



Doctoral Thesis

Title:

Entrepreneurial Capability: Examining Opportunity Pursuit in Multiple Contexts

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Chapter 1 General Introduction

1.1 Research Motivation and Objective

The rapidly changing competitive landscape has challenged companies to become more entrepreneurial. Instead of falling prey to ever-changing market forces, some firms have shown great agility as they relentlessly introduce new products, services, and processes. These companies are driven by a continuous quest for opportunities that put their resources to better and more profitable use. The ability to orchestrate firms' resources¹ and capabilities to realize opportunities is the topic of this dissertation. I refer to this ability as entrepreneurial capability (EC), which is defined as a firm's overall capacity ²to use its internal and external resources to continuously pursue opportunities. Therefore, the purpose of this dissertation is to provide a fine grained understanding of EC and examine its variability across five different contexts.

Studying EC allows the examination of firm-level entrepreneurship by applying a capability perspective, which focuses on firms' orchestration of their resources and capabilities to develop opportunities. Opportunity development requires firms to collectively integrate their capabilities to transform them into actions. Successful enactment of opportunities is not about individual capabilities belonging to different functional areas but rather their reconfiguration, which links diverse resources and spurs new opportunities. Thus, this dissertation brings forward a focus on firms' capabilities and actions, which departs from the literature that focused on a firm's entrepreneurial orientation (EO). EO is firms' propensity to act autonomously, willingness to innovate and take risks, and tendency to be proactive and aggressive towards competitors (Lumpkin & Dess, 1996).

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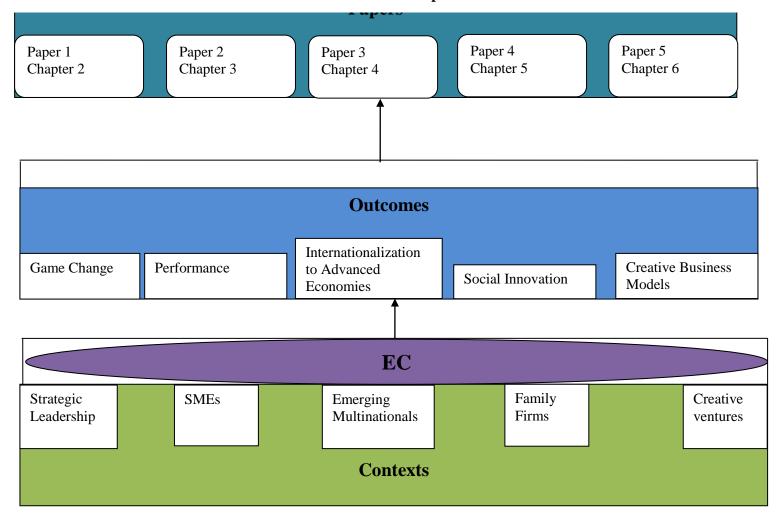
¹ Resources and capabilities are used interchangeably

² Webster online dictionary defines capacity as the ability to perform a specific task, thus it will be used interchangeably with ability.

Although extant research on EO has provided useful explanations of firms' tendencies to undertake new entry (Lumpkin & Dess, 1996), these explanations primarily focus on inferring their entrepreneurial behavior through dispositional traits (Dess, Pinkham, & Yang, 2011; Rauch, Wiklund, Lumpkin, & Frese, 2009). Thus, most studies have been devoted to describing and examining the performance implications of EO dimensions such as autonomy, innovativeness, proactiveness, competitive aggressiveness, and risk taking (Keh, Nguyen, & Ng, 2007; Perez-Luno, Wiklund, & Cabrera, 2011). EO is viewed as a frame of mind or a perspective that reflects firms' dedication to entrepreneurship (Dess & Lumpkin, 2005). However, this focus on orientation provides little guidance on firms' orchestration of their capabilities to develop opportunities. More research is needed to better understand what type of capability firms build and develop to transform opportunities into actions.

This dissertation is designed as a compendium of publications and is comprised of seven chapters. Besides the introduction and conclusion, the five remaining chapters represent five individual papers that examine EC in multiple contexts, as shown in Figure 1.1 below. This reflects a high degree of diversity, which allows a close investigation of the manifestation of EC in several contexts. In turn, this brings focus on the differences among the type of opportunities pursued and their implications for integrating firms' capabilities. Hence, the remainder of the current chapter reflects on how this aim has been realized. In particular, I highlight common themes that emerged from studying EC in various contexts and provide a brief introduction for each of the papers that comprise the dissertation.

Figure 1.1 Dissertation's Papers



1.2 Context and Emerging Themes

This dissertation pays a close attention to the context in which EC unfolds, which is reflected in the diversity of organizations studied across several chapters. These organizations include SMEs (Chapter 3); emerging multinationals (Chapter 4); family firms (Chapter 5); and creative ventures (Chapter 6). This represents an attempt to highlight the contingent nature of opportunities, which initially guided the conceptualization of EC in Chapter 2. Unlike other chapters, Chapter 2 does not specifically address a particular organizational type, but rather views strategic leadership as a favorable setting for EC development. Thus, opportunity is not viewed as a holistic concept that is equally treated across different settings and organizational types. Instead, context holds an important role in influencing EC and the opportunities pursued.

Therefore, Chapter 2 underscores the role of strategic leaders in developing and integrating EC dimensions to realize opportunities for game changing strategies, which are ways to alter entire industries and outsmart other players (Lafley & Charan, 2008). In Chapter 3, the focus is on Swedish SMEs seeking opportunities to extend their market scope. Meanwhile, in Chapter 4, emerging multinationals are in a quest for opportunities that leverage their existing capabilities and open up new possibilities to build world-class ones in developed markets. Chapter 5 offers insights into social opportunities through a focus on family firms' social innovations that harness their embeddedness in societies. Finally, Chapter 6 describes creative ventures' efforts to take advantage of their founders' creative talents to build sound business models. Examining EC across the previously described contexts provides useful insights that could be observed across the themes discussed below.

A recurring theme across the different contexts explored in this research is organizations' strive to attain a balance among competing demands as they pursue opportunities. This observation underscores the importance of looking at firms' entrepreneurship from a capability

perspective. EC's dimensions reflecting broad categories of actions are extended across different organizational types, revealing the importance of EC integration of these dimensions and their embodied capabilities. Integration reflects the valuable role of EC in attending to contradicting demands to collectively orchestrate capabilities and smooth organizations' actions in pursuit of opportunities. For example, Chapter 2 demonstrates the importance of strategic leaders in integrating EC's dimensions and ensuring its embeddedness within firms' fabrics. Chapter 4, looking at emerging multinationals illustrates the role of EC integration in balancing their learning and unlearning capabilities. Meanwhile, Chapter 7 analyzes the nature of creative ventures' business models, offering useful insights into how EC integration enables these ventures to make sense of competing artistic and market logics. In all these instances, variability across the several dimensions of EC is observed, calling for integration that reconciles tension from opportunities.

One theme that unites the chapters herein is the emphasis on capabilities and resources within and outside firms' boundaries. The delineation of EC in Chapter 2 draws attention to the importance of firms' ecosystems and the range of possibilities they bring to link firms' internal and external capabilities. These links spur new opportunities as EC takes advantage of emergent conditions while creating several configurations of capabilities. For instance, in Chapter 4 Teva Pharmaceutical, an emerging multinational, was able to link its distinctive capability of generic drug manufacturing to the expansion of national pharmacies in U.S. markets. Similarly, in Chapter 6, renowned haute cuisine chefs such as Moreno Cedroni and Ferran Adrià linked their ventures' creative skills to external constituents' capabilities of mass marketing and production. A more nuanced outlook on linking firms' capabilities within their ecosystems is further illustrated in Chapter 5, where family firms' endorsements of social innovation connect these

firms with several players, providing them access to diverse resources, knowledge, and learning opportunities that improve their ECs³. These chapters show that the focus of EC on firms' ecosystems appears to be a differentiating attribute of this capability.

Another theme observed across the chapters is supplementing the dynamic capabilities perspective, which is typically used to conceptually define EC and explicate its dimensions with additional theoretical perspectives. Learning theory is used in Chapter 3 and Chapter 4 to understand the implications of EC for performance and its role in balancing emerging multinationals' dual context respectively. Meanwhile, the strategic leadership perspective in Chapter 2 helps clarify the role of senior leaders in developing EC's dimensions, which allows a weaving of the individual level of analysis into firm-level capability building. Similarly, in Chapter 6, extant research on business models is used to depict the role of creative entrepreneurs in understanding the nature of their ventures' business models and the contribution of EC to their operations. Finally, in Chapter 5 the literature on family firms' innovation and social role is invoked to show how social innovation could prove useful to these firms' ECs. As a result, all the chapters introduced below show a clear attempt to link EC to the broader organization context where it operates. This is done through incorporating relevant theoretical lenses that help explain EC's use of firms' capabilities to enact opportunities.

To conclude, this dissertation focuses on EC, its dimensions, and their potential strategic role. The diversity of the settings explored and theories used makes it possible to draw connections across contexts, highlighting the relevance of theoretical robustness of the proposed EC concept. Viewing EC in context also enriches our understanding of managers' role in integrating and harvesting its various dimensions, as elaborated in the chapters to follow.

³ ECs in plural form is used to indicate plural possession throughout the text

1.3 Introduction to Paper 1 (Chapter 2)

The competitive landscapes of organizations are constantly changing, which require firms to proactively control the evolution of their competitive strategies. One way to exercise control over strategies is to develop and hone an entrepreneurial capability at the firm-level, which allows firms to continuously realize opportunities. These opportunities generate novelty within firms' operations. This novelty opens up new strategic directions and transforms their business ecosystems. Thus, firms become adept at experimenting with a variety of strategic alternatives that may spur game changing strategies. These strategies change competitive rules and put their initiators at the forefront of competition. However, the execution of game changing strategies calls for a vigilant exercise of strategic leadership to create hospitable settings for the development and embedding of EC within organizations' fabrics. Therefore, the purpose of this paper is to delineate EC's dimensions, pointing out the pivotal role of strategic leadership in their development and linking it to game change.

Research in strategic management has found that strategic leadership plays an important role in organizational innovative outcome (Thomas, 1988). Pioneered by Hambrick (1984), the upper echelon perspective has provided empirical and theoretical support for the influence of strategic leaders on organizational processes and outcomes. Meanwhile, the full range of leadership perspective has focused on the differences between two leadership styles: transactional and transformational leadership and their differential implications for organizational innovation (Avolio & Bass, 1999; Elenkov, Judge, & Wright, 2005). Finally, a third stream of research is the visionary leadership perspective, which focuses on leaders' abilities to formulate clear visions for subordinates in order to attain organization-wide effectiveness (Westley & Mintzberg, 1989). Overall, the role of strategic leaders has been central

to explaining organizational outcomes and especially game changing and innovation strategies (Wolf, 1994).

Although prior research has generated a wealth of insights on the means through which strategic leaders influence game change and innovation strategies (Elenkov et al., 2005), almost no attention has been devoted to the role of strategic leaders in developing and institutionalizing an entrepreneurial capability at the firm-level (Augier & Teece, 2009). This scant attention may be explained by three main factors. First, previous research has focused on the content of competitive strategies and the conditions that explain their success (Elenkov et al., 2005). This facilitates distilling particular innovation outcomes and linking them to specific leadership behaviors. Second, current research on strategic leadership behavior tends to be confined to the individual level of analysis. Thus, leaders' behavior to influence their subordinates is the most salient explanation for organizations' innovative and game changing outcomes (Waldman, Ramirez, House, & Puranam, 2001). Third, research on firm-level entrepreneurship has mainly focused on individually motivating innovation champions (Howell & Higgins, 1990).

Therefore, this study departs from previous research focus on the individual level of analysis to explain the role of strategic leaders in developing and honing EC at the firm-level. We conceptually define EC, delineate its dimensions, and link it to game changing strategies. The relevance of EC stems from a new competitive reality where firms' internal focus is no longer sufficient. Today's firms are required to think about their ecosystems, where competition is boundary less and collaboration with competitors is crucial. Thus, we argue that senior leaders could provide a conducive context for the development of EC that would enable their firms to continuously realize opportunities and, ultimately generate game changing strategies.

More specifically, game changing strategies refer to firms' ways to improve the odds and out-smart other players in pursuit of profit and growth (Lafley & Charan, 2008). This may be through alterations in the rules, players, tactics, employed artifacts, or the playing fields all together (Lafley et al., 2008). In the meantime, we view entrepreneurial capability as firm's overall capacity to sense, select, shape, and synchronize internal and external conditions and resources for the realization of opportunities. We define opportunity realization as the proactive enactment of opportunities through senior leaders' judicious deployment of collective organizational resources, skills, and capabilities. Thus, senior leaders' role has to do with exercising judgment calls that corresponds to the formation and communication of a future vision (Larwood, Falbe, Kriger, & Miesing, 1995). Taken together, strategic leadership and EC highlight both the context and capabilities of entrepreneurial actions that may spur game change.

Our work contributes to the literature through linking the strategic leadership perspective to firm-level entrepreneurship. We draw on insights from extant work on the role of strategic leaders and the literature on dynamic capabilities to guide our explication of entrepreneurial capability. Thus, we map the specific role of strategic leaders in developing the various dimensions of EC, as well as their pivotal role in its integration and embeddedness within the firm. In doing so, we extend the locus of entrepreneurial activity from individual insights to the consideration of collective intelligence.

Additionally, we respond to recent calls in the entrepreneurship literature for the integration of the creation and discovery perspectives of opportunities (Zahra, 2008). In our focus on EC, we emphasize firms' orchestration of internal and external resources to enact opportunities whether they are discovered or created. Therefore, our approach to EC as a type of dynamic capabilities extends current focus in the literature on internally balancing dynamic and

operational capabilities, to shed the light on the proactive configuration of capabilities in pursuit of opportunities. As a result, we focus on how strategic leadership and EC influence firms' novelty and ecosystems that may lead to game changing strategies.

Our paper proceeds as follows; first, we discuss the link between strategic leadership and competitive strategies, specifically game changing strategies. Second, we define entrepreneurial capability and explicate its dimensions, highlighting the role of senior leaders in developing these dimensions. Third, we argue for the conditions under which EC may lead to game changing strategies, supplementing our theoretical discussion with vivid examples to illustrate our derived propositions. Finally, we highlight our findings and discuss their theoretical and practical contributions.

1.4 Introduction to Paper 2 (Chapter 3)

Will the Kodak moment last? A question that has been repeatedly asked as the giant photography film maker stumbles to survive potential bankruptcy. Meanwhile, its long-time rival Fuji film is reporting continued growth and showing agility against market upheavals and changing demands. As the use of traditional photography film waned, Fuji film was able to extend its chemical compounds capabilities, originally developed for films, into new opportunities such as cosmetics. The question becomes, why do some firms like Kodak fails to use their capabilities effectively into new opportunities, while others succeed? The answer seems to be an ability to put their capabilities and resources into effective use that comes up with the next breakthrough. This is an ability that markets continue to reward as consumers' tastes and competitive realties become increasingly unpredictable. In this study, I call this ability entrepreneurial capability (EC); I specifically ask: what is this capability? What are EC's

contributions to firms' performance? And what are firm-level variables that act as theoretical mechanisms to explain why EC may positively contribute to performance outcomes?

Understanding firm-level entrepreneurship is a central theme in the entrepreneurship literature (Guth & Ginsberg, 1990). In particular, extensive scholarly investigation has focused on firm's entrepreneurial orientation (EO), which describes firms' tendency to undertake a new entry (Dess, Pinkham, & Yang, 2011; Rauch, Wiklund, Lumpkin, & Frese, 2009). Thus, scholarly conversation has been focused on whether this construct is best conceptualized as uni-dimensional or multi-dimensional, trying to demonstrate the merits and empirical support for either views (Covin & Lumpkin, 2011). Additionally, researchers have extensively studied the performance implications of EO, their antecedents, and their contingencies (Keh, Nguyen, & Ng, 2007; Perez-Luno, Wiklund, & Cabrera, 2011). This research has informed us about the attributes firms are likely to display if they are to attain the favorable outcome of new entry. Therefore, an entrepreneurial orientation is often defined as a propensity to act autonomously and take risk; a willingness to innovate; and a tendency to be proactively and aggressively competitive (Lumpkin & Dess, 1996).

EO research has refined our understanding of what entrepreneurial firms look like in terms of posture or disposition; what situational factors determine this disposition; and how it may influence important performance outcomes (Lumpkin & Dess, 2001; Lyon, Lumpkin, & Dess, 2000). However, to date, we know very little about what actions entrepreneurial firms take to pursue opportunities. By actions, I mean firms' use of resources and capabilities to continuously realize new opportunities, which is more than just a matter of identifying an overall firm posture. Instead, firms operating in an increasingly complex environment, where the value of resources and capabilities is anything but constant, must integrate these resources in an

ongoing manner to capture opportunities that keep them ahead of competition. It is therefore especially important for firms to develop EC: a systematic capacity that allows them to use their capabilities in an integrative manner to continuously pursue opportunities. Neither a posture nor disposition reliably addresses this issue. Thus, an impelling question becomes, What do firms do to systematically use and integrate their capabilities to enact opportunities?

