial and service businesses, computer-aided design and communication, and the opening of global markets. In many cases, these discontinuities occur simultaneously and are difficult to predict. Moreover, firms encounter these changes coexistent to intensive foreign competition in domestic markets.

In this complex competitive environment, uncertainty and discontinuous, abrupt change are the only constant. Change and uncertainty may cause serious problems to those companies, which rely on the time-tested behavior of the past and are not able to adapt to the new competitive environment. On the other hand, change and uncertainty imply major opportunities to those firms able to respond to the dynamically changing conditions by continuously adjusting their purpose and shape. In the 21st century, organizations should not solely respond to preordained environmental conditions, but should instead influence and actually create their environment by innovation. Facing unrelenting discontinuities, companies have to develop new strategies and organizational designs to gain or maintain a competitive advantage. Organizations must consider learning to be of critical importance to stay in sync with persistent change. Organizations have to develop and maintain strategic flexibility in this exceedingly complicated environment. The 21st-century environmental conditions call for building dynamic core competencies, focusing on and developing human capital, implementing new contemporary organizational structures and cultures, as well as using and inventing sophisticated technology. In short, the new competitive environment requires new types of organizations and leaders to assure survival and gain in global market leadership. Firms may be able to benefit from the new competitive environment if they are able to identify and exploit the opportunities of uncertainty.

21st-Century Organizational Problems

We can observe a substantial maladjustment between organizational characteristics and requisites of the 21stcentury competitive environment. In order to facilitate survival and progress and overcome Stinchcombe's liabilities of newness (and therefore competitive disadvantages compared to established companies), entrepreneurs have to install structures, systems, controls, rewards, and procedures—they have to transfer the entrepreneurial venture to a managed firm. However, along with years of installing routines, structures, and systems emerge bureaucracy, conservative tendencies, risk avoidance, and a focus on proven procedures as the dark side of striving for efficiency. The former can become so ingrained within an organization that they might cause serious problems with regard to flexibility and change. The reluctance to change due to evolutionary maturation is widely known as liability of age. This organizational inertia is threatening the organization's survival and, ironically, may result to some degree from the very congruence that made a firm successful in the past. Organizations that fit best to a given environment at a certain time tend to be successful. When the environment changes, however, the organization's success has led to structural and cultural inertia, which retards the organization from executing necessary changes along with the competitive environment. In other words, internal forces for stability that originate in a company's past and present success might cause future failure. Consequently, a tightened culture within an organization is one of the main reasons for short-term success and potential long-term failure.

Increasing bureaucratization and goal displacement, however, are not inevitable phenomena every organization is destined to experience during its development. In order to enable strategic renewal, revitalization, or business opportunity seeking and exploiting, firms have to overcome the strong internal forces for stability. Entrepreneurial researchers have developed possible solutions to help tackle organizational inertia. The stream of research that analyzes entrepreneurial phenomena on the organizational level of established companies is labeled CE.

FROM ENTREPRENEURSHIP TO CORPORATE ENTREPRENEURSHIP

Traditionally, entrepreneurship is defined as and is limited to the founding of a new venture by an individual actor. The development of CE is based on the shift from the emphasis of entrepreneurship research to the firm, instead of the individual. Gartner is often cited as being the first to shift the focus of entrepreneurship to the firm level by interpreting entrepreneurship as the creation of new organizations, by individuals or by an organization. Reflecting the underpinnings of Kirzner and Schumpeter, this definition lacks aspects such as innovation of new combination or exploitation of opportunities, which are both decisive with regard to the creation of competitive advantage. A broader definition holds entrepreneurship as the creation of new economic activity that subsumes all activity that is new to an organization and changes its offerings on or position in the market. Thus, CE does include but is not limited to the creation of new ventures.

The firm-level approach to entrepreneurship is consistent with classical economics, in which an individual engages in an entrepreneurial venture, since individuals as well as firms, regardless of age or size, can undertake new economic activity and thus be entrepreneurial. In contrast to individual entrepreneurs, established companies hold a firm base of traditional products and customers, which they have to defend against competitors and economic downturn and, moreover, must respect stakeholders' interests when pursuing new entrepreneurial opportunities.

Following this argument, CE must chase several distinct strategic intents, and CE research must include multiple underlying levels.

There is a growing consensus in research that CE follows three major intentions: innovation, venturing, and strategic renewal. While the strategic value of these activities seems to vary from one industry to another, the three intentions of CE form a constellation of activities that facilitates the sustainable progress and growth of a firm.

The first intention of CE is *innovation*, which, in general, describes the introduction of something new to the market. Innovation occurs in varying degrees, ranging from newto-the-world products and services to minor improvements or adjustments or new applications of an existing product or process. Innovation is based on the firm's commitment to and investment in creating new products, services, and processes, which all may lead to the creation of new business models. Thus, innovative activities aim at the development of new dominant designs that may profoundly change industries such as Google's search algorithm, which almost completely replaced prior searching solutions. A bureaucratically managed organization is unlikely to achieve such a radical innovation.

Sharma and Chrisman (1999) highlight that innovation usually occurs in concert with venturing or strategic renewal. In the absence of both, however, to be entrepreneurial the innovation must be of the Schumpeterian variety such as an original invention or idea transferred into a commercially usable form that is new to the market and has the potential to transform both the competitive environment and the organization itself.

