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## LINKING TWO DIMENSIONS OF ORGANIZATIONAL CREATIVITY TO FIRM PERFORMANCE: THE MEDIATING ROLE OF CORPORATE ENTREPRENEURSHIP AND THE MODERATING ROLE OF ENVIRONMENT<sup>1</sup>

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### **Abstract**

This paper applies a corporate entrepreneurship research to explore boundary conditions for traditional assumption of the creativity literature, the notion that increase in novel and useful idea generation will increase the likelihood of firm performance. Based on the assumption that organizational creativity is two-dimensional construct – We attempt to answer the following research question: What is the strategic role of creativity in entrepreneurial organizations within dynamic, hostile, and complex environment? Despite the impressive body of research on creativity in organizations, this important question remains relatively neglected or unexamined entirely. We explicate the mediating role of a corporate entrepreneurship, as well as the moderating role of environment and conclude with the discussion of the implications for future organizational creativity research.

**Key Words:** Organizational creativity, corporate entrepreneurship, firm performance

**Topic Group:** Entrepreneurship

**JEL Classification:** L26, L25, L20

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## **INTRODUCTION**

Despite the central role of creativity as the basis of competitive advantage and a primary source of firm growth, our understanding of organizational creativity representing a strategic asset remains limited. Creativity scholars have created a vast body of literature regarding a large number of contextual and individual factors, which can enable or inhibit the generation of creative ideas (Mumford, 2012; Runco, 2012; Runco & Pritkzer, 2011). Unfortunately, little is known about the strategic role of creativity in entrepreneurial organizations within dynamic, hostile, and complex environment. Moreover, while most previous studies considered micro-level characteristics of creativity, examining this phenomenon on organization-level performance can holistically increase the understanding of creativity. To address this needs, a corporate entrepreneurship and strategic management theory will be applied to examine the assumption that increased organizational creativity promotes firm performance.

Our focus is on the role of creative capability in the shaping of entrepreneurship strategy, and in consequence in firm performance. Given that a considerable rhetoric surrounds creativity in organizations it is perhaps surprising that organizational creativity has received comparatively little attention from mainstream business and management researchers. In this study we developed a research framework, which integrated organizational creativity and corporate entrepreneurship, and explored the relationship between these variables, environment and performance of small – to medium - sized enterprises. The interaction between organizational creativity, as a firm level variable, corporate entrepreneurship, and the environment conditions in which the firm operates has not been investigated, to the best of our knowledge.

Starting with organizational creativity as dynamic capability, we summarize our study into a preliminary substantive theory of the creativity in organization and discuss dominant in the literature relationships between organizational creativity, firm performance, corporate entrepreneurship and environment. Proposed conceptual model outlines the development of high performance via organizational creativity and corporate entrepreneurship. Additionally, the model provides the sound foundation for uncovering environmental conditions of creativity in entrepreneurial organizations. This framework and the propositions it suggests offer several potential contributions to the field of organizational creativity.

## **THEORETICAL FRAMEWORK**

Organizational theory on creativity has been extensively developed in recent years, but no current comprehensive model explains the organizational creativity in strategic context. The critical review of different theoretical lenses used to analyse creativity in organizations show two dominant paths (James & Drown, 2012). On the one hand, there are researches describing the nature of creativity – performance relationship, which are oriented on identifying mediating and moderating variables and aimed at building a broad theoretical background. On the other hand, there is a whole range of empirical studies testing fragmental theoretical models. Drawing primarily from the pathbreaking works we develop conceptual model making organizational creativity the basis of a dynamic theory of the high – performance organization and building research agenda.

