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Part III: Corporate Entrepreneurship in Context

1. From Entrepreneurial Orientation to Performance: inside the black box of corporate entrepreneurship

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INTRODUCTION

In the 2011 Special Issue on entrepreneurial orientation (EO) of *Entrepreneurship: Theory and Practice*, Danny Miller (2011: 873) wrote, “When I attended a local conference in 2004, an article on EO was being presented. When the speaker put up his first slide with EO in the title, I asked: “What does EO stand for?” The incredulous speaker responded, “You are kidding, right?” I was not.” As a researcher on organizational configurations, Miller introduced the EO concept merely as a side issue to illustrate the predictive power of organizational configurations. From these beginnings, after a long period of incubation, EO has emerged as a concept that describes entrepreneurship in and of established organizations.

One of the reasons for the popularity of EO may be that it allowed researchers to take “entrepreneurship” out of the startup context and apply it to existing firms. This was termed “corporate entrepreneurship” (CE) and was defined as “entrepreneurship within an existing organization, including emergent behavioral intentions and behaviors of an organization related to departures from the customary” (Antoncic & Prodan, 2006: 1). In this regard, George and Mason (2011) argue that EO is used as a direct measure for CE and as a key antecedent to CE activities. Interest in CE from both academics and practitioners is spawned by the idea that CE is linked to firm performance and the creation of a stream of sustainable competitive advantages. Key research questions revolve around the performance impact of CE and the theoretical reasons for why CE is linked to firm performance.

Since Miller (1983), CE research has focused on entrepreneurial orientation (EO) as a core construct. The popularity of EO is illustrated by the large number of papers on the topic: there are now more than 300 papers on SCOPUS which have “EO” in their abstract, title or key words and 236 which have “corporate entrepreneurship”. The relevance of EO research was underscored by a meta-analysis on the EO-performance relationship (Rauch, Wiklund, Lumpkin & Frese, 2009) that indicated a moderately strong EO-performance relationship. The relationship remains robust under different conceptualizations of EO, cultural contexts and despite variations in other internal and external moderators such as business size and the technological intensity of the relevant industry. Taken this EO-performance relationship as a stylized fact, unanswered questions on the EO-performance relationship are becoming more urgent: just how is EO linked to performance?

Research has framed EO as a strategic orientation, a concept used by the global managements of companies that can be interpreted as a “dominant logic” (Prahalad & Bettis, 1986) or, to use Mintzberg’s definition (1987), as encompassing instances of “strategy as perspective” that influence downstream programmes, processes and actions. Examples of strategic orientations include market orientation (Gotteland, Haon & Jollibert, 2009). Miller (1983: 771) defines an entrepreneurial firm in this way: “an entrepreneurial firm is 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”. Innovativeness, risk taking, and proactiveness have since begun to be seen as the core elements of EO and a more nuanced conceptualization has recently been advocated (George & Mason, 2011).

The link between EO and performance can, on an abstract level, be interpreted as follows: EO is a dynamic capability that can lead to valuable, rare, inimitable and non-substitutable resource combinations (Alvarez & Busenitz, 2001). On a more detailed level, the transmission mechanisms between “orientations” and more distal measures such as firm performance still need to be explored. Going back to the interpretation of a strategic orientation as a construct that reflects a type of dominant logic, it is obvious that EO itself is inert; it does not “act”, but it provides a framework for action. Employees in a firm shaped by EO need to act in a specific organizational context to improve their performance. Lumpkin and Dess (1996) discuss how there must be something between EO and performance that acts as a “transmission belt”. I will discuss (section 2) research into mediators, corporate venturing as a process (section 3) and the configurational embeddedness of CE tools (section 3) as potential ways to conceptualize the link between EO and performance. Through this discussion, the line of arguments moves from simple (one mediator) to more complex (a process as a chain of mediators) to most complex (configurational embeddedness).

TRANSMISSIONS BETWEEN EO AND PERFORMANCE: MEDIATION OF THE EO-PERFORMANCE RELATIONSHIP

Conceptually, a mediator is a construct that “represents the generative mechanism through which the focal independent variable is able to influence the dependent variable of interest” (Baron & Kenny, 1986: 1173). A mediator analysis is then used to establish through what mechanism an independent variable exerts its influence on a dependent variable. In the context of EO, Lumpkin and Dess (1996) suggest that there may also be mediators in the relationship between EO and performance. Specifically, they suggest that the degree to which “organizational activities” are integrated serves as a mediator. In short, it is through organizational activities that EO is made effective. Knowledge about these mediators informs the decision makers of the activities that are necessary to make EOs effective.