The second intention of CE is venturing or corporate venturing, respectively. According to Sharma and Chrisman (1999), venturing refers to corporate entrepreneurial efforts that follow from or lead to innovations that exploit new markets, new product offerings, or both. It may or may not result in the formation of new organizational units (e.g., new divisions). Moreover, these ventures may or may not reside within the existing organization. While internal venturing activities lead to the creation of new organizational units within the current organization, external corporate venturing occurs when new business creation resides outside the boundaries of the existing organization. External corporate venturing creates autonomous or semi-autonomous organizational entities. Commonly used forms are joint ventures, spin-offs, and venture capital innovations, which vary in the degree of separateness from the parent company.

Corporate venturing activities serve multiple purposes beyond the creation of new businesses. For instance, venturing leads to the development of new organizational competencies and capabilities as well as knowledge about distant markets and industries, and keeps the organization alert to various business opportunities outside its current operations. Additionally, several risks are associated with corporate venturing. First, it often takes the company away from its traditional core competencies, which leaves it vul-

nerable to competitive attacks. Second, the integration of existing and new businesses may be difficult due to differences in cultures, goals, and strategic priorities. Third, new ventures take away resources from current operations and thus results in another source of tension within the organization.

In order to avoid falling for these risks, successful corporate venturing necessitates managerial skills to nurture both existing and new businesses. Furthermore, because many new ventures are cross-divisional in nature, they demand the broad representation of various units in the company. For the new venture, clear and specific goals and milestones that are evaluated on a regularly basis have to be set. In doing so, the organization must consider that new ventures need time to develop until they influence the organization's financial performance.

The third intention is *strategic renewal*. The premise behind this strand is that firms need to adapt persistently to the ever-changing environmental conditions in order to ensure progress and growth. Therefore, strategic renewal subsumes corporate entrepreneurial efforts that lead to significant changes of a firm's business, corporate strategy, and structure. These changes usually base on innovation and alter preexisting relationships within the organization or between the organization and its environment. Strategic renewal intends to revitalize the firm's operations, to build new competitive skills and, to some extent, to change its strategic thrust. Strategic renewal may challenge prevailing cultural assumptions and embody dramatic changes in terms of structure and strategy. It may influence all hierarchy levels and business units. For instance, these changes may result in the revision of systems, routines, and processes and may alter the technological configuration of the organization. The effect of strategic renewal on a company's financial performance might be relatively moderate in the short run due to the high initiation costs and the time organizational members need to adapt to the reconfiguration, but will amplify gradually with the diffusion of the new setting.

INTERNAL DIMENSIONS OF CORPORATE ENTREPRENEURSHIP

In effectively modeling firm-level entrepreneurship, key variables in the individual realm, the organizational structure and culture, and the overall strategy affect the design and outcomes of CE. Consequently, the subsequent paragraphs will proceed along these lines.

Corporate Entrepreneurship and the Individual

Some scholars regard CE solely as the extension of individual entrepreneurship to the context of existing organizations because all entrepreneurial activities—within or outside a corporate context—originate in the creative acts of individuals. Organizations striving for the benefits of CE,

therefore, need employees who are able to think and act entrepreneurially. Pinchot (1985) uses the term intrapreneur to describe dreamers who do this. These people take hands-on responsibility for creating innovation of any kind within an organization. In his definition of corporate entrepreneurs, Kierulff (1979) argues that these persons or teams examine potential new market opportunities, obtain resources to meet attractive opportunities, and initiate production as well as sales. Thus, corporate entrepreneurs start new business ventures within the corporation.

Of course, the individual alone is not sufficient to make CE efforts successful. Additional prerequisites for prosperous entrepreneurial activities can be found in environmental and organizational aspects as several CE models in the academic literature suggest. This broader focus, then again, does not negate the important role of the individual in corporate entrepreneurship. For instance, precipitating events in the environment of the firm may in fact stimulate entrepreneurial activities, but only if they are perceived as business opportunities by individual members of the organization. External challenges, however, do not necessarily trigger constructive reactions, since cognitive constraints of the individuals involved affect their opportunity-recognition capabilities and subsequent action. Consequently, an entrepreneurial-orientated firm needs employees who are capable of perceiving entrepreneurial opportunities. Such opportunity recognition capabilities are, for instance, determined by prior knowledge of industries, markets, or customers. Moreover, an individual's alertness to opportunities is conditioned by his or her intelligence, creativity, optimism, and perception of risk.

Of course, opportunity perceiving is a conditio sine qua non of potential success; it is, however, by no means a sufficient condition. In their seminal paper, Shane and Venkataraman (2000) posed not only the question "why some people, and not others, discover" (p. 218) entrepreneurial opportunities, but also asked why some people, and not others "exploit these opportunities" (p. 218). Equally, an entrepreneurial company not only needs employees perceiving opportunities, but also needs employees actually behaving in an entrepreneurial way upon the discovery of such opportunities. Consequently, an entrepreneurial orientation (EO) firm needs people who execute—people who are not only capable of perceiving opportunities but who also strive to exploit opportunities. This behavior is termed opportunity exploitation willingness (OEW).

Yet, in an organizational context, the transformation of such entrepreneurial ideas into successful innovation is a very complex undertaking due to restrictions concerning access to resources, autonomy of the subordinate, and emotional support to intrapreneurs. Morris and Kuratko (2002) address this problem by claming that intrapreneurs do not necessarily need to be the inventors of new products, services, or processes, but they must be able to turn innovative ideas into profitable results. Consequently, conforming to

prevailing definitions of entrepreneurship, putting the pursuit of opportunities at the very heart of entrepreneurship theory, perceiving business opportunities and subsequently developing these into profitable results may be considered as an indispensable prerequisite for employees in entrepreneurial organizations.