To deeply investigate this question, I draw on the dynamic capabilities literature. This literature has been informative to our understanding of how firms deploy their resources and capabilities in response to change in order to generate superior performance (Teece, Pisano, & Shuen, 1997). However, in my conceptualization of entrepreneurial capability as a type of dynamic capabilities, I relax the assumption of responsiveness to change. Therefore, I follow the notion of the dynamic capabilities perspective that views capability as the capacity to perform a specific objective (Helfat et al., 2007). Nonetheless, EC differs from other types of dynamic capabilities through its focus on opportunity as a function within the firm. Thus, the logic behind the development of EC is to proactively enact opportunities, rather than to respond to change (Helfat & Peteraf, 2003). In the meantime, what makes it similar to other dynamic capabilities is acting upon firms' resources and capabilities (Helfat et al., 2007).

The primary goal of this study is to introduce the concept of entrepreneurial capability, which captures firms' proactive use of resources and capabilities for continuous pursuit of opportunities. To achieve this goal, I empirically validate the existence of EC using a sample of 311 Swedish SMEs involved in a wide range of internationalization activities, which makes it imperative to proactively seek opportunities. I then demonstrate the importance of EC by examining its direct implications for performance and its association with two firm-level variables implied in extant work on dynamic capabilities: strategic variety, and learning.

Drawing from the literature on strategic variety (Miller &Chen, 1996) and organizational learning theories (Huber, 1991), I hypothesize that EC will positively contribute to the variety of firms' strategic repertoire and induce increased commitment to learning, which subsequently improve performance.

This study advances research on dynamic capabilities and entrepreneurship in several ways. With respect to the former, I identify one type of dynamic capabilities, empirically validate its existence, and explicate its dimensions. I also offer insights into firm-level variables that contribute to the EC performance relationship. Although the importance of both learning and variety has been acknowledged in the dynamic capabilities literature (Helfat et al., 2007), no clear explication has been offered about their role in the contribution of these capabilities to performance. Acknowledging these intervening variables is an important addition to existing empirical evidence that reports only direct performance implications of dynamic capabilities.

With regard to research on entrepreneurship, I draw attention to the importance of investigating firm-level entrepreneurship from a capability perspective. This will allow the entrepreneurship field to gain a thorough understanding of the phenomenon that goes beyond dispositional traits. A focus on EC will stimulate theoretical attention to the context where firms put their resources into use and the differences among the types of opportunities they pursue. Two important issues that recent scholarly calls in entrepreneurship have identified as deserving systematic investigation, if it were to gain a comprehensive understanding of the entrepreneurial phenomenon (Zahra & Wright, 2011).

1.5 Introduction to Paper 3 (Chapter 4)

Emerging multinationals moving from their home countries to advanced economies is a growing phenomenon that has attracted global attention. The effect of these emerging multinationals on the global economic landscape is becoming more pronounced than before, they account for 12% of the world's total FDI out flows (UNCTAD, 2003). These companies are internationalizing at an unprecedented rate, deploying several strategies and entering various markets (Wells, 1983). Thus, they are aspiring to become more visible on the competitive map as they move out of their home markets. However, these companies coming from developing countries, where institutions and market structures are underdeveloped, pose serious challenges to their continued success in advanced economies (Hoskisson, Eden, Lau, & Wright, 2000). These challenges become even more intriguing in light of scholarly observations that these firms' countries of origin simultaneously provide them with advantages and disadvantages in their quest to build world-class capabilities (Khanna & Palepu, 2010).

Emerging multinationals' expansions into advanced economies have been seen by scholars as a long term investment in their capabilities. These companies internationalize to enlarge their businesses, build their brands and cash flows, and learn new skills that are not possible in their local environments (Khanna & Palepu, 2010). The availability of sophisticated market institutions in advanced economies promises to provide these firms with rich information and demanding customers that they could not find at home. However, to make use of these developed environments, these firms need to be adept at learning and unlearning while building their capabilities. Emerging multinationals need to develop their ECs that integrate their inherent competitive capabilities built at home with the ones they need to build a new to succeed in their host markets. Thus, effectively managing the interplay between learning and unlearning becomes an imperative that guides these firms in their development of EC.

Companies from emerging economies have been the subject of extensive research for the past decade (Peng, 2001). Driven by interest in the characteristics of these economies and the implications they carry, scholars have addressed these companies' strategies and business models in relation to their institutional environments (Acquaah, 2007). Research findings have illuminated the role of institutional voids in these companies' business operations and opportunities, while at the same time highlighting the differences between them and their advanced economies' counter parts (Mahmood & Mitchell, 2004). Although these efforts have been extremely useful in our understanding of these firms' strategies and business models, limited research has addresses their learning and especially while internationalizing to advanced economies. This paucity of research renders our understanding incomplete in terms of how these firms build their capabilities as they internationalize. Thus, we investigate the implications of emerging multinationals' learning and unlearning on their ability to build their ECs.

Although addressing learning and unlearning has been a thorny issue in the organizational learning literature (Tsang & Zahra, 2008), we argue that examining these processes in the setting of emerging multinationals may help clarify some of the intricacies associated with these processes. These companies operate across two completely different environments that mandate duality in operations and logic (Khanna & Palepu, 2010). This dual setting could prove useful in the examination of learning and unlearning, especially when viewed as part of the larger milieu of their quest to build their EC. These firms develop their EC while managing diverse contextual features that require building or acquiring new capabilities while shedding or deactivating others. This exercise is inconceivable without an efficacy in managing learning and unlearning that offers clear understanding and analysis of the capabilities'

knowledge content. This understanding is conducive to EC integration of different resources that spurs new links and opens up new opportunities.

Our approach to examining learning and unlearning as emerging multinationals build their EC extends current research on these companies. We suggest that these firms' expansions to advanced economies impose a need to unlearn particular practices and skills. We highlight the difficulties associated with their unlearning and suggest that these difficulties, as well as the content of their unlearning, are likely to be affected by their origin. Furthermore, we contribute to the organizational learning literature through highlighting a useful setting to investigate the interplay between learning and unlearning. We propose that attention to the contextual attributes of emerging multinationals may provide useful insights into the complexity and relationship of these two organizational mechanisms. In addition, we bring attention to the importance of considering unlearning processes in the study of capabilities, which has focused primarily on the role of learning (Winter, 2003).

1.6 Introduction to Paper 4 (Chapter 5)

The classical view that markets' invisible hand and state interventions could be trusted to address and solve social needs could no longer hold in today's world. The growing gap between social needs and available provisions in addressing social problems is growing at an unprecedented rate (Seelosa & Mairb, 2005). This has led to a growing interest in ideas and visions that improve societies through addressing these needs in innovative ways. Thus, innovation in addressing societal ills has found several conceptual labels such as social innovation, corporate social responsibility, social entrepreneurship, public-private partnership, and several others. The focus of this chapter is on social innovation, which is defined as "new concepts and measures that are accepted by impacted social groups and are applied to overcome

social challenges" (Howaldt & Schwarz, 2010). Scholarly interest has proliferated in various organizational forms that attend to social innovation. They have attempted to understand their goals, mechanisms, and tensions of their operations (Zahra, Rawhouser, Bhawe, Neubaum, & Hayton, 2008).

However, to date, most research has focused on three major themes; socially constituted organizations (e.g. NGOs); public and government institutions; and business organizations' efforts to maximize profit and shareholders' value while reaching out social needs (Mulgan, 2006). Almost no research has addressed the role of family firms in promoting social innovation, despite their influential role in society. This lack of systematic research becomes even more striking when interpreted in the light of most findings on social innovation. These findings show that social innovation tends to be successful in the presence of a mutual understanding of policy and social contexts, along with that of business design, growth, and management (Mulgan, Tucker, Ali, & Sanders, 2007). The previously mentioned mix clearly resonates with family firms' nature and embeddedness in societies, which make them perfect candidates to marshal their resources and entrepreneurial capabilities ⁴towards social innovation. Thus, an important question becomes, What is the role of family firms in promoting social innovation and what are the inducements and barriers associated with this role?

Research on family firms' innovation has sought to identify the contribution of these firms' attributes to their innovation outcome (Chen & Hsu, 2009; Munari, Oriani, & Sobrero, 2010). On one hand, some empirical results show that family involvement, long-term and external orientation, and decentralized structures positively contribute to these firms' innovation (Le Breton-Miller & Miller, 2006; Zahra, 2005). Interestingly enough, empirical research has

⁴ Entrepreneurial capabilities is used in plural form for grammatical purposes to indicate plural possession

shown that family firms' innovation is not associated with high R&D spending, as in non-family firms (Le Breton-Miller & Miller, 2006). On the other hand, mounting empirical evidence suggest that these firms are timid R&D spenders due to their tendencies to be risk averse and their willingness to stabilize cash flows (Morck & Yeung, 2004; Munari et al., 2010). Furthermore, these firms' internal conflicts may steer family members' preferences towards private-control benefits that make fewer resources available for R&D (Muñoz-Bullón & Sanchez-Bueno, 2011). These findings are far from comprehensive, which limit our understanding of how family firms contribute to innovation outcomes.

In a similar vein, research on family firms' social role has been limited, and what little has been done has reported inconclusive results. Researchers have studied family firms' social orientation, showing their contribution to societies' economic gain and social causes (Anderson & Reeb, 2003a; Dyer & Whetten, 2006). On the other hand, another research stream shows that family firms focus on maximizing their own benefits to the determinant of society (Anderson, Duru, & Reeb, 2009). Family firms may advocate corruption and unethical practices as part of their entrepreneurial activities (Fisscher, Frenkel, Lurie, & Nijhof, 2005). However, little empirical evidence exists to substantiate any of the previously mentioned views.

The inconsistencies in findings in extant research on family firms' innovation and social role may be due in part to two main issues. First, innovation research has focused predominantly on traditional innovation metrics and outcomes such as R&D, new products and services, and new market entry. However, these metrics and outcomes are driven by pure economic logic and ignore social returns on investments (Chrisman, Chua, Pearson, & Barnett, 2012). Second, research addressing family firms' social role lacks clear specificity on the social objective assessed and investigated (Melin & Nordqvist, 2007). This suggests that the social orientation

often-times mentioned in these studies represents broad social motives that are not theoretically distinct. Thus, focusing on the specific objective of social innovation and linking it to family firms' innovation efforts may help address these conflicting findings.

Studying family firms' social innovation carries several benefits from a normative and a theoretical standpoint. Key industries that are witnessing rapid growth are those that embody a societal influence such as education, health care, child care, elder care, and others (Mulgan, 2006). Family firms' social innovation will allow them to step into these industries and grasp their complex dynamics to leverage their embeddedness in societies. In addition, family firms offer a rich context where social embeddedness, proximity to policy enactment, as well as business logic all exist in one setting. This context will be conducive to the emergence of comprehensive theoretical models on social innovation that accounts for the interplay between societies, policies, and management practices.

The purpose of this chapter is to examine the role of family firms in promoting social innovation, highlighting the value of endorsing these innovations for these firms' entrepreneurial capabilities⁴ and operations. We also outline key inducements and barriers that may encourage or hinder family firms' endorsement of social innovation. This research contributes to the family firm and entrepreneurship literature in several ways. First, we propose that focusing on social innovation as a specific social objective will help address conflicting findings in the literature about the social role of these firms and their capacity to innovate. Second, we propose that family firms' pursuit of social innovation may garner significant rewards to their entrepreneurial capabilities⁴, through the required proactive efforts to align the vested interests of several parties. This allows family firms to focus on their broader ecosystem and extend the scope of their

opportunities to include social ones. This expansive view would reward firms with extensive information that could enhance the frequency and quality of their entrepreneurial activities.

1.7 Introduction to Paper 5 (Chapter 6)

Organization researchers and managers have pointed out the importance and usefulness of the business model concept for organizational success. They have frequently recognized it as a powerful tool for analyzing, implementing, and communicating how firms conduct business and deliver value to stake holders (Shafer, Smith, & Linder, 2005). Consequently, the concept has been explored from many different perspectives, such as e-business, strategy, information system, and technology (Hedman & Kalling, 2003). This has allowed the examination of business models in a variety of contexts, yielding useful insights into the nature of business models.

Despite this contextual variety, studies that examine the concept of business models in creative industries are relatively rare. These are industries where artists embark on creating their own ventures to express their talents and build their legacies. This lack of systematic attention is especially surprising given that these industries exhibit unique attributes that challenge conventional views on business models (Lampel, Lant, & Shamsie, 2000). Hence, this study aims at examining the nature of creative ventures' business models and highlighting the role of EC in their operations.

Ventures in creative industries encompass two opposing logics that give rise to their unique attributes. First, these ventures are created to fulfill the individual artistic expression of their owners, while at the same time to prosper; they must pay considerable attention to the economic viability of the venture (Lampel et al., 2000). Second, these ventures need to strike a balance between the individual creative power that drives their business models and the need to

organize and orchestrate to ensure sustainability and growth (Jones & DeFillippi, 1996). Moreover, the production and consumption of the products and services of these ventures lie within the realm of subjective interpretations (Holbrook & Hirschman, 1982). Thus, the role of business models in these industries is not the widely- received wisdom of analyzing several components, their cause and effect relationships, and the assumptions that gave rise to them in the first place (Zott & Amit, 2007).

Business models in creative industries are enactments of emerging subjective interpretations of various stake holders across multiple elements. Founders of creative ventures interact with various stake holders during the production of their creative output. These interactions are often unpredictable, resulting in diverse opportunities that need to be carefully examined and pursued. This requires an organizational level capability that is focused on opportunity as the ultimate objective. As a result, this makes the role of EC in the operation of these ventures' business models critical to their success. Entrepreneurial capability is firm's ability to envision and mobilize actions for the exploration and exploitation of opportunities. Thus, EC in creative ventures acts upon these ventures' amorphous resources that are difficult to define and emerge from unexpected sources to translate them into tangible opportunities of products and services (Lampel et al., 2000).

Despite the wide acceptance of the uniqueness of creative ventures' resource pool that heavily relies on the individual creative talent of their owners, the ability to harness this individual talent into a venture wide capability has received little scholarly attention. In fact, no general conceptual framework exists that describes the nature of these ventures' business models in relation to their unique attributes described above. Further, the current literature lacks any clear discussion of the role of their capabilities in sustaining and leveraging founders' creative

power. Thus, researchers know relatively nothing about how creative founders' individual talent feed into their ventures' business models, and how they shape these ventures' entrepreneurial capabilities⁴.

The previously discussed introductions offer a recapitulation of the research questions discussed in each chapter of the dissertation. Although the dissertation runs across different contexts, it advances a common focus on the notion of EC and its manifestation and role in each setting. I propose that EC is important for the continuous pursuit of opportunities, where different companies are expected to benefit from its several dimensions. This will become evident in subsequent chapters that address this issue through a focus on the research questions shown in Figure 1.2.

Figure 1.2 Chapters' Research Questions

Paper 1 (Chapter2)

What is the role of strategic leadership in developing EC?

What is the role of EC in implementing game changing strategies?

Paper 2 (Chapter 3)

What is EC?

What are EC's performance implications? What are the theoretical mechanisms that explain performance?

Paper 3 (Chapter 4)

What is the role of learning and unlearning in developing EC?

What is the role of EC in emerging multinationals' expansions to advanced economies?

Paper 4 (Chapter 5)

What is the role of family firms in promoting social innovation?

What is the role of EC in family firms' social innovation?

Paper 5(Chapter 6)

What is the nature of creative ventures' business models?

What is the role of EC in the operation of these business models?

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Chapter 2 Strategic Leadership and Entrepreneurial Capability for Game Change⁵

2.1 Abstract

In this article, we introduce the concept of entrepreneurial capability (EC) to capture a firm's capacity to sense, select, and shape opportunities, and synchronize their strategic moves and resources in pursuit of these opportunities. We define EC and explain its dimensions, highlighting its role in achieving and sustaining a firm's competitive advantage. We also propose that EC is instrumental for realizing a firm's game changing strategies; i.e., those strategic moves that fundamentally alter the nature, domain and dynamics of competition. Further, we propose that strategic leadership plays an essential role in honing a company's EC and aligning it with its game changing strategy by creating an organizational context where transforming the business ecosystem becomes feasible. Finally, we articulate the implications of EC for managerial practices and for advancing future research at the intersection of entrepreneurship, leadership and competitive strategy.