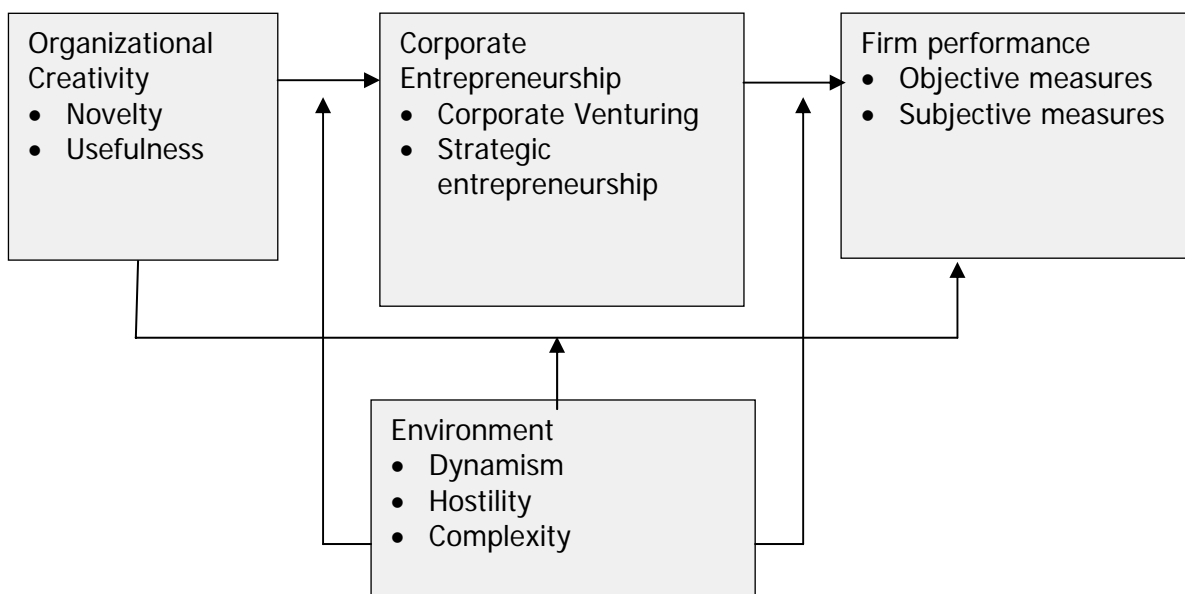
Figure 1 outlines the four main constructs: organizational creativity, corporate entrepreneurship, firm performance, and environment. This framework suggests that firm performance derives from certain level of entrepreneurial behaviour, which in turns depends

on the level of organizational creativity. The directional arrows from environment to relationships between organizational creativity, corporate entrepreneurship, and firm performance indicate that in dynamic, hostile, and complex environment organizations will be likely to engage in creative strategy. In conclusion, Figure 1 portrays the organizational configurations, including various elements, which leads to fundamentally different conception of organizational creativity which are commonly found in literature on creativity theory and practice.

### Creativity as multidimensional construct

Several significant studies have shaped the construct of creativity. Recently, creativity is defined as “the production of high quality, original, and elegant solutions to problems” (Mumford, Hester, & Robledo, 2012: 4). Woodman, Sawyer and Griffin define organizational creativity “as the creation of valuable, useful new product, service, idea, procedure, or process by individuals working together in complex social systems” (1993: 293). Guided by Harrington’s (1990) framework, Liu, Bai, & Zhang (2011) point out that definition of organizational creativity includes four components: creative environmental establishment, creative output generation, member’s creative participation, organization’s creative integration. Furthermore, Weinzimmer, Michel, & Franczak (2011) suggest the firm’s ability to enact creativity at the main level of firm-level performance. In this vein, Sminia (2011) describes creative dynamic capability as consisting of firm’s potential to initiate and create frame breaking change.

Figure 1: Organizational creativity and corporate entrepreneurship in the environmental context. Research model



Barreto (2010) suggests a conceptualization of dynamic capability as consisting of firm’s potential to systematically solve problems based on propensity to sense opportunities and threats, making timely and market-oriented decisions, and changing its resource base. These insights from dynamic capabilities theory open up a way towards a processual understanding of organizational creativity. That is dynamic capabilities, which explicitly rest on the ability to repeatedly creative solutions to business problems. In consequence, drawing on the past

research on creativity in organizations and dynamic capabilities, we suggest the following definition of organizational creativity that accommodates suggestions discussed above: Organizational creativity is the firm's ability to generate new and useful ideas to address rapidly changing opportunities and threats by making timely and market-oriented decisions, and to frame breaking changes in its resource base.