Corporate Entrepreneurship and Organization

Given the advantages associated with CE, firms have to identify effective ways to stimulate and spur organizational members' entrepreneurial thinking and acting. A proentrepreneurship organizational architecture recognizing structural and cultural aspects is crucial to encourage individual and collective entrepreneurial behavior. In their pure forms, however, entrepreneurship and organization are bipolar opposites and blending the two in a single firm seems nearly impossible. In the last two decades, there has been a growing number of studies examining ways to organizationally include discovering and pursuing of opportunities in a corporate environment that is focused mainly on the efficient exploitation of existing resource combinations. Concerning the locus of entrepreneurship, Birkenshaw (2003) suggests a distinction between dispersed and focused entrepreneurship. The former approach refers to the realization of CE at various locations within the organization, while the latter separates corporate entrepreneurial activities into specialized units.

Thus, some companies opt to formalize their CE efforts by creating units that support and champion entrepreneurial activities. Creating separate organizational units, such as new business development, brings together entrepreneurial individuals looking for creative ways to develop new businesses, markets, or products. In pursuit of business opportunities, these entrepreneurial units benefit from being small and flexible. This approach even shields entrepreneurial processes against the negative impact of bureaucratic cultures in large hierarchical systems. In a way, large established corporations mimic the advantages of small firms by dedicating separate units to entrepreneurship. The idea of bringing together entrepreneurial individuals may benefit significantly from interfirm strategic alliances. In joint ventures, research and development (R&D) alliances and learning alliances, creative employees from different firms may collaborate and thus create new ideas and products. Furthermore, a centralized approach makes it easier for firms to track their investments and evaluate the results gained from CE efforts.

Other companies follow a more dispersed approach to CE; they distribute entrepreneurial activities across the whole organization. In these companies, entrepreneurial thinking and acting are not restricted to a particular unit (e.g., new business development or R&D), but are scattered over all parts of the organization. The underlying assumption of this approach is that each employee has the capacity for both entrepreneurial and managerial behavior. Companies

use incentives and seed money to encourage the entrepreneurial activities of the individual members of the organization. These efforts capitalize on and stimulate employees' interest in developing and championing innovative ideas that benefit both their units and the firm as a whole. The meaning of the concept of dispersed CE is enriched by connecting it to the discussion on organizational form, in particular with regard to the way an organic design (in the sense of Burns and Stalker, [1961]) of the organization supports an entrepreneurial culture. An entrepreneurial culture appears to provide an antecedent to entrepreneurial initiatives throughout the organization. Organic organization structures promote discovery and risk taking, which are crucial for entrepreneurial initiatives. They are characterized by both informal and formal communication across divisional (even hierarchical) boundaries and build support and momentum for new ideas within the firm. A sense of autonomy gives employees the freedom to take initiative and act. Senior management commitment and, in particular, political, organizational, and financial support from managers—especially when ideas fail-allows employees to explore innovative ideas without fearing damage to their reputation or, worse, the loss of their jobs. Thus, dispersion of entrepreneurship throughout the organization requires conscious efforts to create and maintain an entrepreneurial culture.

Informal initiatives of individual members often complement established formal systems and fill voids that exist in them. Once their viability has been proven, informal activities may be integrated into the company's formal CE projects. Thus, individual, informal activities are often the forerunners of formal CE venture programs. Still, conflicts might arise between formal and informal entrepreneurial processes where employees pursue ideas that either clash with the formal organizational agenda or, alternatively, are suppressed by managers because they do not understand or like the ideas. Therefore, it is important to create a system to evaluate informal initiatives and determine which projects have the potential to advance company performance.

Corporate Entrepreneurship and Strategy

While the fields of entrepreneurship and strategic management have developed largely independent of each other, in their basic principles, both focus on how firms adapt to environmental change and exploit opportunities created by uncertainties and discontinuities in market development. Thus, entrepreneurial and strategic perspectives should be integrated to examine strategies that facilitate progress and sustainable growth. This integrative approach, describing entrepreneurial action within a strategic perspective, is called strategic entrepreneurship or entrepreneurial strategy. In the beginning of the 21st century, a debate on the notion of *entrepreneurial strategies* appeared in several research issues and works (e.g., Ireland, Hitt, Camp, & D. L. Sexton, 2001) and substi-

tuted, to a certain extent, the general discussion about CE in the 1990s. The purposed debate is how to adopt entrepreneurial mindsets and act toward strategic orientation in a way that the implementation of entrepreneurial strategy in which entrepreneurship becomes the *dominant* logic fosters the creativity and initiatives of employees and also the company's performance.

Strategic management theorists have suggested that an entrepreneurial approach to strategy making may be vital for organizational success. For instance, Miller and Friesen (1982) posit that entrepreneurial companies try to obtain a competitive advantage by habitually making radical innovations and taking risks. Relating it to leadership style, Mintzberg (1973) identified such (entrepreneurial) behavior as one of the three modes of strategy making. Proactive, entrepreneurial strategy making seems to represent an important strategy-making process, in particular in fast-changing and competitive environments. Thus, to build entrepreneurship into an organization is essentially a task of strategic decision makers.

In its essence, strategic entrepreneurship is the integration of entrepreneurial (i.e., opportunity seeking) and strategic (i.e., advantage seeking) perspectives in developing and taking actions designed to sustain progress and growth. It includes a set of commitments and actions framed around entrepreneurial processes that firms design and use to develop current and future competitive advantages in promising product-market or technological arenas. Using CE strategy as a primary means of strategic adaptation reflects the firm's decision to seek advantage through entrepreneurial initiatives on a sustained basis. Strategic entrepreneurship is a fundamental orientation toward the pursuit of opportunity and defines the essence of the firm's functioning. Therefore, CE strategy is a shared ideology that has more to do with commitments to ways of acting and responding than with the firm's specific position within its external environment. Thus, CE strategy is not to be found at one level or unit within the organization. Rather, it embraces the whole organization and is ingrained structurally and culturally as part of its core being. In short, the term strategic entrepreneurship refers to CE as a holistic concept of strategic management.