2.2 Introduction

Game changing strategies occupy a central and distinctive place in companies' quest for competitive superiority. These strategies center on fundamentally changing the rules of competitive rivalry in an industry (Markides, 2008). They also help companies create new industries, redefine (un)profitable niches, redraw and reconfigure industry boundaries, and alter the basis of competition. These strategies often introduce new competitive paradigms that fuel

⁵ This paper is written by **Shaker A. Zahra**(University of Minnesota), Sondos G. Abdelgawad (ESADE), **Silviya Svejenova** (Copenhagen Business School, Denmark), **Harry J. Sapienza**, (University of Minnesota). This paper is accepted in *Journal of Leadership and Organizational Studies*.

innovation that reshapes the domain and dynamics of competition. Applying these game changing strategies has allowed as different companies as Apple, Google, Microsoft and Facebook to fundamentally change their business ecosystems and environments, gaining and sustaining market prominence. Yet, despite their popularity, we know little about the approaches companies take to craft game changing strategies. We know even less about how leaders execute and institutionalize these strategies and create organizational contexts that promote new ways of thinking, organizing and competing. Leaders define these strategies, making them an epicenter of their efforts dedicated to transforming their business ecosystems and industries. These issues are the focus of this article.

Objective and Contribution

In this article, we focus on the role of senior leaders in developing, supporting and implementing game changing strategies that bring about radical industry transformation, while achieving and sustaining a firm's competitiveness. These leaders determine the quality and novelty of the strategic choices companies make (Ireland & Hitt, 1999; Elenkov, Judge & Wright, 2005), including where and how they compete. Game changing strategies require distinct entrepreneurial skills that allow companies to visualize their industries, markets and competitors in fundamentally new ways. Leaders develop, hone and deploy their companies' various skills to develop an organizational-wide entrepreneurial capability. This capability, which works across organization's levels and functional units, becomes the mainspring of innovation that spurs and helps sustain game changing strategies and resultant competitive advantage. EC assists in developing and shaping a company's ecosystem and encourages the creation of new capabilities, rather than simply keeping or upgrading existing ones, allowing the firm to venture into new arenas.

Interest in game changing strategies and EC is growing because competition is becoming system-based. Companies located around the globe have to simultaneously compete and collaborate to ensure continuous innovation that positions their products as their industry's standard (Adner & Kapoor, 2010). As a result, companies need to develop their business ecosystem by creating hospitable environments in which they gain access to the knowledge, resources, ideas and discoveries of other firms. An ecosystem is "the community of organizations, institutions, and individuals that impact the enterprise and the enterprise's customers and suppliers" (Teece, 2009: 16). It is within such business ecosystem that the competitive game unfolds, involving multiple players that differ in strategies, capabilities and resources.

We contribute to the literature by highlighting the central role of strategic leaders (i.e., a company's senior executives) in realizing game changing strategies by aligning them with the firm's EC. Recent research focuses on the content of competitive strategies and the conditions that enhance their success, frequently overlooking the role that senior leaders play in conceiving, crafting and executing these strategies (Elenkov et al., 2005). We draw attention to these issues by linking EC, strategy and leadership. To us, senior leadership is the driving force that ensures the alignment between a company's EC and its game changing strategies. This link becomes evident when we consider EC and its implications for the realization of game changing strategies. Finally, we discuss the conditions under which EC is likely to succeed in creating a strategic advantage. In so doing, we underscore the fact that not all game changing strategies are the same; some are more creative and entrepreneurial while others are not. Some are simple whereas others are more complex. Some unfold quickly while others take years to pay off. These

variations stem the differences that exist in senior leaders' cognitions, skills and styles as well as influencing the content of these strategies and their effect on company performance.

In the remainder of this article, we discuss the link between senior leadership and competition. Then we define EC and its dimensions, distinguishing from other dynamic organizational capabilities. We then focus on the mechanisms through which EC operates and evolves, and articulate the conditions under which EC may trigger game changes. Finally, we reflect on the intersection of entrepreneurship, strategy and leadership as a fertile area for future research and study.

2.3 Strategic Leadership and Competition

Companies such as Apple, Pixar, 3M, Google, Carrefour, Zara, and Virgin have consistently been at the forefront of radical change in their industries, constantly revising the nature of competition. This radical change involves fundamental redefinition of industry boundaries, reconceptualization of the relationship between the firm and its external environment (e.g., its main stakeholders), and the employment of different and bold strategies that reset the dynamics of competition. These activities often require new thinking that comes from challenging industry assumptions, engaging the firm and its employees in a process by which they envision a new competitive landscape. As Hamel and Parahlad (1994) have compellingly shown, strategic shifts that lead to game changes require visionary (even revolutionary), innovative, daring and capable leadership.

In this context, EC, organizational capability for ongoing opportunity exploration and exploitation, becomes a key engine that strategic leaders employ to trigger industry-wide game changes. Unleashed, EC can bring about internal changes in how firms operate, thereby allowing them to proceed to alter the domain, nature and scope of their competitive arenas, the type of

competitive game and the way in which it is played. Companies that fail to inculcate such capabilities throughout their operations may miss on major opportunities to transform and evolve their operations and industries. Such failures reflect poor senior leadership that can undermine a company's market position. This requires us to discuss the nature and content of EC.

2.4 Entrepreneurial Capability

A capability refers to a firm's capacity to perform a task or activity in pursuit of its mission. EC enables a company's transformation through sensing and shaping opportunities as well as providing specific heuristics for opportunity evaluation, selection and exploitation (e.g., Bingham, Eisenhardt & Furr, 2007; Teece, 2007). Limited research exists on EC and whether it differs from other types of dynamic capabilities (Burgelman, 1983; Burgelman & Grove, 2007; Phan, Wright, Ucbasaran, & Tan, 2009). It is important, therefore, that we define EC and its key dimensions.

The literature suggests that firms develop substantive and dynamic capabilities (Bingham et al., 2007). Substantive capabilities typically encompass operating routines that are aimed at the efficiency and effectiveness of value chain activities. Dynamic capabilities integrate and update substantive routines that trigger and enable internal change (Zahra, Sapienza & Davidsson, 2006; Zollo & Winter, 2002), sometimes in unforeseen ways.

Some firms develop a special type of dynamic capabilities that extends beyond the blending or integrating of substantive routines. Rather, this set of capabilities usually focuses on synchronizing and orchestrating the coincidence of such changes with moves and efforts emerging beyond the firm's boundaries; we refer to this as EC. The development and use of EC in the pursuit and creation of opportunities stretches the influence and actions of a firm beyond the resources that it currently controls (Stevenson & Jarillo, 1990). Consequently, EC refers to

firm's overall capacity to sense, select, shape and synchronize internal and external conditions and resources for the exploration (recognition, discovery and creation) and exploitation of opportunities. Exercising this capacity increases, but does not guarantee, that a firm's game changing strategy will materialize and will be successful.

Like other dynamic capabilities, EC centers on anticipating and realizing forthcoming change (Zahra & George, 2002). However, unlike other dynamic capabilities, EC's primary contribution lies in inducing change into a firm's environment to gain an advantage (Burgelman & Grove, 2007), a key objective of entrepreneurial initiatives in established companies (Zahra, 2008). Though both serendipity and external events (e.g., leadership succession) can pave the way to a game change, EC often results from the conscious actions that managers undertake, whether the desired strategic or financial outcomes are realized or not.

Three other qualities distinguish EC from other dynamic capabilities. First, EC is characterized by the interplay of corporate entrepreneurs' (managers' and employees') abilities to envision new courses of action and success in mobilizing resources for their pursuit (Prahalad & Krishnan, 2008). EC typically involves judgments and actions of a multiplicity of entrepreneurs with different roles and contributions throughout the process of reshaping and employing a firm's capability portfolio (Augier & Teece, 2009; Teece, 2007; Adner & Helfat, 2003). For EC to eventually lead to game change, knowledge, skills and perspectives of leaders and their followers matter. Senior leaders typically integrate these diverse views in a coherent manner, potentially facilitating desired strategic change (Burgelman & Grove, 2007; Phan et al., 2009).

Second, EC resides at the intersection of leaders' cognition and action. EC emerges and develops from the actions that entrepreneurs undertake to reconfigure conditions within and

outside their organization in accordance with their mental models (Finkelstein & Peteraf, 2007; Foss et al., 2008). Thus, our notion of EC is distinguished from recent cognitive approaches to dynamic capabilities (Bingham & Grove, 2007; Gavetti, Levinthal, & Rivkin, 2005; Tripsas & Gavetti, 2000), where we add an action orientation to the definition of such capabilities while emphasizing the unique mental models of individual leaders as they seek to shape a collective vision for the desired types of capabilities.

Third, EC involves both the exploration and exploitation of opportunities to synchronize and shape emergent conditions internal and external to the firm. This places a premium on leaders' role in the identification, evaluation, realization and creation of opportunities. This makes EC different from dynamic capabilities (e.g., absorptive capacity) that are knowledge-centered but strictly focus on converting external knowledge to internal knowledge exploitation. This distinction is at the heart of the game changing potential role of EC which represents a capacity to extend the boundaries of the firm, influence the convergence of internal and external conditions, and spark external change—a pillar of entrepreneurship within a company.

Further, by acknowledging the role of senior leaders' conjecture and uncontrollable organizational as well as environmental forces, we avoid an overemphasis on percipience as a precondition to the recognition or creation of opportunities through EC (Alvarez & Barney, 2007; Zahra, 2008). Still, EC requires senior leaders and entrepreneurs within a company to view opportunity realization in ways that reach beyond the transformation and exploitation of internal capabilities to the dynamic creation and shaping of new knowledge, a key source of innovativeness.

Our discussion suggests that EC resembles ambidexterity as a dynamic capability that centers on simultaneous exploration and exploitation (O'Reilly and Tushman, 2008). However,

the role of EC differs from that of ambidexterity, which breeds organizational change (i.e., adaptation to the external environment) but ignores game changing strategic moves.

Ambidextirity focuses on balancing exploration with exploration, whereas EC enables the concurrent recognition, discovery and creation of opportunities (Alvarez & Barney, 2007; Miller, 2007). As a result, EC allows for the simultaneous reaction to external environmental jolts and the discovery and creation of opportunities.

Dimensions of Entrepreneurial Capability

Integrating the literature, EC consists of four distinct but interrelated dimensions that are anchored in the pursuit of opportunities: sensing, selecting, shaping, and synchronizing. In Table 2.1, we provide an overview of each of these dimensions, the mechanisms through which they operate, and supporting references that relate to it.

Table 2.1 EC Dimensions: Nature, Mechanisms, Outcomes, and Leadership Role

Dimension	Nature	Mechanisms	Outcome	Key Sources
Dimension	Tituato	1viconamonio	Outcome	ney bources
Sensing	Seeing possibilities within and beyond the confines of a firm and an industry	Scanning &SearchingExperimenting Imagining	Ideas and insights for further exploration	Burgelman & Grove, 2007; Dyer, Gregersen, & Christensen, 2009; Felin et al., 2009; Klein, 2008; Teece, 2007.
Selecting	Comprehending and choosing what ideas and insights to focus on and pursue given a firm's strategic priorities and resources	Interpreting Evaluating Judging	Opportunities for shaping	Bingham, Eisenhardt, & Furr, 2007; Burgelman & Grove, 2007; Day & Schoemaker, 2006; Dyer; Gregersen, & Christensen, 2009; Tang et al., in press.
Shaping	Transforming and connecting internal and external elements for opportunity probing and realization	Reconfiguring Transposing Meaning making	Prototypes of products/services and business models for opportunity evaluation	Alvarez & Barney, 2007; Augier & Teece, 2009; Djelic & Ainamo, 2005; Felin et al., 2009; Lévi-Strauss, 1962; Powell & Sandholtz, 2012; Teece, 2007; Zahra, 2008
Synchronizing	Orchestrating temporal and spatial correspondence of internal and external resources, capabilities, and activities for reaching markets	Temporal heuristics Procedural heuristics Priority heuristics	Processes of internal and external organizing for opportunity realization	Adner & Helfat, 2003; Bingham, Eisenhardt, & Furr, 2007; Brown & Eisenhardt, 1997; Burgelman & Grove, 2007

The *sensing* dimension of EC centers on seeing or envisioning market and technological opportunities, within as well as beyond the confines of an industry, as in the case of crossboundary disruptors (Felin, Zenger & Tomsik, 2009; Burgelman & Grove, 2007; Teece, 2007). As Table 2.1 indicates, key mechanisms for the sensing dimension of EC include alert scanning and searching (Tang, Kacmar & Busenitz, in press; March & Simon, 1958), experimenting (Dyer, Gregersen & Christensen, 2009), and imagining (Felin et al., 2009; Klein, 2008).

Sensing ideas and insights that may become profitable opportunities can originate both from individuals within an organization such as middle managers or employees as well as from a company's dedicated collectivities such as its R&D function or unit (Teece, 2007). It can also originate outside, through suppliers, customers, or other members of the company's network. Users are also a frequent source of new opportunities' identification (Shah & Tripsas, 2007). Sensing requires avoiding "vigilance gaps" by developing a strong peripheral vision that is sensitive to distant, weak, and unclear signals, To develop this capability, the attitude of leadership towards the periphery is essential for fostering curiosity and sharing of insights.

Whereas sensing can be heightened by gaining access to new knowledge and exposure to contradictory information, it can be hampered by selective learning. Leaders adept at promoting sensing of opportunities are usually alert to contradictory information, viewing it as a potential signal of new, hitherto unanticipated sources of new directions. Contradictory information can stretch the mindset and imagination of the firm's managers, encouraging them to look into formerly unattended or even controversial scenarios. This contradictory information often causes discomfort and dissonance for senior leaders. To counteract this, firms with well-embedded EC often encourage individuals to question the collective wisdom of their company's dominant mindset. Strong leaders realize that the sensing dimension of EC is strongest when it

contains elements that allow or create processes that require the collision of new possibilities with established "taken-for-granted" views and practices (Burgelman, 1991; Phan et al., 2009). While this collision can be paralyzing, senior leaders can safeguard against this risk by establishing milestones, criteria and timetables. They can also define the situation, providing meaning and assigning accountability.

Selecting, a second EC dimension, denotes the firm's ability to comprehend and choose what ideas and insights have the potential to become viable opportunities. Effective EC involves openness to new ideas, and the willingness to forego some possibilities. Selecting is most directly linked to senior leaders' thinking and decision making processes. The selection capability can flourish within a firm through internal competition or could be left to market forces (Burgelman, 1994; Birkinshaw, 2001). Selection demands the evaluation of competing strategic proposals to decide which are of interest and provide senior executives with scenarios for further action (Burgelman, 1983). Regardless of the approach taken, there is a need to consider as many ideas for innovation as possible, then subject them to rigorous analysis and evaluation (O'Connor & Rice, 2001; Phan et al., 2009) or prototype and test them.

Shaping, the third dimension of EC, refers to transforming and connecting internal and external elements to allow for opportunity probing and realization. As Table 2.1 shows, key mechanisms for shaping an opportunity are: reconfiguring, transposing, and "meaning making." Reconfiguring is a mechanism through which familiar elements are combined in new ways. Transposing refers to creating an opportunity by taking the underlying logic or practices and/or elements from a more distant domain and bringing them in into another (Powell & Sandholtz, 2012) such as importing principles and practices from fashion into the field of mobile telephony (Djelic & Ainamo, 2005). Both reconfiguring and transposing involve some degree of

bricolaging where internally and externally available resources and capabilities at hand are mobilized regardless of their original purpose (Lévi-Strauss, 1962; Baker & Nelson, 2005). Finally, "meaning making" involves reasoning and justification in which managers and entrepreneurs become proponents of new courses of action (Felin et al., 2009). Meaning making is an essential capacity of successful leaders (Podolny, Khurana & Besharov, 2010), which allows them to connect new opportunities with the larger purpose of the organization and its strategy. These different mechanisms highlight the critical importance of leaders in the organization, especially senior managers. Shaping requires a vision that uplifts the conversation in a company to a level where the concept of the organization is refined or crafted anew.

Finally, *synchronizing* means temporally and spatially orchestrating the correspondence among internal and external elements of EC. Internal alignment involves simultaneous exploration and exploitation of opportunities. External alignment is about harmonizing a firm's actions with the speed of the environment and the opening and closing of the windows of opportunity. Further, this may also require a dynamic reconfiguration of organizational talent (Prahalad & Krishnan, 2008). For example, executive teams' fast decision making is essential for succeeding in high velocity environments (Eisenhardt, 1989). In these environments, synchronizing involves both understanding the speed of the different elements requiring alignment as well as the integration and actions to harmonize their "arrival." While capabilities themselves may be enduring, the co-occurrence of conditions in optimally matched states may be highly transient. Thus, one of the keys to actual game changing may be synchronizing the skills of the focal individuals or groups in the firm with those outside.

As Table 2.1 shows, synchronizing operates through three mechanisms. The first is using temporal heuristics that specify sequence, pace, and timing. The second is procedural heuristics

that articulate process or actions for opportunity execution. The third is applying priority heuristics that articulate the ranking of opportunities in terms of their importance for the firm (Bingham et al., 2007).