A study of the literature on EO mediation (defined as all articles on SCOPUS with “entrepreneurial orientation” and “mediat*” in their titles, abstracts or key words) reveals that the idea of mediation has been explored only in a small fraction of EO papers: Out of 311 papers that Scopus lists for EO, a search for EO mediation resulted in only 27 papers, 15 of which analyze mediators of the relationship between an EO and a dependent variable (mostly firm performance).

The results indicate that the mediation of EO has been analyzed in many different contexts, with different operationalizations of EO and, most importantly, with many different potential mediators such as innovativeness, organizational structure, commitment and, most of all, organizational learning, which is analyzed in 5 out of the 15 papers. In a large majority of the papers, at least partial mediation was found, which hints at the fact that the particular mediator may be acting as a transmission mechanism between EO and firm performance (table 1)

Table 1. Mediators of the EO – Performance Relationship

Author/s	EO	Mediator	Dependent variable	Result	N	Sample
Colton, et al. (2010)	Covin and Slevin (1991)	Brand strength, supplier relations	Revenue growth; performance against objectives	NM	174	e-commerce retail
Du, et al. (2010)	Proactiveness	Certification	Sales growth, market share growth, profit growth	PM	632	SME
Harms, et al. (2010)	Miller (1983)	Innovativeness, Management by Objectives	Sales growth	PM	165	gazelles
Helm, et al. (2010)	risk taking propensity; proactiveness	Innovation	Subjective indicators reflecting sales growth, cash flow & profitability	Mediation	165	Spin-offs
Jiao, et al. (2010)	Covin and Slevin (1989)	Organizational learning	Dynamic capabilities	PM	-	high tech
Rhee, et al. (2010)	risk taking; proactiveness	Learning orientation	Innovativeness	PM	333	technology intensive
Fis and Cetindamar (2009)	Covin and Slevin (1989)	Managerial support; Corporate Entrepreneurship activities	Growth, profitability, non-financial performance	Mediation	347	heterogeneous
Kaimau-Maina (2009)	Covin and Slevin (1989)	Engagement in college (personal level)	Attitudes, self-efficacy	PM	700	students
Li (2009)	Lumpkin and Dess (1996)	Knowledge creation processes	Satisfaction with efficiency, growth, and profitability	PM	165	heterogeneous
Lin, et al. (2009)	Covin and Slevin (1989)	Learning / Org. structure	business performance	Mediation / NM	333	technology intensive
Wang (2008)	Miller (1983); Covin and Slevin (1989)	Learning orientation	Profitability and sales growth rel. to competitors	Mediation	213	medium-to-large firms
Wu (2008)	Lumpkin and Dess (2001)	Human capital, social capital, customer capital	Innovativeness	Mediation	159	heterogeneous
Peng (2007, 2008)	Covin and Slevin (1989)	Learning orientation	Innovativeness/ business performance (subjective)	NM	333	technology intensive
DeClerq and Rius (2007)	Lumpkin and Dess (1996)	Organizational commitment	Effort (time commitment and work intensity)	Mediation	863	SME
Keh, et al. (2007)	Covin and Slevin (1989)	information acquisition and utilization	Firm performance, financial and non-financial	PM	294	small

NM = No mediation; PM = Partial Mediation

An example of the research stream on organizational learning is the work of Wang (2008), who analyses the mediation of EO-performance by a learning orientation (Kreiser, 2011). She writes (2008: 636): "to reap the benefits of entrepreneurial efforts, a firm must be committed to learning, open-minded to new information and new ways of doing things [...]. Hence, it is through LO that a firm maximizes the impact of EO on firm performance. Overall, EO opens up a scope for learning and particularly favors divergent learning, while LO emphasizes both intensity and a common direction of learning, and hence the convergent effect of learning". With this, she adds a temporal dimension to the EO-performance relationship. She also makes clear that it is not through a one-off entrepreneurial action that a firm becomes successful, but through the strategic use of entrepreneurship (Harms, Walsh & Groen, 2012; Hitt, Ireland, Sirmon, & Trahms, 2011).

Other examples of research on these organizational activities are presented by Harms et al. (Harms, Reschke, Kraus, & Fink, 2010), who argue that management by objectives (a style of management which puts growth as a key organizational goal) energizes employees to pursue entrepreneurial opportunities, which may ultimately lead to growth. Helm et al. (Helm, Mauroner, & Dowling, 2010) argue that innovations are the mechanism that link EO and performance. They capitalize on the idea that innovation is a proximal performance indicator and suggest that it is, in a further step, also linked to firm performance as a distal performance indicator.

In the quest to find organizational activities that can serve as a transmission mechanism between EO and performance, researchers can draw from many unexplored areas such as the studies of strategies (Garcia & Lajara, 2002) or management approaches. A potential source could be the analysis of entrepreneurial management (EM). EM encompasses a collection of management approaches that are geared towards the exploitation of opportunities without regard to the resources currently controlled (Stevenson & Jarillo, 1990). These management approaches include, for example, organic management structures, reward philosophies that are geared towards growth, and company-wide beliefs that growth and the pursuit of opportunities are activities worth pursuing (Brown, Davidsson & Wiklund, 2001). With these approaches, an entrepreneurial orientation may effectively translate into performance.