MANAGING CORPORATE ENTREPRENEURSHIP

While the last paragraphs referred to the content of CE by addressing *what* is undertaken, the following paragraphs represent key entrepreneurial decisions that answer the question of *how* CE is undertaken. Scholars have paid attention to the question of how to manage entrepreneurial processes in established companies since the 1970s. This stream of research generated three partly overlapping approaches that have gathered broad attention: entrepreneurial management, EO, and ambidexterity.

Entrepreneurial Management

Stevenson (1983) conceptualizes entrepreneurship as an opportunity-based management approach. He holds that entrepreneurship can help organizations remain vital and can contribute positively to firm- and society-level value creation. In line with former approaches of scholars like Khandwalla (1977) or Mintzberg (1973), in his conceptualization, Stevenson contrasts entrepreneurial management styles with administrative management styles. Entrepreneurial firms (promoters) pursue and exploit business opportunities without regard to resources currently controlled, while administrative firms (trustees) strive to make the most efficient use of their resource pools. Certain internal and external factors push established firms toward either entrepreneurial or administrative behavior.

An operationalization of Stevenson's reasoning by Brown, Davidsson, and Wiklund (2001) results in a categorization of a firm's management behavior along eight dimensions. Two of them, strategic orientation and commitment to opportunity, constitute the nucleus of the construct. The other six dimensions, commitment of resources and control of resources, management structure and reward philosophy, entrepreneurial culture and growth orientation, just have strengthening or weakening influences on the former.

Strategic orientation describes the factors driving the creation of strategy. The entrepreneurial strategy is driven solely by the business opportunities that exist regardless of the resources, which may be required to exploit them. Once an opportunity is chosen to exploit, the required resources may be acquired. Conversely, the administrative strategy aims at utilizing the resource pool of the firm efficiently. The existing resources serve as a starting point and only business opportunities that fit into these are relevant to the firm. The commitment to opportunity describes the way companies react to emerging business opportunities. Entrepreneurial organizations are action oriented and are able to commit to action rapidly. Contrary, administrative organizations are analysis oriented and their behavior tends to be slow and inflexible. Decisions are made in peripatetic processes including multiple decision constituents, negotiated strategies, and a focus on risk reduction. Therefore, these organizations may be unable to pursue opportunities characterized by a short window of opportunity. An opportunistic commitment of resource, as the first subdimension, describes the attempt of entrepreneurial organizations to maximize value creation by exploiting opportunities while minimizing the resources applied. The firm commits just small amounts of resources in a multistep manner with minimal risk exposure at each step. This allows the firm to commit investments in a very flexible manner. Conversely, an administrative management of resources is characterized by a deep analysis in advance with large, but nearly irreversible, investments. Concerning the control of resources, entrepreneurial firms reduce the resources they own and make use of others' resources including financial capital, intellectual capital, and skills and competencies, by subcontracting or outsourcing. Contrary, administrative organizations favor control of resources by ownership. The management structure or organization's structure, respectively, of entrepreneurial firms is organic. This includes flat hierarchies and multiple informal networks. Organic structures are designed to convey flexibility as well as opportunity creating and seeking. Administrative organizations are mechanistic structures characterized by formalized hierarchies, clearly defined lines of authority, routines, and control systems. The reward philosophy of a firm influences individuals' behavior. Entrepreneurial-oriented firms are interested in creating and harvesting wealth and, therefore, base remuneration on how individual members contribute to the creation of wealth. Thus, compensations are linked to the success of the individual, his or her team, and/or the whole organization. Administratively managed firms, on the other hand, relate remuneration to the amount of resources under the individual's control (e.g., people, assets) and with seniority. Thereby, individual success is remunerated with promotion to a position with control of more resources.

In addition to the above-mentioned dimensions, Stevenson's (1983) later work suggests two more dimensions regarding growth orientation and entrepreneurial culture. Entrepreneurial firms desire rapid growth and, conveniently, it is said that entrepreneurial management is related to growth in a positive way. Administrative firms try to obtain growth as well, but at a slower and steady pace. In their believing, administrative management will help create this kind of growth. Concerning the culture of a firm, entrepreneurial firms aim to create an *entrepreneurial culture* characterized by creativity and experimentation resulting in new ideas and innovations. Administrative firms create a work atmosphere with just enough individual activity to match the possessed resources.

In summary, Stevenson (1983) describes the dichotomy of two kinds of management styles: entrepreneurial management versus administrative business. His reasoning of entrepreneurial management puts opportunity-based behavior at the center and suggests that this posture is crucial to the long-term vitality of the economy. EO, the next discussed approach to firm-level entrepreneurship, partly overlaps with Stevenson's opportunity-based concept, albeit highlighting other aspects of an entrepreneurial proclivity.

Entrepreneurial Orientation

If strategic leaders and the culture of a given firm together generate a strong motion to innovate, to accept risks, and aim for new entrepreneurial opportunities, one can speak of a high EO. Thus, EO is a term that addresses the mindset of firms. An entrepreneurial posture can be regarded as a firm-level strategy-making process that companies use to enact their organizational purpose, sustain their vision, and create competitive advantages. Building EO into an organization is essentially a task of strategic

decision makers and represents a configuration of policies, practices, and processes that provide insights into the bases of entrepreneurial decisions and actions. Miller (1983) defines an EO firm as one that "engages in product market innovation, undertakes somewhat risky ventures, and is first to come up with proactive innovations, beating competitors to the punch" (p. 771).