To summarize, as we suggest in Table 2.1, each dimension of EC provides senior leaders with unique, though interconnected, information (e.g., ideas to explore, opportunities to pursue, prototypes to evaluate, and alignment processes to fine tune) that is useful in conceiving, selecting, evaluating, and co-aligning opportunities. This process is generated and sustained both by the firm's human capital which is embedded in individuals and collective skills, talents, feelings, attitudes and judgments as well as the organizational systems and practices. The four dimensions we have outlined in Table 2.1, therefore, transcend individual contributions. Instead, they form important organizational-level activities and skills. In fact, these dimensions may not occur sequentially or in strict order because the dimensions of EC both co-exist and affect one another in a variety of patterns that are difficult to predict in advance. This unpredictability makes game changing strategy harder for competitors to predict, as discussed next.

2.5 EC Integration and Game Changing Strategies

Game changing analogies have proliferated the strategy and entrepreneurship literatures, as revealed by the plethora of titles that employ them (see e.g., Gray, Brown & Macanufo, 2010; Osterwalder & Pigneur, 2009; Lafley & Charan, 2008; Markides, 2008). Authors have used the metaphor of a "game" as a gainful activity that involves rivalry and strategy (Merriam-Webster Online, 2012). The objective is to identify ways of improving the odds and outsmarting other players in pursuit of profit and growth. In explaining the logic of these competitive games, authors have focused on established and newly created markets as the "playing field", but have

rarely considered the broader context of economic activity that occurs within them (Dacin, Ventresca & Beal, 1999).

We believe there are two main mechanisms that contribute to a firm's initiating steps for game changing strategies: the integration of EC dimensions (Table 2.1) and their organizational embeddedness. Below we discuss these mechanisms in relation to the processes of novelty generation, transformation, and opportunity realization, all of which can spark radical strategic change.

Integration of EC Dimensions and Game Change

Generally speaking, all higher order organizational capabilities aim to create or secure the long-term viability and welfare of the firm's business. Thus, the central mission of EC is to sense, shape, select, and synchronize activities (internal and external to the firm) in order to realize opportunities that enhance the viability and welfare of the firm. The outcomes of developing and exercising EC are far from predicable. Therefore, in Figures 2.1, 2.2, and 2.3, we present three different but realistic paths of such potential outcomes. As Figure 2.1 depicts, the direct object of EC (box 1) is to enact an opportunity realization process (box 2) which, in turn, enhances the ongoing performance of the firm (box 3). The performance implications of these efforts will reinforce or alter EC (box 1). Opportunity realization means the proactive pursuit of those opportunites selected through senior leaders' judicious deployment of organizational resources, skills and capabilities.

Figure 2.1
Entrepreneurial Capability, Opportunity Realization and Performance Primary Path

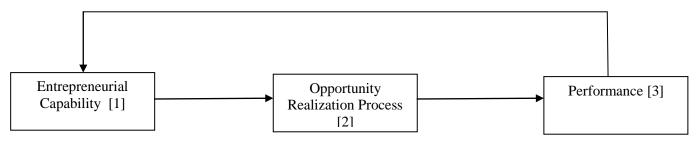


Figure 2.2 Entrepreneurial Capability, Radical Opportunity Realization, and Unintended Game Change

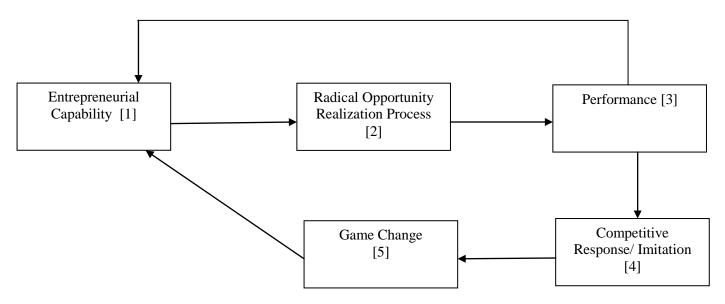
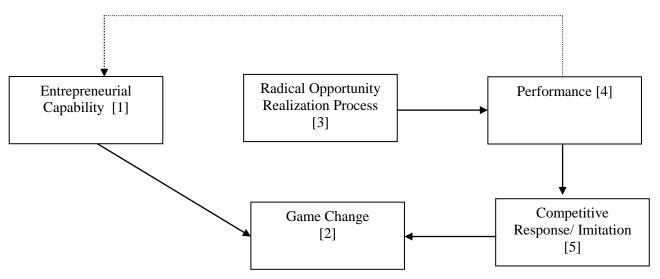


Figure 2.3
Game Change as an Intended Instrument of the Opportunity Realization Process



Sometimes, as shown in Figure 2.2, EC (box 1) leads directly to radical innovations that are manifested in the opportunity realiztion process (box 2), which influences a firm's performance (box 3). In this context, EC may have some moderate effects on the way others connected to them 'play the game' (box 5). At the same time, performance effects of radical changes are rather unpredictable (box 3). If the perfromance effects are negligible or negative, we cannot always expect much impact on the behavior of competitors, suppliers, customers, or other companies. However, if the desired positive effects are unusually strong, we can expect game changing strategies to emanate from two sources. First, the positive feedback on the focal firm will enhance its determination to change the game in a manner that reflects and leverages the innovations in its opportunity realization process to change the game (box 5). Second, such strong performance will draw the attention and response of other players and companies' leaders to either imitate or otherwise leverage the radical innovations for themselves (box 4). These efforts center on copying or leveraging the focal firm's efforts, further accelerating changes occurring in the way the competitive game is being played (Box 5). Finally, not only will the performance of the focal firm alter its EC, but the changing game will also drive changes in its EC (box 1)—eventually restarting and altering the entire cycle.

The game change processes depicted in Figure 2.2 are a *by-product* of the focal firm's efforts to realize opportunites. The firm's intention may not be to alter the game at all, but rather to take advantage of an existing weakness which it hopes others will not copy or will be unable to copy effectively. As noted, the greater the focal firm's success with its innovations, the greater the likelihood that the game will be changed as others hasten to keep up and learn. It is possible, too, that the game is altered in ways that undermine the long-run stability and

competence of the focal firm despite the early successes it might achieve. Failures can also inform other players in ways that change the competitive game.

Our discussion indicates that *unintended* game change is most likely to evolve out of radical changes that meet with significant success. Success encourages these firms' leaders to persist, repeat, and refine their efforts. They will also likely redouble their efforts to encourage external firms to cooprate with them and make changes that more fully leverage what they are doing. Success also encourages both competitive responses and imitation that quicken game change. At this point, a self-reinforcing pattern is embedded in multiple actors in the field (e.g., companies' senior leaders) as they adjust their own processes and capabilities to meet the emerging new game.

Figure 2.3 depicts another, but less common, way in which game change emerges. Here, the focal firm proactively attempts to change the game as a precondition for realizing an opportunity that it has envisioned. In this process, the firm's leadership might have concluded that a promising opportunity can be brought into existence only if the way the game is played is altered first. For example, a regulatory or financial barrier may have to be removed if the firm's innovation is to succeed. For the most part, unless firms are 'missionary' type organizations, business firms will not seek to change the competitive game for the sake of change. Changing the game means synchronizing or creating those conditions that allow the firm to realize an opportunity.

This path (depicted in Figure 2.3), begins in a manner very different from the ordinary process shown earlier in Figures 2.1 and 2.2. Here, a firm takes actions to change aspects of the competitive game (box 2). If this action is met with success, the alteration of the game allows the focal firm to engage its intended opportunity realization process (box 3). This new

realization process, then, affects the performance of the firm (box 4). Further, because the competitive game has been altered in some small way, other firms in the industry may also be affected (box 5). Again, if the results are positive, others will imitate or respond (box 4) and this will further encourage game changing moves (box 2). These changes and performance itself will feed back into the firm's EC (dotted lines in 1C).

We believe that this latter, intentional process is probably less common because inertial forces constrain what firms can do and what they believe they can do. All else being equal, however, we would expect that firms with very strong EC are more apt to attempt to alter the fabric of an entire ecology. Given the number of forces at play and the unpredictability of even the near future in dynamic environments, we doubt that firms can reliably and predictably "control" the consequences of such efforts. Rather, we suspect that those that use this aspect of game changing do so through collective action that enables them to take small, 'affordable' risks. While we can not deny that some firms have honed their judgment and knowledge to high levels of expertise, constrained experimentation and trial-and-error learning rather than percipience is a likely explanation.

The individual dimensions of EC (Table 2.1) may matter little if they are not interwoven and coordinated with one another to create momentum in a company's pursuit of a chosen opportunity. Sensing the environment may be exciting and informative. Yet, unless linked to selecting, shaping, and synchronizing, sensing becomes little more than an academic exercise and the firm will fail to realize competitive advantage. The emergence and evolution of EC depends upon honing and coordinating organization-level capabilities. This is why active integration by managers of the various EC dimensions is crucial. This integration confers

potency on the various dimensions of EC, a value that goes well beyond the contribution of each individual dimension. Our discussion suggests the following propositions:

Proposition 1a: Individual dimensions of EC are weakly but positively related to opportunity realization.

Proposition 1b: Integration moderates the positive relationship between the individual dimensions of EC and opportunity realization such that in the presence of integration, the positive relationship between EC and opportunity realization will be stronger.

The integration of EC dimensions also allows for continuous novelty generation within a company's operations. Novelty refers to actions that fall typically outside an organization's existing strategic repertoire. Novelty is conducive to firms' long-run viability as contexts and competitive requirements change. However, there is no reliable way to accurately predict which of them will succeed (March, 2010). Hence, persisting in the pursuing novelty and game change requires a strong organizational culture that tolerates failure and provides the slack resources needed to endure its effects. For instance, Pixar offers its employees "opportunities to fail together and to recover from mistakes together" (Taylor & LaBarre, 2006). If failure is an outcome of pursuing novelty in the organization, senior leadership also needs handle the cases of losers whose technologies, products, or business models do not get adopted. With careful management, failure could be demotivating for both managers and employees (Birkinshaw, 2001).

To ensure novelty generation, the various dimensions of a firm's EC need to operate at the intersection of creation and destruction. As some research suggests, this is difficult for incumbents who usually fail to pursue novel paths and are phased out, though sometimes they persist and even displace intruders (Tripsas, 1997). Because new entrants are less restricted by dominant standards or taken-for-granted rules (Autio, Sapienza & Almeida, 2000), game

changing strategies are often championed by newcomers, who are willing to cross industry boundaries to initiate something new (Burgelman & Grove, 2007). Some newcomers bring into the industry new mental and business models, and reframe industry dynamics and boundaries around these different mindsets. Newcomers also make use of their ECs, which have been honed in other domains, to identify key points of entry and how best to build solid positions that give them market lead. This discussion suggests the following proposition:

Proposition 2: Integrated EC is positively related to the creation of new opportunity realization paths, thereby increasing organizational novelty.

Novelty generation contributes to imagining the re-shaping of the organization's processes, systems, resources, and capabilities necessary to realize and address the envisioned external disruption. When focused externally, EC can be channeled towards envisaging changes in an industry's architecture (Jacobides, Knudsen & Augier, 2006) and the business ecosystem (Teece, 2009: 16). Industry architecture denotes the evolving relationships among value chain participants and determines how labor and surplus are divided among the types of players involved (Jacobides et al., 2006). This architecture facilitates those interactions that allow firms to identify opportunities for and constraints to radical transformation and change. Knowledge of this architecture is essential to identifying who does what (the roles) and to what norms (the rules). The business ecosystem usually incorporates architecture across multiple industries.

Attending to industry architecture and the business ecosystem (Moore, 1993; Teece, 2007) expands the firm's playing field beyond the boundaries of its industry value chain. By interacting with various existing players in its ecosystem (e.g., customers and suppliers) and proactively seeking new players (e.g., boundary disruptors), a firm can bring about ecosystem transformation. An example of this success is P&G's "Connect and Develop" initiative, which has established more than 1000 active agreements with partners in its ecosystem. These

agreements have facilitated P&G's opportunity realization by creating new markets and applications, developing technologies that build on convergence, and thus gain access to innovation. These benefits will be greater when the firm's leadership has developed an integrated and coherent EC able to capture knowledge, resources, and ideas from diverse groups. This discussion suggests the following proposition:

Proposition 3: Integrated EC is positively related to the transformation of a firm's business ecosystem.

2.6 Organizational Embeddedness of EC and Game Change

When a firm's EC is embedded in and distributed across its different units, the company can more easily engage in game changing strategies. Though a company can choose to centralize access to information to ensure unity and clarity of command and expedite information retrieval and processing, centralization has serious drawbacks for EC. It can deprive the organization of gaining access to the rich and often soft information that permeates intra-organizational networks and informal innovation hubs that grow naturally in the decentralized firm's operations.

With dispersed EC, a firm can capture and synthesize information within and outside the organization. As EC becomes embedded in the firm's operations, it becomes easier for its leaders to glean insights that enrich organizational intelligence and foster creativity. Members of the organization often have different views about the industry's evolution, how the firm fits within the industry's existing social structures and where potential changes may occur. Organizational members also pay differential attention to diverse sources, leading to multiple (and oftentimes conflicting) views about how to "upset the apple cart" by taking risks and pursuing innovations. Integrating, and learning from, different views can enhance EC.

A highly embedded EC allows challenging deeply ingrained and strong organizational mental models about how to exploit emerging opportunities, as they can hamper the generation

and adoption of new ideas (Markides, 2008). It also permits bringing together different and even divergent interpretations that may serve as a basis for novelty. These interpretations frequently serve as the foundation for conceiving and developing new strategies that bring fundamental changes in perceptions and views of the competitive arena and consider how to shape this arena in ways that create a competitive advantage. These observations suggest the following propositions:

Proposition 4a: The higher the organizational embeddedness of EC, the greater the novelty a firm will generate internally.

Proposition 4b: The higher the organizational embeddedness of EC, the more likely the firm will initiate game changing strategies.

EC embeddedness also facilitates and expedites data collection, analysis, interpretation and absorption. It also spurs the rapid development of new ideas or knowledge. When the firm has systems that effect speedy information processing and which are open to re-generation of ideas, it is less susceptible to "paralysis by analysis," where managers become captive of competing interpretations that they cannot resolve (Zajac & Bazerman, 1991). Resolving complexity in a coherent manner becomes a major challenge for senior executives when the EC is highly diffused throughout the organization, and different groups of people hold divergent visions of things to come. To ensure rapid adaptation, executives need to develop their company's EC in a way that quickly considers rival interpretations and attendant scenarios; they may integrate these views or simply select one path to pursue. Forming a habit of quickly choosing a resolution path allows senior managers to move ahead of their rivals and reshape the competitive game. Time itself may thus become an important means of creating successful game change. These observations suggest the following proposition:

Proposition 5a: The higher the organizational embeddedness of EC, the faster the firm will engage in game changing strategies.

A highly embedded EC results in speedy action in recognizing and pursuing opportunities. It can also increase the radicalness of game change strategies the firm could undertake. EC brings to focus multiple, divergent and often radical views of the competitive arenas, its context, and the agenda of different players. This allows senior leaders to theorize about the radical changes they might wish to initiate to "shuffle the cards" and introduce a new regime in the industry. Leaders can also visualize a new landscape where they can capitalize on their firm's resources, skills and capabilities as they redefine the core competencies essential to success in the new arena. By changing a few of the key industry taken for granted assumptions or fundamentals, a firm's senior leaders can dramatically alter the ecology of competition in profound ways. Clearly, changing the ecology of the game is harder and riskier than simply upgrading products, changing pricing policies, or joining alliances. A well-honed and organizationally embedded EC makes it possible to recognize the potential for radical change, even when signals of pending transitions are weak. These observations suggest the following proposition:

Proposition 5b: The higher the organizational embeddedness of EC, the more likely the firm will engage in radical game changing strategies.

Game changing strategies also differ in pattern, magnitude and pace. They unfold through sudden, sweeping disruptions or through minute alterations that build up momentum over time to amount to a radical transformation. Whether EC paves the way to game changing strategies and of what nature and magnitude can only be determined ex-post. These strategies can initially involve a disruption by creating and introducing into the market a revolutionary new product or a novel way of doing things that goes against the prevailing industry's dominant model or logic.

This type of disruption opens up a new space of possibilities in the taken-for-granted industry architecture. If these efforts are deepened, industry disruption can grow into transformation whereby some important aspects of the playing field and the system of roles, rules, and relationships among players are preserved, while others are simply altered. Transformation occurs as a result of the opportunities emerging after a new competitive game is introduced through experimentation by players, both established and new.

Game changing strategies also involve the creation of a new game by envisioning and realizing a new playing field and related system of roles, rules and relationships. This, however, requires both "meaning making" (Table 2.1) and mobilization of collective action across a range of stakeholders, within and outside the industry, as well as lobbying efforts at the institutional level to legitimize the new game (Aldrich & Fiol, 1994). It also demands careful sequencing and timing of orchestration and negotiation activities so that a new industry architecture and business ecosystem can come into being (Jacobides et al., 2006; Teece, 2007).