While there are many potentially interesting mediation hypotheses which would warrant analysis, methodological considerations should also be taken into account. A test for mediation requires that there already be a strong and significant relationship between the independent variable and the dependent variable (Baron & Kenny, 1986). While the meta-analysis of the EO-performance relationship hints at a robust relationship, it might not under all circumstances be so strong as to allow for a mediation analysis. This factor may limit the applicability of mediation analysis for future research.

TRANSMISSIONS BETWEEN EO AND PERFORMANCE: CE AS AN ENTREPRENEURIAL PROCESS

Another way to analyze the linking pins between EO and performance is by explicit consideration of the entrepreneurial process. An entrepreneurial process is the temporal sequence of activities from opportunity recognition/opportunity creation through to exploitation (Moroz & Hindle, 2011). Entrepreneurial process models describe the development from the genesis of an idea to the startup of a business, from the idea for a product to its introduction or from the idea to “go international” to actually setting up an international venture.

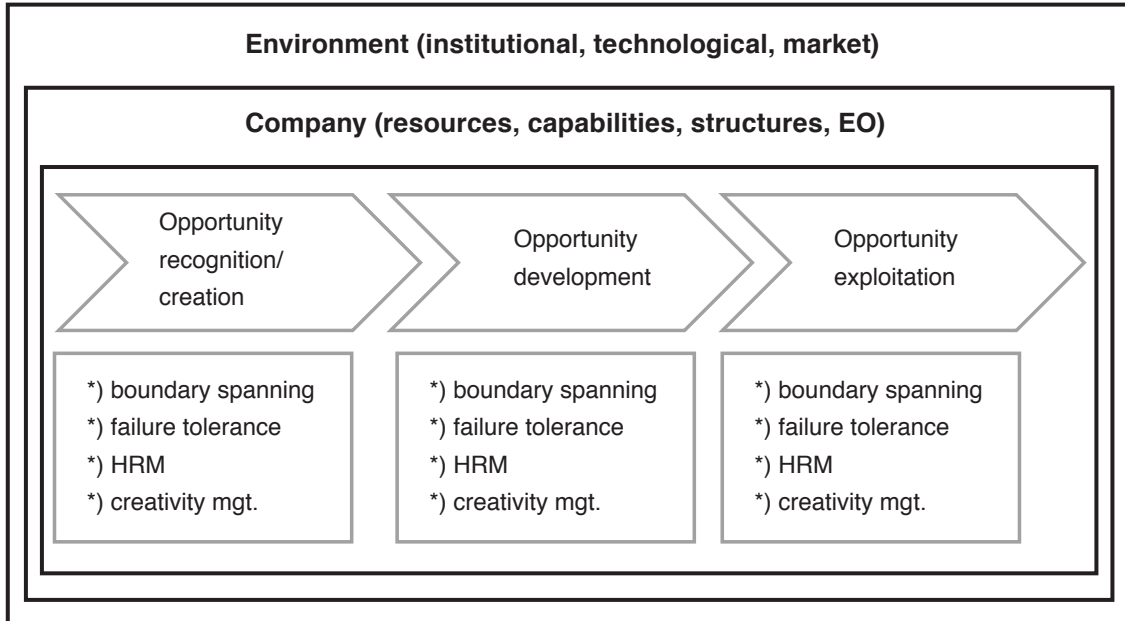
The process perspective on CE has already been introduced to CE research by Burgelman (1983), whose 1983 paper “Corporate Entrepreneurship and Strategic Management: Insights from a Process Study” has become a seminal paper in CE research. Further to this, the mediator analyses in the previous section can be regarded as first steps towards a process model. Process models of strategic entrepreneurship, a topic related to CE, have already been devised (Hitt, et al., 2011).

In describing entrepreneurial processes, Sarasvathy (2001) identifies two distinct approaches: causation and effectuation (C&E). “Causation” has connotations of rational planning, whereas “effectuation” is associated with emergent strategies. Sarasvathy illustrates that the entrepreneurial process impacts on the type of opportunities that are finally exploited: for example, entrepreneurs choosing causation tend to rule out opportunities that do not lend themselves to ex-ante planning. In a similar vein, C&E can impact on international opportunities. This illustrates that decision making processes influence the types of decisions being made and ultimately their effectiveness (Dean & Sharfman, 1996). The analysis of C&E is thus pertinent to entrepreneurial processes in general and to international new venture creation processes (INVCP) in particular.