The salient dimensions of EO have been derived from an integration of the strategy-making process and entrepreneurship research. Today, there is a strong consensus that five distinct dimensions should measure EO. In his seminal conceptualization, Miller (1983) identified the first three dimensions of EO, which have been used consistently in academic literature. These dimensions address risk taking, innovativeness, and proactiveness of a firm. While today most studies treat EO as an independent variable, Miller originally sought to identify the antecedents of entrepreneurial behavior on the firm level.

First, risk taking describes firms that act and decide although faced with considerable uncertainty. It involves taking bold actions, venturing into the unknown, borrowing heavily, and committing significant resources to ventures with uncertain outcomes. These firms prefer the typical relationship of high risk and high return in an investment context. The tendency to accept risky conditions on the organizational level can be facilitated by a high-fault tolerance. Second, innovativeness addresses the capability and willingness to develop and execute new initiatives (for instance toward new processes, new products, or new markets) and is associated with a predisposition in creativity and experimentation as well as high R&D-investments. Third, proactiveness refers to behavior aiming at anticipating and foreseeing future needs and developments. It describes an opportunity-seeking forward-looking perspective characterized by the introduction of new products and services ahead of the competition. In the early 1990s, the focus of EO research changed and the three original dimensions were treated for the first time as an independent variable, which was linked to performance as the variable to explain.

Lumpkin and Dess (1996) extended the construct by adding two further dimensions: competitive aggressiveness in distinction to proactiveness and autonomy. Entrepreneurial firms and start-ups are keenly concerned with opportunities and threats in the external environment because these factors may support or limit their success. The proactiveness dimension of EO captures the response to an entrepreneurial opportunity, but omits the question of how EO firms respond to threats. Competitive aggressiveness reflects this aspect of EO and therefore describes the intensity of a firm's efforts to outperform rivals and is characterized by aggressive responses to the actions of competitors. Last, the autonomy dimension of the EO construct pertains to the degree to which individuals are allowed to autonomously pursue entrepreneurial opportunities—this is, independent action undertaken by entrepreneurial leaders or teams directed at bringing about a new venture and seeing it to fruition. Autonomy is said to be facilitated by, for instance, flat hierarchies or a high degree of delegation within an organization.

Apparently, the EO construct transfers some of the well-known categories describing the individual entrepreneur to the organizational level—such as an individual's attitude toward risk or McClelland's (1953) need for achievement of individuals, which overlaps with competitive aggressiveness and proactiveness on the organizational level. Just as entrepreneurship researchers of the past have been trying to correlate an individual's traits with entrepreneurial behavior and even—regrettably unsuccessful most of time—to entrepreneurial success, today's entrepreneurship researchers aim at elucidating the role of organizational EO as an independent variable.

There have been strong debates in academic literature as to whether or not the dimensions of EO are independent or covary under certain conditions. Some suggest the EO construct is best viewed as a unidimensional concept. Others have argued the dimensions of EO may occur in different combinations. Empirical findings suggest that unique combinations of EO provide more precise explanations of entrepreneurship as firm-level phenomena as well as greater insights into linkage of EO and performance.

In a recent discussion concerning the management of a firm's entrepreneurial activities, Dess and Lumpkin (2005) indicate that more may not always be better—that is, each EO dimension bears potential benefits for the firm but comes with its own pitfalls as well. No single dimension should be developed to an absolute maximum, because of the inherent risk, which is specific to each dimension. The dimensions indeed require a *delicate balance* between too much and too little entrepreneurial behavior. Therefore, the next paragraphs deal with the balance of entrepreneurial and preservative modes in strategic management.

Ambidextrous Management

Many CE initiatives focus on the question of how to overcome inertia by implementing entrepreneurial processes and behavior patterns but disregard the challenge of simultaneously preserving efficient existing processes. Probably the most discussed concept aimed at filling this gap is called ambidextrous management or ambidexterity. Ambidexterity integrates seemingly opposing activities within an organization that aim at preserving existing business (exploitation) and at the same time discovering entrepreneurial opportunities (exploration). Ambidexterity could be defined as the dual management of seemingly opposing tasks forcing managers to accept the challenge of paradox management. The ambidexterity concept has been utilized to describe a variety of possible distinctions. What unifies these distinctions is that the dimensions of ambidexterity are always diametrically opposite of each other. For instance, some scholars see ambidextrous firms

as capable of implementing incremental and revolutionary change at the same time, while others see ambidextrous distinctions in academic literature that address efficiency versus flexibility, differentiation versus low-cost strategic positioning, enabling versus coercive bureaucracy, centrifugal versus centripetal forces, or global integration versus local responsiveness (for an extensive overview cf. Gibson & Birkinshaw, 2004).

Gibson and Birkinshaw (2004) define a particular variation of ambidexterity as a firm's capacity to achieve alignment and adaptability simultaneously at the level of business units. Afterwards, this approach has been dedicated to the business unit level in large, established corporations. Ambidextrous organizations that integrate preservative and entrepreneurial activities are built with the explicit goal to excel both today and tomorrow. To sustain an organization in the long run, organizations need to engage in two fundamentally opposing activities—they need to develop and preserve their existing business and they need to develop and explore their future business. Thus, firms exaggerating one side of ambidexterity either suffocate in conservatism or drown in chaos caused by too much change. What complicates the path toward the attainment of this integrative goal is the necessity to execute both kinds of activities simultaneously. Early conceptualizations of ambidexterity such as Duncan's (1976) did not yet mention this simultaneous pursuit of opposing goals, as is the case in today's academic discourse, but rather recommended a sequential pursuit of such seemingly opposing goals. This sequential pursuit is linked to the notion of punctuated equilibria, wherein long periods of exploitation are punctuated by short periods of exploration. The need for a simultaneous balancing of exploration and exploitation through ambidextrous management, however, is well established and commonly accepted.