2.7 EC Renewal

Finally, for EC to maintain and strengthen its game changing potential, it should be kept current through constant renewal. As we indicate in Figures 2.1-2.3, such renewal can occur in three main ways: by continuous incorporation of up-to-date knowledge from the environment (mostly via the sensing dimension of EC), through the feedback obtained in the opportunity realization process, and from how the game changing process itself unfolds.

EC co-evolves with the environment (Volberda & Lewin, 2003; Lewin & Volberda, 1999). Similar to other capabilities, EC can be honed through experience and reflection (Bingham et al., 2007). This allows senior leaders to re-conceptualize their environments, identifying emerging changes and corresponding opportunities. EC is a constellation of

dimensions or sub-capabilities that might change over time, in relationship to the dynamics of the ecosystems and opportunities being explored or utilized. For example, the ecosystem in which a competitive game is embedded provides clues about the appropriate *tipping point* where fit with the prevailing game should be abandoned and action towards a transformed or new, more vibrant ecosystem should be initiated.

The dynamism of EC makes it especially invaluable in defining the genesis of variety that breeds novelty and sparks entrepreneurial action. Thus, EC promotes the continuous pursuit of novelty in the presence of constraining forces that pull a firm towards exploitation (March, 1991). The heterogeneous knowledge introduced into the firm on an ongoing basis, the diverse perspectives and insights of managers and employees at all levels, their differential access to different types of knowledge, and their different ways of organizing and processing this knowledge induce variety which can be harvested in the form of novelty. Capturing, comprehending, absorbing and exploiting these diverse types of knowledge is a daunting challenge (O'Reilly & Tushman, 2008; Adner & Helfat, 2003). As such, EC can become a powerful organizational engine that employs this knowledge in the recognition, definition, refinement and evaluation of opportunities as well as their realization. Perpetuating novelty requires the creation of a strong organizational culture that tolerates failure and can sustain its energy for simultaneous exploration and exploitation.

2.8 Discussion: Senior Leadership and EC for Game Change

As we have argued throughout this article, game changing strategies introduce new competitive dynamics into an industry or a business ecosystem. While the characteristics and skills of senior leaders shape a company's strategic choices (Finkelstein, Hambrick & Cannella, 2009), they are more likely to influence game changing strategies that reconceptualize the

competitive arena anew. As such, EC becomes an important means by which senior leaders exploit the collective intelligence, abilities and skills of other managers and employees throughout their organization. Therefore, in this article we have defined EC and discussed its dimensions. We also highlighted ways in which it could change the competitive arena and rules of competition, and sequence of competitive moves. This discussion places senior leaders at the heart of the entrepreneurial processes that underlie the creation, maintenance, and renewal of EC. The discussion also underscores senior leaders' role in connecting entrepreneurial activities with a firm's strategic choices, especially those focused on game change. In this depiction, entrepreneurship gives birth to competitive strategies (especially game changing strategies) which, in turn, ignite entrepreneurial activities.

2.9 **Theoretical Implications**

For years, entrepreneurship researchers have argued that prior knowledge and alertness are key antecedents of opportunity recognition. In this mode of discovery, the recognition of opportunities is tantamount to the firm's leaders connecting the dots (Baron, 2006). While insightful, some believe this focus has overlooked "creation" types of opportunities (Alvarez & Barney, 2007). Others have suggested that discovery and creation form an ongoing cycle, with each stimulating the other (Zahra, 2008). Though such depictions of opportunity recognition and discovery/creation are useful, their power is limited when companies find themselves in the throes of fundamental changes in their competitive landscapes. Some firms respond by becoming more rigid, others spring into action unleashing a myriad of efforts that end up more or less perpetuating the status quo. Yet, some firms engage in entrepreneurial initiatives as they foresee opportunities to shape their industries and change the competitive game, making effective use of their ECs.

Our definition of EC and our delineation of its mechanisms for sparking game change suggest a shift in perspective in research. First, the locus of entrepreneurial activity is not solely the individual manager, but lies in the interplay between individual insights and collective intelligence. Those companies intent on game change, therefore, need to develop their intellectual capital in ways that develop, integrate and harvest that intelligence. Second, our approach shifts focus from the ongoing debate of discovery versus creation, to considering their interaction. As we have noted, opportunity realization requires cognizance and recognition of the dynamic interplay between discovery and creation. Third, an EC-centered approach also causes a shift in the conception of opportunity exploitation itself. We have expanded the view of balancing dynamic and operational capabilities to include attention to building and sustaining EC. Hence, beyond being a distinctive type of dynamic capabilities, EC offers a means to revisit existing views on the nature of entrepreneurial opportunities.

By focusing on EC and its dimensions, we highlight a need to go beyond individual-centered explanations of a company's entrepreneurial activities. EC offers an important means of defining (or creating) opportunities, calling for collective intelligence rather than individual insight or foresight. Given these qualities, senior leaders should focus on creating, nurturing and sustaining EC rather than simply motivating particular individuals to innovate. Leaders can also attend to the synchronization of EC's various elements across units and organizational levels. Synchronizing is a demanding task because different elements move at different paces and their misalignment could result in missed opportunities or miscalculations about the viability of these opportunities or the skills needed to harvest them.

Therefore, EC as a new category of dynamic capabilities, operating at the intersection of leaders' mindsets and actions will enable companies to anticipate game change, and, when

feasible and necessary, induce it. Our discussion extends the capability approach to the study of entrepreneurship by offering insights into the content of dynamic capabilities, distinguishing a new category, and articulating a set of dimensions that allows a firm to engage and influence external change. Though the entrepreneurial aspect of dynamic capabilities has been acknowledged (Teece, 2007), to our knowledge this is the first attempt to distinguish EC as a distinctive capability.

2.10 Managerial Implications

Our discussion underscores that having a well honed organizational EC *per se* is not sufficient to effect radical strategic change. Senior managers' vision, commitment to action, ability to articulate when and where to focus search for opportunities, and social skills needed to build momentum for entrepreneurship and change. Managing the different dimensions of EC requires different leaderships skills that allow opportunity exploration that fosters exploitation.

Perhaps, the greatest contribution of the process of engaging EC is stretching the firm's leaders and managers' thinking and frames. This can free leaders to consider "far-off" scenarios that are initially hard to justify or even to comprehend. EC requires managers to stretch beyond their familiar "search zone," (March & Simon, 1958) to explore distant signals of pending change (Zahra, 2008). For instance, senior leaders can explore scenarios that predict their own company's demise; the convergence of distant and unrelated technologies and scientific paradigms; the occurrence of "black swan" events; politically radical global shifts, and many other possibilities. Such 'blue sky' exercises are familiar in traditional strategy models. However, when they are firmly embedded in the fabric of the company, they can have a profound educational role: they revise leaders and managers' notions of what their industry (and

company) is all about. The result is not only to upset the apple cart but to grow new apples and get them to new markets in new carts.

2.11 Limitations and Directions for Future Research

Our current focus on EC advances the capability-based view of the firm by articulating a larger theatre of operations, beyond the boundaries of the internal organization of a firm (e.g., resources, processes, routines, and assets) to the competitive game. We emphasize the importance of the business ecosystem and how a firm can proactively transform it through entrepreneurial activities focused on industry game change. Thus, we add to the literature on entrepreneurial opportunities by suggesting how EC can contribute to the co-evolution of opportunity exploration and exploitation. Thus, we enrich the discussion on industry emergence and evolution by highlighting the firm's role in initiating game changing strategies. This role should be empirically documented in future research.

Another area to explore is the configuration of different EC. Given the multiple elements that constitute EC, different and multiple types of capabilities might exist that differ across opportunities, across firms, and even within firms. By developing taxonomies of these configurations, it would be possible to study these types as well as how and when they change in their texture. We can then link these shifts to corresponding changes in the opportunities recognized and realized.

The literature also underscores the importance of using the firm's capabilities to keep them current and productive (Zollo & Winter, 2002). Yet, the literature weighs the benefits of frequent use of these capabilities against the costs involved. Being a portfolio of capabilities that is focused on opportunity identification, creation and exploitation suggests that EC is continuously deployed in different forms and on different arenas. The heterogeneity of these

opportunities and their contexts create avenues for learning that keeps EC current and up-to-date.

A question to explore is: How is this variety harnessed to maintain EC's vitality while avoiding dilution or decay? This is an important question for future research to tackle.

By marrying EC and game changing behaviors, we hope to minimize a bias that pervades existing research. It is usually assumed that proactiveness and risk taking are essential for market success, even though there is some limited evidence to the contrary (Lumpkin & Dess, 2001). Of course, proactiveness, risk taking and innovativeness are highly desirable attributes but it is possible to have "too much of a good thing." It is possible that continually honing an EC might have some dysfunctional effects that should be explored empirically. The conditions under which such dysfunctional effects occur also deserve investigation. For instance, by examining the innovative and financial performance of firms, we can better appreciate the implications of EC for evolutionary and technical fitness (Teece, 2007) and when (and how) EC becomes an impediment to change.

Having outlined our article's contributions, we believe it has several limitations that provide opportunities for further research. First, as it is a theoretical article, the validity of our ideas needs to be empirically tested. For example, we need an empirical exploration of the generalizability of the EC's dimensions across a variety of contexts. Once validated empirically and connected to each other, we can use these dimensions to classify different capabilities and connect them to the different opportunities companies might pursue. We can also trace longitudinally the co-evolution of capabilities and corresponding opportunities, which in turn also highlights the importance of multi-level research design.

2.12 Conclusion

In this article, we have advanced the concept of entrepreneurial capability as a means of sensing, selecting, shaping and synchronizing internal and external conditions for the exploration and exploitation of opportunities. We have also proposed that each of these dimensions consists of several sub-capabilities and has multiple dimensions. We have highlighted the importance of EC in, unintentionally and intentionally, changing the competitive game through entrepreneurial activities. Our discussion invites future empirical examinations of how some companies change the game and, by doing so, change the world. Future research should give special attention to the entrepreneurial dimension of senior leadership and how it brings about fundamental changes in the complexion, scope and duration of game changing strategies that redefine industries and business ecosystems.

2.13 **References**

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Chapter 3 Relating Entrepreneurial Capability to Learning and ⁶Variety: Performance Implications

3.1 Abstract

Continuous success in today's open competitive economy requires firms to develop the ability to continuously pursue opportunities. Extant research provides little insight into what such ability may constitute or how it contributes to organizational performance. In this study, I conceptualize entrepreneurial capability (EC) and develop and empirically test a theoretical model that links EC to organizational performance. Analyses indicate that EC is a multi-dimensional construct that positively contributes to performance directly and through its effect on organizational variety and learning. I discuss the theoretical and managerial implications of the findings and provide suggestion for future research. I also connect EC to the broader discussion in the literature on the nature and effects of capabilities.

3.2 **Introduction**

In today's markets, companies are constantly searching for lucrative business opportunities. Many of these opportunities emerge from the companies' own research and internal development and are complemented by outside resources and knowledge. In fact, firms such as Google, Apple, and Intel are highly praised and rewarded for their continuous innovative output that opens up new markets and alters existing ones. These firms appear to possess an ability to come up with the next break thorugh that keeps them ahead of the competition.

Although this ability is crucial to firms' survival and growth, existing research offers little

⁶ This paper is written by Sondos G. Abdelgawad and in the process of revision for submission. I would like to express my immense gratitude to Lucia Naldi, Shaker A. Zahra, and Jönköping International Business School for giving me access to the database used in this paper.

guidance on what this ability may constitute and why it may have important implications for firms' performance. Therefore, in this study I focus on firms' ability to identify and pursue opportunities; I call this ability entrepreneurial capability (EC). I ask: What is this capability? What are EC's contributions to firms' performance? And what are firm-level variables that act as theoretical mechanisms to explain why EC may positively contribute to performance outcomes?

Building on the dynamic capabilities perspective (Helfat et al., 2007; Teece, 2007; Teece, Pisano, & Shuen, 1997), I define entrepreneurial capability as the capacity of the firm to proactively put its capabilities and resources into use to continuously pursue opportunities. This definition is in line with the widely accepted definition of capability as firm's ability to perform a particular function or pursue a specific objective (Helfat et al., 2007). Thus, EC's primary function within an organization is to ensure the continuous pursuit of opportunities. Although the dynamic capabilities literature has recently acknowledged the role of opportunities (Augier & Teece, 2009; Teece, 2007), most formulations of these capabilities are focused on their ability to be responsive to change (Helfat & Peteraf, 2003; Teece et al., 1997). The conceptualization of EC differs from other types of dynamic capabilities in that it focuses on the proactive enactment of opportunities. This conceptualization is multi-dimensional, reflecting three broad categories of actions: selecting; shaping; and synchronizing. All three categories embody various combinations of firms' capabilities and resources (Teece, 2007).

EC will have both direct and indirect contributions to performance. I argue that both strategic variety and learning will help clarify the impact of EC on firm performance. Strategic variety is viewed as the repertoire reflecting the range of market oriented actions taken by the firm (Miller & Chen, 1996; Miller, Lant, Milliken, & Korn, 1996). Meanwhile, organizational

learning denotes firms' commitment to acquiring and using new knowledge in pursuit of organizational success through capability building and upgrade (Schilling, 2002).

Research on strategic variety suggests that the broad range of market oriented actions within firms' strategic repertoire plays an important role in enhancing firms' performance (Miller et al., 1996). Thus, I argue that EC pursuit of several opportunities will generate a broad range of market oriented actions that will enrich firms' strategic variety repertoire. Similarly, performance implications of organizational learning have been widely documented in the literature (Huber, 1991). My focus here is on firms' orientation and commitment to learning, which I argue that EC will induce to enable firms' collective sense making of the diverse capabilities.

The contribution of this study is threefold. First, I extend previous research on dynamic capabilities that has focused primarily on firms' ability to alter their resources in response to change by introducing EC as a multi-dimensional construct that proactively pursues opportunities. Second, I draw attention to the importance of investigating firm-level entrepreneurship from a capability perspective. This will allow the entrepreneurship field to gain a thorough understanding of the phenomenon that goes beyond dispositional traits (Covin & Lumpkin, 2011; Lumpkin & Dess, 1996; Wiklund & Shepherd, 2003). A focus on firm's EC will stimulate theoretical attention to the context where it puts firms' resources into use and the differences among the types of opportunities it pursues. Two important issues that recent scholarly calls in entrepreneurship have identified as deserving systematic investigation to gain a comprehensive understanding of the entrepreneurial phenomenon (Zahra & Wright, 2011).

Third, drawing on the strategic variety and learning literature, I examine how EC enables a diverse strategic variety repertoire and a strong learning commitment that subsequently

influences performance outcomes. Although performance implications of dynamic capabilities have been a major area of investigation for scholars in the field (Makadok, 2001; Zahra & Nielsen, 2002), research has not yet provided a clear understanding of the mechanisms through which these capabilities influence performance outcomes. I believe that studying variety and learning as two mediating variables can help resolve these issues, adding clarity on the effect of EC on organizational performance.

To achieve my research objective, I obtained data from 311 Swedish SMEs that were involved in wide range of internationalization activities that reflect both downstream activities (such as foreign sales and marketing in international markets) and upstream activities (such as production and R&D abroad). I have chosen the Swedish context because the relatively small market size in Sweden makes it imperative for firms to internationalize and seek opportunities abroad. I utilize the context of seeking international expansion because firms would use their capabilities to proactively enact opportunities for growth. This makes an ideal setting for clearly studying the hypothesized concept of entrepreneurial capability and the proposed relationships. Furthermore, the Swedish context offers the unique advantage of relatively higher survey response rates compared to other countries (Harzing, 2000), especially when the targeted population is SMEs (Davidsson, 2004).

The remainder of this article proceeds as follows. First, I link the dynamic capabilities literature to the conversation on strategic variety and organizational learning to provide the theoretical reasoning for my argument and derive the hypothesized relationships. Second, I describe the methodology that was designed to measure EC and establish its dimensionality, along with the measures of other variables. Third, I test the hypothesized relationship proposed

in the model. Finally, I present the results of this study and discuss their theoretical and practical implications.

3.3 Theory and Hypotheses

3.3.1 EC's Contribution to Performance

EC, as an organizational capability, is expected to positively contribute to firm performance. Theory and empirical evidence in the capability literature suggest that capabilities are generally associated with improved performance at the firm-level (Barney, 1991; Peteraf, 1993; Wernerfelt, 1984). In the case of EC, the opportunity focus is expected to positively contribute to firms' performance. Opportunities means opening up new possibilities for the use of existing capabilities and the development of new ones. These possibilities broaden the field of search, encourage the flow of new information and create new cognitive/mental frames for interpreting this information, potentially increasing the likelihood that firms will venture into unfamiliar landscapes that disconfirms the prevailing dominant logic (Hamel & Prahalad, 1994). Thus, firms will be encouraged to revise the prevailing dominant logic, add new ones or ignore existing ones as they pursue opportunities (Prahalad & Bettis, 1986).