Most operationalizations of creativity treat creativity as a unitary construct (Kozbelt, Beghetto, & Runco, 2010; Shin & Zhou, 2007). Creativity is often measured as a combination of novelty and usefulness melted into a single scale. Interestingly, it is increasingly recognized that creative solutions require both the generation of alternatives and the selection of which alternative to pursue. Sue-Chan & Hempel (2010) developed a new operationalization of creativity based on treatment of novelty and usefulness as two separate dimensions. Similarly, Choi (2004) and Juillerat (2011) maintained that there are differences in both antecedents to, and consequences of, novelty and usefulness. Moreover, the different dimensions of creativity are likely to be differentially influenced by individual's task and organizational elements. Hence, we consider the novelty and usefulness as two distinct dimensions of organizational creativity.

In sum, if organization lacks the resources to implement the idea, its performance would be unaffected by novelty. In somewhat different tone, organization may be highly skilled at implementing novel ideas, but if it has nothing to implement, its performance would be unaffected. This view is expressed in the following proposition:

Proposition 1: Novelty and usefulness are distinct dimensions of organizational creativity.

### **Creativity and performance**

The most important relationship in organizational creativity field is perhaps the one between creativity and performance. Researchers have shown confidence in the compulsory and direct link between organizational creativity and performance. Creativity is crucial for organizational innovation and survival (Amabile, 1988; Oldham & Cummings, 1996; Vaccaro, Jansen, Van Den Bosch, & Volberda, 2010; Augsdorfer, Bessant & Moeslein, 2012). At the level of organization, creativity is essential factor for high performance (Wang & Cheng, 2010), reconciling management paradoxes (Low & Purser, 2011), developing new behaviours in surprising situations (Bechky & Ockhuysen, 2011), and for high level of financial performance (Weinzimmer, Michel, & Franczak, 2011). Contrary, established bases of evidence from several researches also seem to counter the notion that creativity will seamlessly increase performance (George, 2007; Litchfield, 2008; Shalley & Gilson, 2004). Nevertheless, despite widespread beliefs in its benefits there has been relatively little empirical examination of its consequences in an organizational setting (Gong, Huang, & Farh, 2009). Thus, according to earlier suggestions (Poon, Ainuddin, & Unit, 2006), and recent findings (Simsek & Heavey, 2011), the foregoing arguments suggest the following:

Proposition 2: Organizational creativity is associated with higher level of firm's performance.

### **Organizational creativity and corporate entrepreneurship**

Creativity and entrepreneurship are independent constructs, but they also have complementary qualities (Henry & LeBruin, 2011; Hitt & Ireland, 2011; Schumpeter, 1934; Whiting, 1988). In fact, creativity is characteristic or capability of entrepreneurs and their activities (Baker & Nelson, 2005; Cesinger, Gelleri, Winter, & Putsch, 2010; Ogilvy, 2011),

more specifically socio-cognitive networks (Belussi & Staber, 2011; Shalley & Perry-Smith, 2008) and, perhaps most importantly, in the production of entrepreneurial opportunity (Alvarez, Young, & Wooley, 2011; Hansen, Lumpkin, & Hills, 2011; Venkatraman, Sarasvathy, Dew, & Forster, 2012; Wood & McKinley, 2010). Along the similarity lines Perry-Smith and Coff (2011) stated the role of generating and selecting entrepreneurial ideas in the developments of new ventures and argue that entrepreneurial creativity is the capacity to identify novel and useful solutions to problems in the form of new products and services. Simply being creative is not sufficient. Rather it is the firm's ability to take entrepreneurial action that may determine the extent to which creativity impacts firm performance. This is particularly true for interaction of organizational creativity - as dynamic capability - with other dynamic and operating capabilities to enable entrepreneurship (Newey & Zahra, 2009). This discussion suggests the following summary proposition:

Proposition 3: Organizational creativity and corporate entrepreneurship have a positive relationship.