In essence, if executed well, ambidextrous management is a helpful instrument that—by integrating entrepreneurial activities as a complement to everyday business—can possibly help to deal with organizational inertia and the dynamics in the 21st-century competitive environment, and sustain durable competitiveness. There is a plethora of examples of how established corporations succeeded in building an ambidextrous organization at least at some time in their history. These examples include such renowned firms as Nokia, GlaxoSmithKline, Seiko, Hewlett-Packard, and Johnson & Johnson.

EXPLORING THE CORPORATE ENTREPRENEURSHIP-PERFORMANCE RELATIONSHIP

As mentioned in the introduction, CE can make varied contributions to an organization's financial and nonfinancial performance (e.g., creating new products and goods, learning new skills, renewing its operations). When exploring the CE-performance link, it is essential to recognize the

multidimensional nature of the performance construct. In other words, entrepreneurial activity may lead to favorable outcomes on one performance dimension (e.g., adaptability, flexibility, growth in sales) and unfavorable outcomes on a different dimension (e.g., reliability, efficiency, return on investment) at the same time. Furthermore, there is strong need for balancing short-run and long-term considerations. For example, heavy investments in R&D lead to higher costs instantly, albeit they may lead to product and process innovations and, therefore, competitive advantages in the long run.

In general, most theoretical assertions associate CE with superior performance. However, failed initiatives of opportunity-focused corporations such as Ericsson in the late 1990s, which concentrated almost exclusively on the development of new technologies, lead to the conjecture that a simple monocausal relationship between CE and performance does not exist per se. For this reason, the following paragraphs review the extant literature on the CE-performance relationship and provide possible adjustments to the relationship and a number of explanations about mediating factors.

Theoretical Assertions and Empirical Evidence on the CE-Performance Link

Several contributions propose a positive CE-performance relationship. The bulk of the early supportive evidence, however, was anecdotal and testimonial in nature. There are not only theoretical papers, but also several empirical studies, sustaining these assertions and showing that entrepreneurial firms can indeed perform better in the market. For example, in their pioneering study, Covin and Slevin (1991) confirmed the expected positive relationship of entrepreneurship and performance for large corporations in 1986. Zahra and Covin (1995) found a positive relationship of CE with financial measures of company performance in a long-term study of 108 established companies. They found CE particularly effective among firms in hostile environments, and the relationship tends to grow over time. Wiklund (1999) found a growing body of research that offers overall support to the positive relationship of company performance and EO. Moreover, Zahra, Jennings, and Kuratko (1999) suggest-after reviewing 25 years of firmlevel entrepreneurship research—that there is substantial evidence to link CE and performance, and that firms with an EO achieve superior performance.

However, despite these numerous theoretical and empirical findings, the relationship between CE and performance is, to some extent, questionable due to some contradictory empirical findings. A recent meta-analysis of 37 empirical studies conducted by Rauch, Wiklund, Frese, and Lumpkin (2004) show entrepreneurial postures only moderately linked to performance. Moreover, the positive empirical findings mentioned previously are at the same time challenged by a number of studies in which a significant

relationship between CE and performance is not evidenced in the data. Some studies even argue theoretically that entrepreneurial strategy types are more likely to lead to low performance, since CE is reported as being a resource-consuming strategic orientation, requiring extensive investments by the firm.

In addition, most empirical studies on CE are cross-sectional in nature and therefore run the risk of falling for survivor bias. Especially firms scoring high on the risk-taking dimension of an EO might be responsible for this kind of bias. Moreover, although it is a legitimate goal to thwart organizational inertia with higher entrepreneurial efforts, firms pursuing this goal too forcefully tend to face continuous liabilities of newness. That is, they constantly transfer the organization toward a condition that is comparable to the risky beginning of the organizational lifecycle.

For these reasons, the assumption of a straightforward correlation between CE and performance seems to be too simple. Not only do differences in research design and methodological idiosyncrasies lead to mixed empirical findings—admittedly, the CE-performance relationship is moderated by a variety of possible influences. For instance, the model of entrepreneurship as firm behavior by Covin and Slevin (1991) considers different internal, external, and strategic variables influencing CE directly and at the same time moderating its relationship to performance. Guth and Ginsberg (1990) suggest an alternative framework consisting of strategic leadership and organizational and environmental aspects. Following them, to model the EO-performance relationship effectively, key variables in the individual realm, the environment, and the organization itself are not to be neglected if one aims to examine CE in a coherent way.

Environmental Influences on the CE-Performance Link

Of course, the previously discussed appropriate management of CE and the commitment and ability of the individual are strong moderators of the CE-performance link, but considering the findings described in the last paragraph, the influence of the environment has to be recognized as well. In academic literature, actually, some of the strongest findings associate the CE-performance relationship with the external environment. Covin and Slevin (1991) note that the environment has a strong if not deterministic effect on entrepreneurial activity. The environment provides the initial conditions and the context that either facilitates or constrains the prosperousness of entrepreneurial behavior.