EC actions that focus on promoting the departure from the existing dominant logic and frequently subjecting it into question will have important implications. New dominant logic means developing new combinations of capabilities that correspond to new products and services that have the potential to increase revenues. Previous research has shown that dynamic capabilities allow firms to introduce new products and services through developing new processes and capabilities, which improves firms' performance(Chmielewski & Paladino, 2007; Makadok, 2001, 2010; Zou, Fang, & Zhao, 2003). Further, these new products and services will differentiate firms from competition, which is a major contribution of capabilities to firms'

performance (Drnevich & Kriauciunas, 2011). Research has shown that capabilities act as a strategic differentiator because of their embodied tacit knowledge and unavailability in factor markets(Amit & Schoemaker, 1993).

Furthermore, an EC differentiating effect arises from the continuous pursuit of opportunities, which allows firms to experiment with several alternatives. This experimentation can shield firms from competition and keep them ahead, because competitors could no longer predict their actions. Experimentation makes prediction more difficult because actions are not tightly coupled with outcomes; thus, imitation becomes difficult (Nicholls-Nixon & Cooper, 2000). This means that EC will open new, unpredicted decision options that are expected to enhance firms' performance. The ability to shape new decision alternatives and influence their expected positive implications for performance has been acknowledged in previous work on dynamic capabilities (Eisenhardt & Martin, 2000; Zhu, 2004).

Though the previously discussed view of dynamic capabilities explicitly assumes that firms' enhanced performance is an outcome of these capabilities' ability to make firms responsive to change (Helfat et al., 2007; Winter, 2003), no explicit consideration is given to the ability of firms to create change. Instead, I argue that EC creates a positive performance effect due to its ability to continuously pursue opportunities that may sometimes be responsive, but often times will demonstrate the capacity to spur change. Thus, EC could offer firms pioneering advantages in existing and new markets, which can positively contribute to their performance. This pioneering advantage may have some correspondence with the dynamic capabilities view of heterogeneity (Barney, 1991; Peteraf, 1993). Heterogeneity indicates firms' ability to modify and extend their capabilities in a unique fashion (Helfat & Peteraf, 2003; Teece, 2007; Teece et al., 1997). Heterogeneity has been viewed as a major basis for the positive contribution of dynamic

capabilities to performance (Drnevich & Kriauciunas, 2011; Teece et al., 1997). This discussion leads to the following Hypothesis:

Hypothesis 1: EC is positively associated with firms' performance.

3.3.2 EC's Contribution to Strategic Variety

The notion that requisite variety is vital for organizational survival has been widely acknowledged in the literature (Ashby, 1956). Strategic variety is the foundation of distinctive and differentiated products, goods, services, and business models (Larraneta, Zahra, & Gonzalez, 2011). Following the literature on strategic variety, strategic variety is defined as firms' repertoire of market oriented actions (Miller & Chen, 1996). This repertoire embodies a range of actions taken by a firm at a particular point in time (Miller et al., 1996). The broader the range of these actions, the more variety organizations will have to create a competitive advantage.

Viewing organizations as information processing units, strategic variety leads to diversity in information sources, which provides information richness that can be translated to better decisions, choices, and innovations (Argote & Ingram, 2000; Austin, 2003). Empirical research has shown that organizations lacking variety are left vulnerable to obsolescence and decline (Henderson & Clark, 1990; Leonard-Barton, 1992; Levinthal, 1997). Therefore, I argue that an EC's objective to continuously pursue opportunities will enable firms to draw upon the multiplicity of their capabilities to generate variety. Different opportunities will bear upon capabilities' diverse attributes, potentially enhancing the supply of ideas and unique approaches. Thus, firms' strategic variety repertoire will build on the unique information produced as a function of the distinct content of firm's capabilities and opportunities.

These innovative ideas and approaches are driven by firms' efforts to identify opportunities that lead to intensifying their search efforts (March, 1991). Opportunity-driven

search is expected to be broad in scope, often generating variations in information sources (McGrath, 2001). Seeking variation allows firms to gain new insights about existing and potential information that may have been previously obscured or unrealized (Zahra, 2008). This will equip firms with the ability to continuously discover novel and rich information useful in pursuing opportunities through innovative strategies and business models (Pisano, 1994). Information richness means diversifying firms' pool of information resources. This exposes firms to a diversity of environmental cues (Daft & Lengel, 1986). Diversity means the continuous generation of new products, services, and approaches of doing business (Harrison & Klein, 2007). Information diversity is a major source of strategic variety within firms (Miner, Haunschild, & Schwab, 2003).

Furthermore, EC generation of variety is expected to go beyond the distinctive content of information provided by various firms' capabilities and resources. EC's contribution lies in how this diverse content is bundled. In fact, prior research on strategic variety shows variety as a function of the strategic characteristics of the business in the portfolio of the firm (Cottrell & Nault, 2004; Prahalad & Bettis, 1986). Similarly, EC-based variety will be a function of the characteristics of the opportunities being pursued that guide the deployment of various firms' capabilities at a particular point of time. This view is also consistent with various conceptualization of the contribution of dynamic capabilities, which allows firms to identify and respond to new opportunities (Teece, 2007). These opportunities require the development of new process, products and services (Chmielewski & Paladino, 2007; Makadok, 2001, 2010; Zou et al., 2003), which have the potential to generate variety. Evidence shows that firms can develop and use their capabilities to secure continuous generation of variety (Henderson & Clark, 1990;

Tushman & Anderson, 1986). Therefore, EC will positively contribute to firms' variety, which suggests the following Hypothesis:

Hypothesis 2: EC is positively associated with variety.

3.3.3 EC's Contribution to Organizational Learning

Next, I consider the contribution of EC to organizational learning. Organizational learning is defined as firms' commitment and orientation to acquire and use new knowledge through capability building and upgrade (Sinkula, Baker, & Noordewier, 1997). As I have noted, EC directs firms' capabilities to continuously pursue opportunities. This allows EC to distribute information across the firm, thereby making this information accessible to members of the organization. In turn, this enhances awareness of the existence of the knowledge content that may have been previously ignored or unrecognized (Huber, 1991). In addition, recognition of new knowledge facilitates the retrieval of knowledge from varied sources, which increases the likelihood that firms will engage in learning efforts that make sense of this knowledge. This is in line with the conceptualization of learning as the change of organizations' knowledge, firms learn when they add, transform or reduce organizational knowledge (Argote, McEvily, & Reagans, 2003; Huber, 1991).

Given the myriad of opportunities and the corresponding capabilities that firms can deploy in pursuing opportunities, firms are expected to exhibit a varied repertoire of knowledge. This repertoire is also indicative of organizational learning as the newly generated knowledge needs to be analyzed and integrated in relation to existing knowledge (Levinthal, 1997). Existing theories of organizational learning highlight that variety of information requires collective framing at the organizational level (Argote, 1999; Fiol, 1994; Huber, 1991). This framing encompasses creating a collective understanding of the acquired diverse information to make

sense of firms existing and new knowledge (Fiol, 1994). This sense making is not simply an additive product of firms' individual capabilities; it is embedded in the link across diverse capabilities (Cohen & Levinthal, 1990; Nelson & Winter, 1982). Therefore, EC is expected to promote a learning orientation and commitment that links various firms' capabilities. Learning orientation is expected to promote "unified diversity" where firms begin to share a common view of the knowledge content of diverse capabilities (Fiol, 1994). This shared view triggers collective action at the firm-level (Donnellon, Gray, & Bougon, 1986), which is an expected consequence of EC's capacity to realize opportunities.

This idea has some precedent in the learning literature, attempts to converge on specific actions from a diverse array of inputs stimulate learning efforts (Walsh, 1988). These efforts are directed towards building consensus among diverse and often contradicting stimuli (Fiol, 1994). Therefore, the multi-dimensional nature of EC would promote wide ranging and extensive learning efforts on the part of the firm for two main reasons. First, these dimensions reflect different capabilities that firms use to orchestrate their resources towards opportunities. Second, these dimensions and the corresponding capabilities are expected to exhibit significant differences that are often times conflicting. This calls for a learning orientation to surface contradictory knowledge and elicit agreement on future actions and successful implementation. This discussion suggests the following Hypothesis:

Hypothesis 3: EC is positively associated with organizational learning.

3.3.4 The Effect of Variety on Performance

I build on my hypothesized relationship in Hypothesis 1 to consider the effect of EC generated variety on performance. Research indicates that variety is usually associated with positive consequences, such as enhanced creativity and decision making quality, as well as

improved complex performance (Harrison & Klein, 2007; McGrath, 2001). One explanation is that variety enhances firms' awareness with various problems and, challenges, as well as alternatives for explanations and solutions. This awareness offers firms with several strategic directions that match competitive challenges and opportunities (Pentland, 2003). Consequently, variety allows firm to be open and receptive to previously untapped solutions and options that firms' various capabilities could offer. Furthermore, the work of Chandler (1962) and Rumelt (1982) has built the foundation for the benefits of variety and specifically diversity for industry performance.

The advantage of variety has been widely acknowledged in the literature where high levels of strategic variety are associated with increased industry profitability (Dooley, Fowler, & Miller, 1996; Miles, Snow, & Sharfman, 1993). In this stream of research, strategic variety denotes the differences in strategic characteristics of the businesses in the portfolio of the firm (Prahalad & Bettis, 1986). Empirical findings show significant correlations between strategic variety and performance measures, such as return on investment and stock prices (Miles et al., 1993). Although these findings are mostly concerned with industry profitability, the accepted view is that variety is associated positively with performance (Dooley et al., 1996). For example, Cottrell and Nault (2004) found empirical evidence supporting the positive effect of product variety on firm performance. Similarly, Eisenhardt and Tabrizi (1995) showed that variance enhancing strategies were valuable for new products development. This suggests that variety will positively enhance firms' profitability and growth.

Though variety is not explicitly invoked in the capability literature, a consensus emerges that firms possessing heterogeneous capabilities are able to attain sustained competitive advantage (Barney, 1991; Barney, 2001; Peteraf, 1993; Teece et al., 1997; Wernerfelt, 1984).

Therefore, since EC generated variety arises from diverse capabilities, I expect that this variety is a source of heterogeneity. Variety can promote different organizational actions that do not necessarily conform to prevailing industry standards. These actions are expected to differentiate firms from their competitors, which would in turn enhance performance (Leiblein & Madsen, 2009). The preceding discussion of empirical results and theoretical arguments suggests the following Hypothesis:

Hypothesis 4: EC generated variety is positively associated with performance.

3.3.5 The Effect of Learning on Performance

Organizational learning is of fundamental importance for firms' performance because it enables innovation, new strategies, and improvement in productivity and efficiency (Argote, 1999). Learning helps firms diversify into new countries (Barkema, Bell, & Pennings, 1996; Zahra, Ireland, & Hitt, 2000) and new products (Miner, Bassoff, & Moorman, 2001), which in turn help them capture economies of scale and scope (Bingham & Davis, 2012). Furthermore, research has revealed learning as a critical mechanism for disseminating knowledge that helps improve pricing and productivity as well as expanding operations (Darr & Argote, 1995; Haleblian & Finkelstein, 1999; Hayward, 2002). Thus, the previously discussed role of EC in emphasizing organizational learning will have important implications for firms' knowledge that will enhance their performance.

EC-induced learning will enable firms to integrate the knowledge generated from the orchestration of different capabilities across opportunities. Once integrated, this knowledge can provide the firm with a knowledge edge through affecting both knowledge stocks and flows. Knowledge stock will be continuously updated through various knowledge gleaned from the diverse capabilities (Zahra & Nielsen, 2002). Meanwhile, the continuous accumulation of

knowledge through integration will enhance firms' knowledge flow (Dierickx & Cool, 1989). Thus, keeping the firm knowledge base current and relevant, which helps spur new strategies, innovative products and services (Grant, 1996). This logic is consistent with the knowledge based view of the firm that shows that knowledge is a major determinant of competitive advantage (Kogut & Zander, 1992).

Through learning, firms will be able to link seemingly irrelevant knowledge that helps change their understanding of the market and the dynamics of competition (Zahra, Van de Velde, & Larraneta, 2007). In turn, this will help trigger creative responses to market and customer demands that yield process and product innovations. Indeed, the literature shows that establishing connection between knowledge elements is one of the most important sources of innovation in organizations (Nelson & Winter, 1982). These innovations help firms gain market and customer acceptance that improves their market share and profitability (Greve, 2009). Evidence from the knowledge based view of the firm suggests that knowledge combinations can provide firms with competitive advantage and deter competitive imitation (Galunic & Rodan, 1998; Nahapiet & Ghoshal, 1998)

Empirical evidence and theory establish learning as a key factor influencing organization performance and survival (Argote et al., 2003). Through learning firms accumulate, integrate, and disseminate knowledge which helps create a unique knowledge base. This knowledge base acts as a key determinant of firms' innovative actions that helps bring about new opportunities for products, services, and processes. This, in turn, is conducive to favorable outcomes that lead to positive performance. This discussion suggests the following Hypothesis:

Hypothesis 5: EC induced organizational learning is positively associated with performance.

3.4 **Methods**

3.4.1 Sample and Respondents

Data analyzed here come from 311 Swedish international SMEs that had at least one of the following international activities: foreign sales; marketing directed at foreign markets; purchases from abroad; production and R&D conducted abroad. Initially, 885 international SMEs were targeted. They were screened before being contacted. This screening procedure employed Amadeus and Affärsdata datasets. Amadeus is a financial database, combining data from over 30 specialist regional information providers (IPs), supplying 10 years of detailed accounting and ownership information on all European incorporated companies. Affärsdata is also a financial database that provides detailed accounting and ownership information on Swedish companies.

This screening process showed that 218 companies that either suspended their operations or changed their legal form of business. The remaining 667 firms were contacted through a brief phone interview to gather information on their international activities and verify their operations status. Of the 667 firms, 109 firms either refused to take part in the study or could not be reached at all. Thus, a total of 558 firms completed the phone interview; those are the ones that received the mail questionnaire. The questionnaire included scales to measure firms' growth and internationalization, as well as organizational processes for the transformation and exploitation of knowledge.

Of the 558 firms that received the mail questionnaire, 311 firms completed it. Thus, the response rate is 55.73 % (311/558). Given the length of the questionnaire and the top level of management targeted, this response rate is considered comparable to other studies that examine

complex organization phenomenon (Baruch & Holtom, 2008; Harzing, 1997; Menon, Jaworski, & Kohli, 1997).

The respondent for each firm was its CEO. Given that the studied firms are SMEs, respondents are viewed to be in an appropriate position to provide accurate information about the constructs measured in the survey. CEOs are directly involved in the business and in accordance with previous literature; CEOs in small firms are often times in charge of internationalization decisions (Coviello & Jones, 2004).

3.4.2 Testing for Source Bias

Since measures of the constructs used in this study were obtained from the same subjects, there is a possibility that common method variance bias would be present in the data. Thus, I employed Harman's one-factor rule to assess the potential effect of common method variance bias (Podsakoff, MacKenzie, Jeong-Yeon, & Podsakoff, 2003; Podsakoff & Organ, 1986). The results of the factor analysis suggested no single dominant factor. Rather, the analysis extracted eight factors. Collectively, these factors account for 68% of the variance with the first factor explaining just 23% of the variance.

3.4.3 Measures

The measures of the study's key constructs were developed in a multi-stage process.

First, the survey items were reviewed to locate verified scale items that measure the constructs in the model. Potential scale items for the construct of entrepreneurial capability were extracted based on my theoretical conceptualization of the dimensions of the construct and the relevant literature to the hypothesized dimensions. As for the other three constructs of the model, the extracted scale items were based on the relevant conceptual and empirical literature on learning, strategic variety, and performance.

Next, a number of academic colleagues familiar with research pertaining to entrepreneurship were asked for their comments about whether the items used were meaningful, understandable, and reflective of the proposed constructs in the model. Based on their feedback, some items were dropped and others were added.

For all the four constructs used in this study, an initial exploratory factor analysis was conducted to establish the existence of the constructs as well as a confirmatory factor analysis to ensure that the items specific to each construct loaded on a single factor. Additionally, a reliability assessment was conducted using Chronbach's α procedure.

3.4.3.1 Entrepreneurial Capability (EC)

Twenty three items were extracted from the survey based on the theoretical conceptualization of the four dimensions of EC: sensing, selecting, shaping, and synchronizing. Items were selected based on the hypothesized definition of these dimensions and the literature review of their relevant processes.

Next, a principal component analysis was conducted on the 23 items with orthogonal rotation (varimax). The purpose was to uncover the significant factors in EC. When the 23 items were factor analyzed, seven factors were extracted after orthogonal rotation. All extracted factors had an eigen value significantly higher than one and they collectively explained 68.3% of the variance which is shown in Table 3.1 below.

Table 3.1 EC Factor Analysis Statistics

Factor	Eigen Value	Percent of variance	Cumulative variance
1	3.944	17.149	17.149
2	2.66	11.564	28.713
3	2.596	11.286	39.999
4	1.753	7.622	47.621
5	1.744	7.581	55.202
6	1.665	7.241	62.443
7	1.349	5.865	68.309

In interpreting the results, three factors were selected based on two criteria. First, the scree plot suggests retaining the first three factors. Second, the first three factors show the highest eigen values of 3.9, 2.6, and 2.5 respectively.