### **Corporate entrepreneurship and performance**

The notion that corporate entrepreneurship increases the level of organization performance has been added to the growing body of research on entrepreneurial orientation vein (Rauch, Wiklund, Lumpkin & Frese, 2009; Zahra, Jennings, & Kuratko, 1999). This is true, but only to a limited extent, because it may also be that entrepreneurial orientation is only predisposition to different corporate entrepreneurship activities (Dess & Lumpkin, 2005; Miller, 2011; Short, Broberg, Coglisier, & Brigham, 2009). Entrepreneurial orientation is the key construct in the entrepreneurship literature (George, 2011). This construct has its roots in the work of Covin and Slevin (1989) who theorized that the three dimensions – innovation, proactiveness, and risk-taking – act together to comprise a basic strategic orientation. The point is that the high performance almost certainly arises as function of the corporate venturing (bringing new business to corporation through internal corporate venturing, cooperative corporate venturing, and external corporate venturing) and strategic entrepreneurship (innovating in the pursuit of competitive advantage manifested in firm's strategy, product offerings, served markets, internal organization, and business model) as various forms that corporate entrepreneurship can take (Morris, Kuratko, & Covin, 2011). These arguments suggest that organization with higher level of corporate entrepreneurship are more likely to be effective, leading to the following proposition. In sum, we propose:

Proposition 4: Organizational creativity has a positive indirect relationship with firm performance through the corporate entrepreneurship: organizational creativity is positively related to corporate entrepreneurship and corporate entrepreneurship is positively related to firm performance.

### **The role of organizational environment**

Although most research within the organizational creativity field has not paid due attention to bounding assumptions, one ongoing debate regarding boundaries of this perspective bear mentioning – this related to environmental conditions. In this vein, Ford (1996) summarise evidence that institutional environment plays an important role in shaping creative activities. Manimala (2009) argue that both general and task environment are important to entrepreneurship, and they are, in fact, in interaction with entrepreneurial individuals. Overall, in terms of environmental characteristics the literature shows that turbulent

environment enables creativity (Sternberg, 2005) amplifies the effects of dynamic capabilities (Wilden, 2010), and positively affects the relationship between entrepreneurial orientation and performance (Wei, Wu, & Yang, 2009).

A careful review of entrepreneurship literature suggests that a dynamic context fosters the relationship between entrepreneurial orientation and performance (Van Doorn & Volberda, 2009; Frank & Kessler, 2010). Similarly, Baron and Tang (2011) observed encouraging moderating role of environmental dynamism in creativity-firm innovation relationship. Uncertainty of environment promotes speed of strategic change, and in consequence strategic performance (Su, Li, Lui, & Li, 2009), is positively associated with growth of SME (Small and Medium Scaled Enterprises) (Pett & Wolff, 2009). Intense competition exerts more pressure on the firm, hence a variety of interactions (capability, entrepreneurial orientation and market conditions) are associated with small firm growth (Chaston & Sadler-Smith, 2012). Under intense market conditions firms with low entrepreneurial orientation and low capability show lowest growth rate, whereas firms with high entrepreneurial orientation and high capability show highest levels of growth. Additionally, the level of environmental complexity is likely to affect the proactive strategic efforts (Oliver & Holzinger, 2008) The degree to which hostility is present in environment is positively associated with entrepreneurial behaviours (Ding, Malleret, & Vekamuri, 2009), and in interaction with technological sophistication positively influencing entrepreneurial processes and behaviours (Kreiser, Kuratko, Covin, & House, 2011). Further, interaction of hostility and turbulence increases the positive effect of entrepreneurship strategy on performance (Wiklund & Shepherd, 2005).

Viewed together, these research findings indicate that environment influences several aspects of entrepreneurial behaviours, simultaneously, important elements of corporate entrepreneurship. From the previous analysis, it is also apparent that environment studies designed at the organizational level of creativity are relatively rare. Due to lack of creativity and environment research at present, we extend the entrepreneurship and environment findings to organizational creativity. The following three propositions capture these moderation effects:

Proposition 5a: Environment would moderate the relationship between organizational creativity and firm performance, that high level of dynamic, hostile, and complex environment would be associated with a stronger relationship between organizational creativity and performance.