Therefore, identifying the proper conditions for entrepreneurial organizations is an important subject in CE research. The relationship between entrepreneurial activities, the surrounding environment, and performance has been discussed in several theoretical contributions and empirical studies. A literature review leads to four environmental factors that can be used to describe the proper entrepreneurial setting in order to achieve superior performance with an EO. Shane and Venkataraman (2000) state that in order to "have entrepreneurship, you must first have entrepreneurial opportunities" (p. 220). Dynamic environments are more likely to provide many of these opportunities as changing conditions, displace existing bases for competitive advantage, and provoke new explorations of sources of advantage. Stable environments, however, tend to reinforce existing sources of competitive advantage, providing only a few opportunities. Moreover, traditional industries in stable environments allow firms to evolve slowly, meaning there is no direct pressing need for the exploitation of entrepreneurial opportunities. Entrepreneurial opportunities occur in heterogeneous environments marked by multiple market segments with diverse customer characteristics and needs. This diversity possesses a broader scope and multiple opportunities for pursuing corporate entrepreneurship. Environments demonstrating high levels of rivalry between industry competitors and vulnerability to outside influences have also been correlated with corporate entrepreneurship. These harsh conditions, called hostile environments, have to be regarded as a strong incentive for companies to recognize opportunities as a source of competitive advantage. Moreover, the abundance of resources can be observed as a prerequisite for the actual conversion of ideas into innovations. Under these conditions, the external environment presents a greater probability for the existence, a pressing need for the perception, and the resources for the exploitation of entrepreneurial opportunities. Although organizations may conduct entrepreneurial activities in all types of environments, the prospect of positive impacts on performance are, in conclusion, higher in dynamic, heterogeneous, hostile, and abundant environments.

FUTURE DIRECTIONS

The concept of CE includes numerous promising and worth-while questions that warrant future research. First, considering the pathological consequences of organizational inertia and the large number of approaches addressing the question of how to overcome *existing* inertia, it is indeed surprising that there is almost no research on the topic of avoiding the *emergence* of inertia. Therefore, in contrast to the existing *curative* approaches, scholars could aim at developing *preventive* approaches that may allow firms to avoid falling for the emerging forces of inertia.

Second, most approaches to CE focus on the question of how to overcome inertia and enable opportunity seeking and pursuing by implementing entrepreneurial processes and behavior patterns. However, they disregard the challenge of simultaneously preserving efficient existing processes and defending a firm base of traditional products and customers against competitors and economic downturn. Until now, scholars have focused insufficient attention on the antagonism in strategic alignment depending on the need

for managing both exploitation and exploration. Research on ambidexterity aiming at a balance between preservative and entrepreneurial behavior, for instance, could integrate the dimensions of EO in order to identify optimal levels of entrepreneurship and management.

Third, scholars could explore what factors may augment and inhibit the strength of the relationship between CE and performance. Under what conditions would strong organizational cultures cause core rigidities, and, in consequence, erode innovativeness and discourage risk taking as well as opportunity seeking? Moreover, in how far are reward systems able to facilitate entrepreneurial actions of both managers and employees?

Fourth, research focusing on the link between CE and best practices of leading-edge companies could help scholars to inductively derive theory that can later be tested to confirm or disconfirm extant knowledge. In doing so, they would enhance the viability of descriptive and normative CE theory.

SUMMARY

The 21st-century competitive environment challenges established companies and their strategic leaders to integrate innovation, opportunity seeking, and strategic flexibility in their organizational architectures in order to facilitate survival and progress. Possible solutions that aim at tackling the maladjustment between requisites of 21st-century competition and the organizational setting of established companies characterized by bureaucracy, risk avoidance, and conservative tendencies have been developed in entrepreneurship research. The integration of theories of organizational design and entrepreneurship resulted in the concept of CE that focuses on entrepreneurial behavior in larger established organizations.

This chapter has shown that the concept of CE with its intents on innovation, venturing, and strategic renewal is an applicable response to the challenges of the 21st-century competitive environment. However, CE is not to be found at one level or place within the organization. Rather, it is reflected across the organization and ingrained as part of its core being. Therefore, entrepreneurial phenomena on the firm level have to be analyzed on several levels, in particular in the individual realm, the organizational structure and culture, and the overall strategic alignment. The stream of research that focused on the question of how firm-level entrepreneurship can be managed generated three partly overlapping approaches. First, entrepreneurial management puts opportunity-based behavior at the center. Second, EO addresses the mindsets of firms characterizing them as risk taking, innovative, proactive, autonomy conveying, and aggressive in competition. Third, ambidexterity integrates seemingly opposing activities within an organization that aim at preserving existing business (exploitation) and at the same time discovering entrepreneurial opportunities (exploration).

The investigation of the CE-performance relationship shows that, in general, CE is associated positively with performance, though the assumption of a straightforward correlation between CE and performance seems to be too simple. Admittedly, the CE-performance relationship is moderated by a variety of possible influences that may enhance or inhibit the strength of the CE-performance link.