It should be noted that only items with the highest factor loading above 0.5 were selected for any particular factor, following the minimum cutoff recommended by Hulland (1999). To further enhance the interpretation of the factors, items that loaded on more than one factor were dropped. Table 3.2 shows the factors retained and their respective items loading.

Table 3.2 EC Retained Factors and Items Loadings

Item	Factors loading		
	1	2	3
We are fast to recognize changes in international markets	.852		
New opportunities in international markets are quickly understood	.845		
We consider the consequences of changing demands in international	.827		
markets			
We quickly recognize the usefulness of new knowledge on international	.806		
markets for our customers			
We constantly consider how to better use the knowledge on international	.790		
markets			
We record and store newly acquired knowledge on international markets	.597		

for future references	
There is a general agreement on our organizational vision across levels	.816
and functions	
We share a view of where the firm should be in the future	.753
Employees are involved in developing the direction of the organization	.688
Cross functional teams is a common way of working	.512
Regular discussion as the whether we work effectively together	.785
Methods to get the job done are often discussed	.733
Time is taken to review organizational objectives	.655

Based on the items loading on each factor and the hypothesized definitions of the factors that guided the selection of the items, I developed each by adding the scores on the relevant items and then dividing the sum by the number of items. This procedure has an advantage of biasing out individual responses and the resulting interpretation of results is conservative because variance is compressed (Gresov, Drazin, & Van de Ven, 1989). The interpretation of the retained factors is as follows:

Factor 1(6 items): This factor indicated the hypothesized dimension of synchronizing, which refers to temporally orchestrating a correspondence to align internal and external elements. This alignment is about harmonizing firm's actions with the speed of the environment and timing of opportunities. This factor has a Cronbach α of .899.

Factor 2 (3 items): This factor captured the dimension of selecting, which denotes the ability to identify and choose what potential opportunities to pursue. This factor has a Cronbach α of .768. Factor 3 (3 items): This factor captured the dimension of shaping, which refers to the orchestration of connections among internally and externally available capabilities and resources for opportunity realization. This factor has a Cronbach α of .73.

Next, a correlation analysis examined the relationship between the three aggregated factors. The Pearson correlation coefficient (r) between each factor and the other two factors is significant at p<0.001 level. This suggests that the three factors are related and internally consistent, guiding the second order factor analysis reported next.

Second order factor analysis: A principal component analysis was conducted on the three factors extracted from the initial factor analysis with orthogonal rotation (varimax). This analysis was carried out to determine if the three factors emerged from the initial factor analysis representing the three dimensions of EC load on a single factor. This analysis was intended to increase confidence in my theoretical conceptualization of EC as an overall aggregate construct. When the three factors were factor analyzed, one factor was extracted. The extracted factor had an eigen value of 1.64, it explained 54.659% of the variance. This factor has a Cronbach α of .886.

3.4.3.2 Mediating Variables: Learning and Variety.

14 items were extracted from the questionnaire based on the review of relevant literature to the potential hypothesized mediating constructs. A principal component analysis was conducted on 14 items with orthogonal rotation (varimax). When the 14 items were factor analyzed, five factors were extracted after rotation. All extracted factors had an eigen value significantly higher than 1; they collectively explained 68.3% of the variance. These results are shown in Table 3.3 and interpreted below.

Table 3.3
Learning and Variety Factor Analysis Statistics

Factor	Eigen value	Percent of variance (%)	Cumulative variance (%)
1	4.013	28.665	28.665
2	1.736	12.399	41.064
3	1.627	11.618	52.682
4	1.185	8.466	61.148
5	1.049	7.491	68.639

Based on the items loading on each factor and the relevant literature related to each of the hypothesized mediating variables, two factors were retained; they encompassed items with the highest loadings. Additionally, only items with loadings above 0.5 were selected for any particular factor, again following the minimum cutoff recommended by Hulland (1999). Results are shown in Table 3.4 and interpreted below:

Factor 1 (6 items): This factor indicated the hypothesized mediating variable of *Variety*, which refers to the variation in the firms' operations and its associated diversity. This factor has a Cronbach α of .851.

Factor 3 (2 items): This factor indicated the hypothesized mediating variable of *learning*, which refers to the firms' orientation and commitment to learning. This factor has a Cronbach α of .719.

Table 3.4
Mediating Variables: Retained Factors and Items Loading

Items		rs
	1	3
Ability to learn is the key to improving our operation		.813
Employee learning is an investment		.820
Percentage of assets outside Sweden	.666	
Percentage of profits from international markets	.803	
Sales to how many countries	.768	
Business activities (purchase, sales, production) with how many countries	.760	
Share of the company's sale coming from new customers in international markets	.787	
Share of company's sales from products/services the company did not have 3 years	.719	
before coming from international markets		

Additionally, correlation analysis was conducted between the mean of the items of the two variables showing insignificant simple correlation (r) of 0.04. This enhances my confidence that the two extracted mediating variables are distinctively different.

3.4.3.3 Organizational Performance

Capturing organizational performance has been a subject of debate in the literature. Yet, a consensus emerges on the importance of considering both profitability and growth measures due to the inherent tradeoff between them (Dess & Robinson Jr, 1984). Thus, six items of outcome measure were extracted from the survey. A principal component analysis was conducted on the six items with orthogonal rotation (varimax). When the six items were factor analyzed, two factors were extracted after rotation. All extracted factors had an eigen value above 1; they collectively explained 72.25% of the variance which is shown in Table 3.5.

Table 3.5
Performance Factor Analysis Statistics

Factor	Eigen value		Percent of variance (%)	Cumulative variance	
	1	3.136	43.594		43.594
	2	1.199	28.662		72.255

Given that a key goal of EC is pursuing opportunities, I found that factor 2 encompassing the two items: profitability of foreign operations, and growth of foreign sales an adequate performance metric for this study. First, profitability of foreign operations signals the success of using resources effectively to make profit out of foreign operations (Zahra & Bogner, 2000). Second, growth of foreign sales is a key indicator of international markets' acceptance of firms' products and services (Chandler & Hanks, 1993). The two items of growth and profitability showed loading of **0.882** and **0.890** respectively. The two-item measure had a Cronbach α of .768. This suggested that this performance metric does not only reflect firms' pursuit of opportunities, but also the progression of these opportunities to successful operations and market acceptance.

3.4.3.4 Control Variables

I included four control variables in my model: firm size, firm age, environmental dynamism, and industry growth. First, I controlled for firm size because larger firms may have more resources to allocate for building EC. Meanwhile, the vulnerability of small firms and their few structural constraints may motivate the development of EC. Firm size is measured as the total number of employees one year before the survey. Second, I controlled for firms' age because older firms may exhibit greater inertia and structural rigidity that may impede the development of EC. These firms may decide to ignore opportunities, owing to the confidence developed from long market presence that leads to spuriously inferring formulas for success.

Firm age is measured as the age of the firm in years at the time of the survey. Third, I controlled for environmental dynamism (ED) as it may affect performance. I developed a measure of environmental dynamism that averaged the scores of three items that asked respondents to assess the extent of change in their markets ($\alpha = 0.84$). Finally, I controlled for industry growth (IG) as it may influence firm performance.

3.5 Analyses and results

Table 3.6 presents means, standard deviations, and correlations. I calculated the variance inflation factor (VIF) for all variables in the study. Results suggested no need for concern with respect to multi-collinearity. Significant and positive correlations between EC and learning and variety suggested the importance of including these variables in the analysis.

Table 3.6 Means, Standard Deviations and Correlations

Variable	Mean	s.d	1	2	3	4	5	6	7	8
1. EC	10.1415	1.64506	1							
2. Learning	4.2538	0.65176	0.3783**	1						
3. Variety	17.5933	19.7993	0.3638**	0.0407	1					
4.Performance	3.0249	1.0084	0.3271**	0.042	0.3292**	1				
5.Size	137.94	1138.736	-0.0564	-0.1282*	0.2587**	0.0705	1			
6.Age	22.7638	8.4272	0.0991	-0.0612	0.0416	-0.0914	0.0695	1		
7.ED	10.9	4.305	0.0145	-0.0404	0.0085	0.0811	0.0187	0.0246	1	
8.IG	3.74	1.565	-0.0998	-0.1512*	-0.065	-0.0743	0.01	0.0447	0.559**	1

^{**} p< 0.01 level (2-tailed)

I tested the model using structural equation modeling (specifically, SmartPLS 2.0 M3; Ringle, Wende, & Will, 2005). SmartPLS allows for the simultaneous testing of the hypothesis and enable the use of multi-item reflective scales (White, Varadarajan, & Dacin, 2003). Thus, both the measurement and structural model could be tested and analyzed. PLS is similar to LISERL in that it examines both structural relationships among latent variables and relationships between latent variables and observed variables. PLS is particularly adequate to this study for

^{*}p<0.05 level (2-tailed)

two main reasons. First, it does not make distributional assumptions with regards to the residuals or the independence of the cases. (Vinzi, Chin, Henseler, & Wang, 2010). Second, the item weights and loadings of the constructs are developed based on the inner weights of the other constructs of the model, which is an adequate tool for testing the predictive relevance of the constructs and their associated indicators (Vinzi et al., 2010).

3.5.1 Adequacy of the Measure, Reliability, Validity and Bias

In this study I have paid considerable attention to the issues of reliability and validity of the measures. As shown in Table 3.7, all indicator items of the constructs showed high positive loadings on their respective constructs; thus, items from the different constructs separated cleanly. No item from one construct had a loading greater than 0.5 on a factor associated with another construct.

Furthermore, as shown in Table 3.8, all construct composite reliabilities are higher than 0.7, which supports the internal consistency of the measures. Unlike Cronbach's alpha (α) which is a lower bound estimate of reliability, composite reliability does not assume that all indicators are equally weighted. Thus, it is a closer approximation under the assumption that the parameters estimates are accurate (Hair, Ringle, & Sarstedt, 2011).

Table 3.7
Outer Model Loadings and Cross Loadings

	EC	Learning	Variety	Performance
EC(synchronizing)	0.8064	0.1403	0.4607	0.4452
EC (Selecting)	0.678	0.405	0.0407	0.1198
EC (Shaping)	0.7108	0.405	0.1749	0.0324
Learning 1	0.3403	0.882	0.0232	0.0235
Learning 2	0.3197	0.8656	0.0485	0.0506
Variety 1	0.2298	0.0492	0.6472	0.1952
Variety 2	0.3231	0.0499	0.8348	0.3859
Variety 3	0.317	-0.001	0.7922	0.1636
Variety 4	0.3051	0.0174	0.7871	0.1703
Variety 5	0.2948	0.0482	0.791	0.2957
Variety 6	0.1545	0.0096	0.7044	0.2281
Performance 1	0.2591	-0.0228	0.3064	0.8985
Performance 2	0.3292	0.0976	0.2863	0.9016

I also tested for discriminate validity of the scales. This test centered on determining the extent to which they measure a single construct rather than multiple constructs. As shown in Table 3.8, average variance extracted (AVE) of all the constructs was significantly higher than 0.5. Additionally, following Fornell and Larcker (1981) criteria, I calculated the squared correlations among constructs and compared it to the AVE. For every construct, the AVE of each construct was greater than the squared correlations across constructs (Chin, 1998).

Table 3.8
Inter-Construct Correlations and Reliability Measures

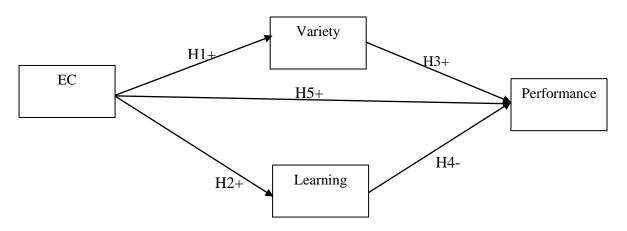
		Correlations a	mong cons	structs		
Composite Reliability	AVE		EC	Learning	Variety	Performance
0.7768	0.5384	EC	1			
0.8648	0.7618	Learning	0.3783	1		
0.8919	0.5808	Variety	0.3638	0.0407	1	
0.8951	0.8101	Performance	0.3271	0.042	0.3292	1

Squared correlations among constructs						
Composite Reliability	AVE		EC	Learning	Variety	Performance
0.7768	0.5384	EC	1			
0.8648	0.7618	Learning	0.143110	1		
0.8919	0.5808	Variety	0.132350	0.001656	1	
0.8951	0.8101	Performance	0.106994	0.001764	0.108372	1

Furthermore, an important test for validity is convergent validity, in which a block of indicators for each construct strongly agrees on their representation of their respective construct (Vinzi et al., 2010). As was previously shown in Table 3.7, items of each construct exhibited high loadings and narrow range, which indicates that the items are homogenous set that captures the phenomenon of interest (Vinzi et al., 2010).

With regards to testing specific hypotheses, as was previously mentioned, PLS does not make any distributional assumptions. As a result, a limitation of this technique is that traditional parametric methods such as chi-square (X^2) test significance are not applicable. Therefore, I used the bootstrapping method (sampling with replacement) to assess the significance and stability of the parameter estimates of the structural model shown in Figure 3.1.

Figure 3.1 Structural Model



The results reported in Table 3.9 show the coefficient estimates and *t*-statistic. Hypothesis 1 suggests that EC will be positively associated with variety. The data appear to support this relationship. Hypothesis 2 suggests that EC will be positively associated with learning, which is also supported. Hypothesis 3 suggests that variety will be positively associated with performance, which is also supported. Hypothesis 4 suggests that learning will be positively associated with performance. The results favor rejecting this Hypothesis. Hypothesis 5 suggests that EC will be positively associated with performance. This relationship was significant. The multiple squared correlation coefficient (R²) of the endogenous latent variables suggests that the hypothesized model in Figure 3.1 fits the data well. This supports soundness of the model in explaining the impact of the independent latent variable EC on the endogenous latent variables in the model. Thus, EC appears to have a substantial impact in explaining the variance in the endogenous latent variables of the model. In turn, this enhances confidence in the predictive power of the model.

Table 3.9
Test of Hypothesized Relationships: Beta Coefficients, T-Values and R2

	Variety	Learning	Performance
EC	0.363 (9.39)**	0.378 (9.00)**	0.282 (6.12)**
Variety			0.22 (4.99)**
Learning			-0.09 (2.67)**
Construct R2	0.132	0.143	0.195

t-values reported in parentheses, two tailed test. p<0.01

3.6 **Discussion and Implications**

In this study, I conceptualized and examined the role of entrepreneurial capability in inducing firm-level variety and learning and, in turn, their contributions to firms' performance. I developed five hypotheses to explore the direct and indirect effects of EC on firm performance. In this section, I review key findings and discuss their implications.

In testing Hypothesis 1, I found support for the argument that EC will positively contribute to firm performance. These findings suggest that the ability of EC to pursue opportunities will have a net positive contribution to firms' performance. This positive contribution is through actions that generate novelty in firms' products, services, markets, and ways of doing business. As a result, I observe support for my argument that EC, as a type of dynamic capabilities, focuses firms' efforts on opportunities that likely reward these firms with performance gains. This speaks to the importance of considering opportunity as a specific objective that guides firms' capabilities. Given the fact that opportunities are never quite the same, EC may allow firms to attain heterogeneity. This heterogeneity will arise from efforts to customize firms' capabilities and resources across EC's dimensions to the specific idiosyncrasies of opportunities. Thus, collectively, EC will embody an integrated set of resources that are

difficult to disentangle to uncover causal relationships. Consequently, this will impede competitors' imitation efforts, as concrete cause and effect linkages are not clearly observable.

In the second Hypothesis, I proposed a basic direct relationship to determine if EC contributes to increased variety. In testing this Hypothesis, I observed support for the argument that EC will positively contribute to inducing variety. This finding indicates that EC's activities that focus on pursuing opportunities draw upon firm multiple capabilities, which enhance the generation of new ideas and approaches. Further, this supports the argument that diversity of information will provide a continuous supply of market oriented actions for firms' strategic variety repertoire. The support found for this Hypothesis speaks to the importance of considering the effect of capabilities on other variables that may play important roles in explaining firm performance.

In testing Hypothesis 3, I also observed support for the predicted relationship of the positive contribution of EC to organizational learning. These findings suggest that EC generates a varied knowledge content that calls for organizational learning to integrate and disseminate its elements. Thus, organizational learning will play an important role in linking firms' capabilities across its various opportunities through a unified framework that could guide future actions. This framework will require continuous learning efforts to harness the benefits of diverse knowledge content and offsets its associated conflicting effects. As such, EC's dimensions create a platform to bring together diverse capabilities that encourages organizational learning efforts to integrate and find new links among them.