Proposition 5b: Environment would moderate the relationship between organizational creativity and corporate entrepreneurship, so that high level of dynamic, hostile, and complex environment would be associated with a stronger relationship between organizational creativity and corporate entrepreneurship.

Proposition 5c: Environment would moderate the relationship between corporate entrepreneurship and performance, so that high level of dynamic, hostile, and complex environment would be associated with a stronger relationship between corporate entrepreneurship and performance.

## **DISCUSSION AND CONCLUSIONS**

For research purpose, this study addresses the various theoretical challenges that await those seeking to apply strategic management and corporate entrepreneurship theory to the nascent field of organizational creativity. Our efforts contribute to the literature in the following ways. First, and foremost, the present research examined assumption within the creativity literature by proposing boundary conditions in which organizational creativity might positively impact firm performance. The research extends organizational creativity theory by exploring the mediating role of corporate entrepreneurship, and moderating role of the environment. In other words, the study contributes to the creativity and entrepreneurship literatures by identifying relationship between organizational creativity, corporate entrepreneurship, and firm performance, and making more explicit theoretical bases of its constituent arguments. In addition, our study suggests that these relationships require special attention from environment perspective.

Second, the insights developed here advance creativity literature by operationalizing organizational creativity as dynamic capability. Our general idea is to build a strategic management organization theory concept of creativity referring to whole organization, not forgetting about individuals as a source of creativity, which is the main focus of psychology, and where the traditional reference of creativity comes from. In these sense our perspective is more comprehensive than approaches used in prior studies mostly carried out from psychological and social viewpoint, while the lenses of strategic management and corporate entrepreneurship were largely ignored.

For practitioners, this paper has a very clear message: organizational creativity matters. A major implications of this discussion that is helpful to characterize organizational creativity in terms of dynamic relationship with corporate entrepreneurship, performance and environment. This family of concepts are related to significant issues required for success: defying the scope activities through the lenses of novelty and usefulness of ideas, using corporate entrepreneurship to strengthen the process of organizational creativity, activating the forces of firm performance by creative and entrepreneurial means, joining organization growth with evolutionary and revolutionary changes in environment, and finally overcoming inertia from the success earned so far.

This research offers several key contributions, however, there are also a number of limitations and most of them highlight opportunities for further inquiry. While this paper has attempted to portray the issues surrounding the theoretical model of organizational creativity and corporate entrepreneurship in dynamic, hostile, and complex environment, it should be noted that there are additional issues that also need to be addressed before we can hope to build a solid body of research in this area. Perhaps a larger problem is the lack of consistency in measuring firm performance. In the related vein, questions is raising regarding the definition and the measurement of organizational creativity. Operationalizing organizational creativity remains the case today and highlights fruitful area for future research. Next, the idea of corporate entrepreneurship forms should be further developed. Special attention should be given to the assumption about relationship between entrepreneurial orientation and corporate entrepreneurship forms.

The concepts of organizational creativity, corporate entrepreneurship, and environment are quite broad and involve multiple dimensions. The current study crossing these three domains only selects a representative set of the categories for characterising each of the domains. Nevertheless, the study is quite comprehensive in that that it is one of only a handful to

simultaneously include measures of the organizational creativity, corporate entrepreneurship, and environment related to performance. Nonetheless, additional work is needed to understand how such configurations influence organizations strategic efforts.

A possible limitation of our research is that we selected variables that have been previously found to be related to creativity. Thus, the theoretical contribution of our research may be questioned. To further increase the generalizability of our findings regarding organizational creativity, however, other individual differences and more contextual variables should be examined in future research. Of particular interest should be power and organizational politics (Bouquet & Birkinshaw, 2008), managerial mind sets (Miller & Tsang, 2010), and action orientation (Weinzimmer, Michel, & Franczak, 2011). We also believe that it is important to attempt organizational creativity in the context of more macro-level influences affecting industries, including changes in institutional logics that are often historically variant and shaped by economic and social structures (e.g., Greenwood & Suddaby, 2006), because these forces may influence the structure and content of organizational creativity as it evolves over time.

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