REFERENCES AND FURTHER READINGS

- Birkenshaw, J. (2003, Spring). The paradox of corporate entrepreneurship. *Strategy+Business*. Retrieved November 3, 2007, from http://www.strategy-business.com/press/16635507/8276
- Brown, T. E., Davidsson, P., & Wiklund, J. (2001). An operationalization of Stevenson's conceptualization of entrepreneurship as opportunity-based firm behavior. *Strategic Management Journal*, 22(10), 953–968.
- Burns, T., & Stalker, G. M. (1961). The management of innovation. London: Tavistock.
- Covin, J., & Slevin, D. P. (1991). A conceptual model of entrepreneurship as firm behavior. *Entrepreneurship Theory and Practice*, *16*(1), 7–24.
- Dess, G. G., & Lumpkin, G. T. (2005). The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship. *Academy of Management Executive*, 19(1), 147–156.
- Duncan, R. B. (1976). The ambidextrous organization: Designing dual structures for innovation. In R. H. Kilmann, L. R. Pondy,
 & D. Slevin (Eds.), *The management of organization* (Vol. 1, pp. 167–188). New York: North-Holland.
- Garvin, D. A., & Levesque, L. C. (2006). Meeting the challenge of corporate entrepreneurship. *Harvard Business Review*, 84(10), 102–112.
- Gibson, C.B., & Birkinshaw, J. (2004). The antecedents, consequences, and mediating role of organizational ambidexterity. *Academy of Management Journal*, 47(2), 209–226.
- Guth, W., & Ginsberg, A. (1990, Summer). Guest editors' introduction: Corporate entrepreneurship [Special issue]. *Strate-gic Management Journal*, 11, 5–15.
- Hannan, M. T., & Freeman, J. (1984). Structural inertia and organizational change. American Sociological Review, 49(2), 149–164.
- Hayton, J. C., & Kelley, D. J. (2006). A competency-based framework for promoting corporate entrepreneurship. *Human Resource Management*, 45(3), 407–427.
- Ireland, D., Hitt, M. A., Camp, S. M., & Sexton, D. L. (2001). Integrating entrepreneurship and strategic management actions to create firm wealth. *Academy of Management Executive*, 15(1), 49–63.
- Katz, J. A., & Shepherd, D. A. (2004). *Corporate entrepreneurship*. New York: Elsevier.
- Khandwalla, P. (1977). *The design of organization*. New York: Harcourt Brace Jovanovich.
- Kierulff, H. E. (1979). Finding—and keeping—corporate entrepreneurs. *Business Horizons*, 22(1), 6–15.
- Kirzner, I. M. (1985). *Discovery and the capitalist process*. Chicago: University of Chicago Press.
- Kollmann, T. (2006). What is e-entrepreneurship? Fundamentals of company founding in the net economy. *International Journal of Technology Management*, *33*(4), 322–340.

- Kollmann, T., Christofor, J., & Kuckertz, A. (2007). Explaining entrepreneurial orientation. Conceptualization of a cross-cultural research framework. *International Journal of Entrepreneurship and Small Business*, 4(3), 325–340.
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135–172.
- March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science*, 2(1), 71–87.
- McClelland, D. C., Atkinson, J. W., Clark, R. A., & Lowell, E. L. (1953). *The achievement motive*. New York: Appleton-Century-Crofts.
- Miller, D. (1983). The correlates of entrepreneurship in three types of firms. *Management Science*, 29(7), 770–791.
- Miller, D., & Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms: Two models of strategic momentum. *Strategic Management Journal*, 3(1), 1–26
- Mintzberg, H. (1973). Strategy making in three modes. *California Management Review*, 16, 44–53.
- Morris, M. H., & Kuratko, D. F. (2002). Corporate entrepreneurship. Mason, OH: Thomson, South-Western.
- Pinchot, G. (1985). Intrapreneuring. New York: Harper & Row.
- Rauch, A., Wiklund, J., Frese, M., & Lumpkin, G. T. (2004). Entrepreneurial orientation and business performance: Cumulative empirical evidence. In S. Zahra, C. Brush, P. Davidsson, J. Fiet, P. Greene, R. Harrison, et al. (Eds.), Frontiers of entrepreneurship research 2004: Proceedings of the twenty-fourth annual Entrepreneurship Research Conference (pp. 164–177). Babson Park, MA: Arthur M. Blank Center for Entrepreneurship, Babson College.
- Schumpeter, J. A. (1934). *The theory of economic development*. Cambridge, MA: Harvard University Press.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217–226.
- Sharma, P., & Chrisman, J. J. (1999). Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship. *Entrepreneurship: Theory & Practice*. 23(3), 11–27.
- Stevenson, H. H. (1983). *A perspective on entrepreneurship* (Working paper 9-384-131). Boston: Harvard Business School Press.

- Stevenson, H. H., & Jarillo, J. C. (1990). A paradigm of entrepreneurship: Entrepreneurial management [Special issue]. *Strategic Management Journal*, 11, 17–27.
- Stinchcombe, A. L. (1965). Organizations and social structure. In J. G. March (Ed.), *Handbook of organizations* (pp. 153–193). Chicago: Rand-McNally.
- Stopford, J. M., & Baden-Fuller, C. W. F. (1994). Creating corporate entrepreneurship. *Strategic Management Journal*, 15(7), 521–536.
- Teng, B.-S. (2007). Corporate entrepreneurship activities through strategic alliances: A resource-based approach toward competitive advantage. *Journal of Management Studies*, 44(1), 119–142.
- Tushman, M. L., & O'Reilly III, C. A. (1996). Ambidextrous organizations: Managing evolutionary and revolutionary change. *California Management Review*, *38*(4), 8–30.
- Wiklund, J. (1999). The sustainability of the entrepreneurial orientation-performance relationship. *Entrepreneurship Theory and Practice*, 24(1), 37–48.
- Zahra, S. A. (1991). Predictors and financial outcomes of corporate entrepreneurship: An exploratory study. *Journal of Business Venturing*, 6(4), 259–285.
- Zahra, S. A., & Covin, J. G. (1995). Contextual influences on the corporate entrepreneurship performance relationship. A longitudinal analysis. *Journal of Business Venturing*, 10(1), 43–58.
- Zahra, S. A., Jennings, D. F., & Kuratko, D. (1999). The antecedents and consequences of firm-level entrepreneurship: The state of the field. *Entrepreneurship Theory and Practice*, 24(2), 46–65.

CROSS-REFERENCES

Strategic Planning in New Ventures and Young SMEs (8) Toward Sustainable Organizations for the 21st Century (25) Organization Development in the 21st Century (92) Managing Creativity and Innovation in the 21st Century (94)