Effectuation theory has been applied in fields such as management, economics, finance, marketing and international entrepreneurship (Harms and Schiele, 2012). Effectuation theory may be particularly suitable as a building block for corporate entrepreneurship, since CE can also be framed as a problem of decision-making in an uncertain context. The first papers in this direction have come from Brettel et al. (Brettel, Mauer, Engelen, & Küpper, 2011) who analyze effectuation in R&D management, and, as presented at the 1st international CE workshop, the works of DeGeorge et al. (DeGeorge, Fayolle & Randerson, 2011) and Viala and Redien-Collot (2011).

TRANSMISSIONS BETWEEN EO AND PERFORMANCE: TOOLS FOR CE

On a less abstract level, research could analyze which tools companies use to make CE work. Zahra (1995: 227) defines CE as “the sum of an organization’s innovation, renewal and venturing efforts” and this hints at a tools-based perspective on CE. This approach has the advantage that its results would be actionable for practitioners. Research based on this stream would analyze what types of tools are used for successful CE.

Figure 1. An embedded model of the corporate entrepreneurship process

The performance impact of CE tools can be analyzed alone as well as in a more complex framework. Take, for example, the schematic model of CE as an entrepreneurial process (see Figure 1). Here the environment and the company context (including its strategic orientation) provide the framework for the entrepreneurial process (see section 3). Organized throughout along the entrepreneurial process, a number of management tools can be applied for effective opportunity recognition (for example, HRM for selecting and promoting creative employees, boundary spanning for receiving external information, creativity management for the generation of ideas and failure tolerance for effective creativity), opportunity development (slack resources in terms of time and money such as corporate venture capital, power promotion and functional promotion and idea management such as stage-gate type selection processes) and opportunity exploitation (internal or external commercialization).

In this model, it is not EO alone but the complex interplay between environmental and firm-specific contexts, along with a number of management tools, that can be used to develop a business idea from inception to exploitation. A framework for analysis can be based on the ideas of Miller (1983), who advocated the configuration approach in his seminal paper on CE and EO. The configuration approach posits that organizational development is influenced by factors from the domains of the environment, strategy, leadership and structure. The factors from each domain can interact in a complex way, giving rise to a limited number of observable organizational types, each with a dominant domain. For example, Miller (1983) identifies simple firms (leadership dominates), planning firms (structure dominates) and organic firms (environment dominates), in which the dominant domain is a "chief determinant of entrepreneurship" (p. 770). As there

are different types of companies, there may also be different ways to trigger entrepreneurship. Miller writes (1983: 770): “any programs which aim to stimulate entrepreneurship would benefit greatly from tailoring recommendations to the nature of the target firms”. This differentiated perspective holds the promise of creating a fitting match of tools and firm configuration.

While the configuration has delivered promising empirical results (for an overview see Harms, Kraus, & Reschke, 2007) it is methodologically challenging (Dess, Newport & Rasheed, 1993) and has limitations when it comes to the empirical identification of very entrepreneurial firms (Harms, Kraus, & Schwarz, 2009). Nevertheless, future research in this direction should be encouraged. Here, an emphasis on the construct of the “Business Model” as a potential framework for generating new knowledge could potentially be used by practitioners and academics (Lecocq, Demil, & Ventura, 2010).

DISCUSSION AND CONCLUSION

This paper proposed to look at research streams that open the “black box” hovering between EO and performance. First, mediators can illustrate the transmission mechanism between EO and performance. Researchers have analyzed mediators from a variety of theoretical perspectives, and found partial evidence for mediation effects. While numerous avenues for future research are still open, the medium-to-low (albeit persistent) link between EO and performance indicates that there are methodological barriers to this kind of research. Second, research on corporate venturing could emphasize the perspective of the entrepreneurial process, by, for example, drawing on the concepts of causation and effectuation. First attempts show that CE processes can be analyzed through this perspective. Third, research based on a tools-based perspective is certainly actionable for practitioners. This perspective can focus on individual tools as well as on the complex interplay of configuration domains.

This overview is not without limitations, as it represents a subjective perspective on the literature. Where it attempts to be systematic, it may not be complete, as there may be studies that have analyzed direct and indirect effects without using the key word “mediation” and which have thus not been used in the analysis of the literature. Nevertheless, it is hoped that this short discussion of the research streams provides interesting and inspiring inputs for CE researchers who strive to take a look into the “black box” of CE.

To carry out these promising research streams, longitudinal research designs with multiple cross-sections would form one option to capture varying degrees of causation and effectuation over time (Van de Ven & Huber, 1990). In these efforts, attempts towards a configuration perspective that encompasses multiple domains (Harms, et al., 2009) could shed light on the multifaceted nature of CE. It is hoped that further research will outline the process of CE and that new insights will be gained.

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