In testing Hypothesis 4, I found support for the prediction that strategic variety will have a positive effect on firm performance. The argument underlying this Hypothesis is that given the nature of EC to link diverse firms' capabilities across opportunities, firms will have greater

access to previously unexplored options. In turn, this will open up new approaches and perspectives that are conducive to the generation of new products, processes, and services.

Collectively, they would enrich variety that, in turn, enhances organizational performance. This increases a firm's distinctiveness providing access to new markets and increasing market share.

This observation provides support for the dynamic capabilities perspective that posits heterogeneity arguments to explain dynamic capabilities' performance relationship (Helfat et al., 2007; Teece et al., 1997).

In Hypothesis 5, I predicted a positive contribution of organizational learning to firm performance. Interestingly, the results are opposite to those predicted. One explanation is that performance gains may not offset the additional difficulty associated with organizational learning, which arises from attempts to integrate and link diverse capabilities that often surface conflicts and contradictory signals. Clearing up these conflicts and the subsequent adjustments needed at the level of capabilities and actions, may not allow the observation of pronounced performance gains during the time period of the study.

As Gavetti and Levinthal stated learning and experiential wisdom are backward forms of intelligence (2000). This indicates that collective learning that integrates diverse knowledge content would require extended time horizons to produce pronounced effects on organizational performance. Thus, the observed performance effects may reflect the negative immediate effects of conflict among diverse knowledge content. This is also consistent with the widely accepted definition of learning as increased awareness of alternatives that yields new insights and not necessary behavioral change (Friedlander, 1983; Huber, 1991). Additionally, the conceptualization of learning in this study as a commitment and orientation for acquiring and using new knowledge does not imply direct translation to performance gains. Previous research

employing similar conceptualization of learning has shown that learning accrued in capability development efforts may not be directly linked to revenue generating outcomes (Schilling, 2002).

As for the managerial implications of the study, my findings suggest that the generation of variety and learning are both desirable outcomes of EC. However, to realize the performance implications of these variables, it appears prudent that managers would be prepared to deal with conflicting and often competing capabilities' demands. As evidence shows, variety could encompass several options that would carry positive implications for performance. However, when it comes to learning, it requires time to make sense of the diverse stimuli to realize performance gains. It is important for managers to understand that time is essential for firms to collectively create interpretative frames, which make sense of diversity and integrate it into meaningful knowledge content that guides organizational actions.

3.7 Contributions and Limitations

This study has attempted to explicate the EC construct, measure it, and model its relationship to performance. As a result, this study makes several contributions to the entrepreneurship and capability literatures. Initially, the study introduces a type of capability that is focused on the entrepreneurial function within the firm that is guided by the opportunity objective. This represents a first step towards moving the entrepreneurship field from a predominant focus on disposition to act, and rather focuses on firms' actions represented by its capabilities. The support for the positive contribution of EC to variety and learning provides a better understanding of the contribution of capabilities to firm performance.

It appears that these variables provide a foundation for understanding the relationship of EC to firm performance. As such, the results underscore that capabilities may offer greater

contributions when considered in combination with other related variables in the firm. In addition, through these findings I provide a possible explanation as to the source of heterogeneity, which is of major interest in capability research (Chmielewski et al., 2007; Helfat et al., 2007).

Furthermore, organizational learning is viewed as a function of firms' capabilities, because each firm would exhibit a heterogeneous set of capabilities with particular opportunities. This implies that learning approaches would vary across firms and across opportunities. Future research would benefit greatly from finding out whether particular learning approaches are associated with particular opportunities and capabilities. Learning approaches that may appear conducive to a given opportunity and capabilities may be inappropriate for others. The questions of when and why and under what conditions specific learning approaches are selected all represent important avenues for future research.

On the other hand, similar to other research, this study exhibits some limitations. Though I have strived to develop measures that accurately capture EC, future research may wish to develop more direct measure of this complex construct. In addition, a common problem of survey design research is the use of the same survey to measure both the dependent and independent variable. This approach has the potential of introducing common method bias (Podsakoff et al., 2003); however, using different types of measurement data and the results of the one factor test reduces the likelihood of the impact of such issue.

Furthermore, the focus on Swedish firms suggests a need for a multi-country study that would provide added explanatory power, generalizability, and useful insights on the effect of context on the variables of the study. This approach would address latest scholarly calls to bring the role of context to the forefront in entrepreneurship research (Zahra & Wright, 2011). Finally,

my study is a cross sectional one, which make me believe that considering longitudinal designs that incorporate various time periods would add additional insights. Considering time would reveal the temporal dynamic of EC as well as performance lag effects, which would further inform the field regarding the link between EC and performance.

3.8 Conclusion

This study has attempted to introduce and measure the EC construct as a useful concept in explaining firms' entrepreneurial behavior. I have attempted to model the role of EC in assisting other organizational variables, specifically variety and learning and their implications for performance. The analysis supported the premise that EC is a useful construct to assess firm-level entrepreneurship. It has also provided useful insights into the relationship between the models' variables, suggesting the importance of considering the effects of capabilities and other mediating variables. This means that the widely accepted view of assessing capabilities contributions individually may need to be reconsidered. In particular, we need to consider the effect of intervening variables when assessing the effect of capabilities on performance.

3.9 **References**

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Chapter 4 Emerging Multinationals Venturing into Developed Economies: Implications for Learning, Unlearning, and Entrepreneurial Capability⁷

4.1 Abstract

The entry of young and aggressive multinational corporations from emerging economies into developed countries' markets is an important trend that promises to shape the global competitive landscape. Brazilian, Chinese, and Indian multinationals typify this growing trend. The individual and collective experiences of these multinationals provide an interesting context in which organizational unlearning becomes a means for inducing multifaceted learning that enables these companies to develop and exploit their entrepreneurial capabilities⁴. In this article, the authors discuss the challenges associated with unlearning and how it sets the stage for learning and exercise of entrepreneurial capability for competitive advantage. The authors also identify important research questions that deserve exploration.

4.2 Introduction

Organizational learning and the conditions that foster it have been the subject of interest in the literature, underscoring their potential consequences for companies. One important source of disagreement is whether unlearning is necessary to make learning possible. Debate persists because unlearning and learning are subtle and messy processes that are difficult to disentangle empirically (Tsang & Zahra, 2008). The context in which these processes occur can also accentuate the difficulties, further complicating theory development and testing. The expansion

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of multinational corporations from emerging countries to developed economies is one such interesting but challenging setting in which to study the links between unlearning and learning and their implications for building and upgrading organizational capabilities.

Emerging multinational corporations or emerging multinationals in short, refer to companies that are founded in emerging economies and operate in developed countries' markets. These companies usually follow a focused strategy, targeting a few international markets at a time. These emerging multinationals are of two types—born global and expansion type. Bornglobal emerging multinationals are created to go international from inception, whereas their expansion-type counterparts are existing companies that decide to internationalize their operations later in their life cycle. Regardless of their type, some emerging multinationals are independently owned, whereas others are members of business groups. Although the emergence of these multinationals is a relatively recent phenomenon (Wells, 1983), their contribution to outward foreign direct investment (FDI) has grown from US\$65 billion in 1980 to US\$849 billion in 2002, accounting for 12% of the world's total FDI outflows (United Nations Conference on Trade and Development, 2003).

Emerging multinationals from diverse countries such as Brazil, China, Egypt, and India have been adept at crafting strategies that enable them to enter developed economies and operate profitably. In so doing, they have shown deftness in developing, honing, and exploiting their entrepreneurial capability (EC), defined as their capacity to recognize, conceive, create, and exploit opportunities for competitive advantage. As they continue expansion, emerging multinationals need to learn new skills that sustain profitable exploitation of their capabilities. This often requires them, especially the expansion type, to unlearn some of the practices they have used in their domestic or foreign markets. However, unlearning and learning create

formidable challenges for emerging multinationals and their managers as well as researchers studying this phenomenon. These companies need to be adept at learning and unlearning as well as in building the EC needed to identify and exploit value-creating opportunities.

Focusing on the growing participation of emerging multinationals in developed economies, we discuss the challenges that unlearning poses for these firms and their managers and analyze how they relate to these firms' EC. We also highlight the various issues researchers are likely to encounter as they empirically study these issues in the rich context in which emerging multinationals work, underscoring the importance of combining qualitative and quantitative studies. By analyzing emerging multinationals, we illustrate the powerful influence of the context in which these firms operate and how it might affect unlearning and learning as well as EC.

4.3 The Need to Unlearn

Following Tsang and Zahra (2008), we distinguish between organizational unlearning and forgetting. Unlearning refers to the intentional discarding of practices, such as abandoning a certain recruitment procedure. Forgetting refers to inadvertent loss of practices from organizational memory (Easterby- Smith & Lyles, in press), as happens when knowledge is lost because of personnel turnover. Sometimes "forgetting" could be useful but, in other times, it is dysfunctional (Easterby- Smith & Lyles, in press; Martin de Holan, in press).

Emerging multinationals expand internationally to exploit their assets in pursuit of growth and profitability. As a result, they need to build capabilities that give them an advantage in selected foreign markets (Luo, 2002). Many of these capabilities are functional in nature and require developing and judicially exercising EC. To generate economic value, emerging multinationals should keep their capabilities current by infusing new knowledge and innovation

into their operations, which requires learning multiple skills and competencies. Huber (1991, p. 89) states, "an organization learns if any of its units acquires knowledge that it recognizes as potentially useful to the organization" (emphasis in original). Learning takes time and effort to comprehend, absorb, and exploit new knowledge and develop new frames of reference about the competitive arena; how the emerging multinational defines its mission as well as where and how it competes.

Emerging multinationals' existing practices may create hurdles to learning in international markets. An Egyptian coffee chain internationalizing to the United Kingdom offers an example of this situation. When expanding into the United Kingdom, the firm continued to use its human resource incentive programs that were designed for the Egyptian market. Given the differences between the career orientation and objectives of the workforce in the domestic versus the foreign market, the incentive program did not work well to motivate employees in the U. K. operation. In this case, existing human resource practices became a cognitive blinder (Walsh, 1995), delaying the firm's expansion. Such blinders perpetuate competency traps resulting from capabilities that were valuable in the past but have become serious barriers to organizational adaptation (Levinthal & March, 1993).

Learning could be difficult especially for an expansion type emerging multinational whose organizational memory might become a barrier to absorbing the new knowledge gained in international markets (Casey & Olivera, in press). Here, the dynamics of forgetting and especially unlearning come into play. The firm's knowledge might be decaying, dated, or limited because of its local experiences. For instance, local knowledge about technology may lag behind international standards. Furthermore, knowledge about international markets and consumers may be inaccurate because of faulty or limited analysis or lack of experience. Knowledge about

institutions and how they work in host countries may be deficient. This would happen when new knowledge gained from international markets is forgotten because it is not firmly embedded in established organizational practices. Emerging multinationals may need to unlearn some of the beliefs they hold. They may unlearn how institutions in their own home countries function, as institutions in the countries that they target at might be significantly different (North, 1990). For instance, they probably need to unlearn the value of the underground economy in their home markets. They might also need to unlearn some of the competitive strategies that have worked well for them domestically and, instead, explore ways that will allow them to succeed in their chosen international arena. Purging existing knowledge is clearly vitally important.

When compared with their expansion-type peers, born global emerging multinationals, typically have a comparative advantage in learning about international markets. Because they are less embedded in their home countries, they are unfettered by experiences or organizational memory. Their flat structures make it easy to disseminate the knowledge gained from new markets. Their leaders are also close to the markets and key stakeholders and enjoy opportunities to learn from their interactions with these diverse groups. For these emerging multinationals, the loss of knowledge could be accidental—as they inadvertently forget to capture useful concepts and practices that they have improvised.

For both types of emerging multinationals, some existing knowledge may be degraded as they continue their expansion into advanced economies (Martin de Holan & Phillips, 2004). Unlearning can free up these firms' organizational memory and, thus, create opportunities to explore new concepts. In this case, unlearning can become a precursor to the learning that drives successful transformation (Tsang & Zahra, 2008). Of course, unlearning does not translate automatically into learning as efforts dedicated to unlearning might thwart attention to learning

(Globerson & Levin, 1987). Moreover, learning and unlearning are different processes that require different skills.

4.4 The Interplay between Unlearning and Learning

Moving from unlearning to learning often requires the infusion of different ideas and types of knowledge. It also demands experimentation with different systems and concepts. Fortunately, international expansion offers a variety of opportunities that can yield new knowledge of different types (e.g., marketing, product development, and competitive intelligence). To reap the benefits associated with this knowledge, integration is essential (Zahra, Ireland, & Hitt, 2000).

Integration starts with identifying and capturing new knowledge, defining its potential strategic importance, and connecting it to what the emerging multinational knows or does. As such, integration is an ongoing process that entails variety generation (creating many different types of knowledge), selection (identifying pertinent ones) and retention (persevering and exploiting) of particular types of knowledge. These activities require care as well as foresight because knowledge considered irrelevant today might become strategically valuable in the future. Similarly, some pieces of knowledge are worthless when considered alone but become crucially valuable when combined with other pieces. Managers making these judgment calls can miscalculate or fail to see linkages and even overlook capturing new knowledge.

Learning to make these judgment calls and linking them to potential industry evolutionary trajectories can promote "meta-learning", defined as learning to learn (Argyris & Schön, 1996). Meta-learning can revise managers' mental models of how the industry is likely to evolve and how competitive dynamics may unfold. Changes in managers' frames of reference and mental models can spur exploration that enriches innovation, reigniting the variation-

selection-retention cycle and subsequent learning. Clearly, learning requires expansion-type emerging multinationals to be better at unlearning. These firms need to unlearn many things they come to know in their search and synthesis process. This is a difficult task, as discussed below.

4.5 The Difficulties of Unlearning

As noted, for born-global emerging multinationals, unlearning is not a major challenge because they have few practices that are firmly embedded in their home countries. However, Huber (1991) observes that these companies do not start with a clean slate. Founders often bring their biases to their newly created companies and thus imprint their views on the companies' systems and mental models. Founders may also surround themselves with people who share their world views, further defining the new firm's world views. Consequently, these born-global emerging multinationals have to guard against such biases as they begin their operations.

Unlearning is a more complicated issue for expansion-type emerging multinationals.

Learning about opportunities and threats in advanced economies can pose a serious challenge to their existing practices that often reflect and dictate a dominant logic closely tied to their home markets. Even when unlearning happens naturally, it is difficult to realize its occurrence and potential consequences. Discarded concepts, ideas and practices might emerge from time to time as the firm and its employees come face-to-face with the cultural challenges in their new, foreign markets. For example, interactions with diverse foreign customers can remind employees of how things are done in their home markets, possibly delaying unlearning. Moreover, concepts, ideas and practices that need to be discarded in foreign markets might remain intact in home markets because of their usefulness and might even constitute the core of the organizational memory.

Such selective discard of knowledge in certain markets of the firm's operation makes unlearning particularly difficult.

Emerging multinationals are founded in emerging economies, which often have underdeveloped institutions. This is typically manifested in the prevalence of weak and inefficient formal institutions such as laws, regulations, information disclosure, governmental agencies, specialized professions and financial press. These economies are "[l]ow income, rapid growth countries using economic liberalization as their primary engine of growth" (Hoskisson, Eden & Wright, 2000, p. 249). They also have highly volatile environments that exhibit great uncertainty, significant government interference, unstable political and economic conditions and significant dependence on informal institutions (la Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1998; Peng, 2000). Formal and informal institutions largely determine firms' mental models and cognitions which typically frame their direction and strategic moves (Peng, 2003). Because of the strong role of informal institutions in emerging economies, networks that are grounded in social, political and economic connections are widespread. Some of these networks give rise to corrupt business behaviors. While officially abhorred, these practices are common and widely accepted as a normal part of business. If the same practices are used in international operations they represent serious crimes that can bring ruin to the emerging multinational and its leadership. Attempting to put an end to these practices through unlearning can bring managers face-to-face with the subtle but powerful social and cultural norms that are hard to change.

Emerging multinationals need to pay attention to the differences in the institutions that exist across countries, otherwise will fail to establish positions in advanced economies. However, this attention may be constrained by their dominant logic that is usually and deeply embedded in their domestic institutional environments (Prahalad & Bettis, 1986). This dominant logic may confine these firms' information interpretation processing to the old setting, overlooking the needs and expectations of advanced economies. Overcoming the dominant logic requires

effective knowledge integration and coordination in order to yield a cohesive picture of dispersed information and stimuli that can guide the emerging multinational's learning and unlearning processes.

Problems arise when the firm or its leaders deliberately attempt to unlearn something; disagreement might arise about the importance of what is to be unlearned and the best way do so. These disagreements are often culturally-laden. Some might view the origin of uniqueness to lie in the cultural heritage of the company's home market and therefore see opportunities to build upon this heritage. Unlearning these values can evoke a deep sense of betrayal to one's own national culture. It can also lead to employees' isolation and alienation from the very culture on which the company's initial success is based. Others might see the same values as obstacles to progress and conclude that it is best for the organization to rid itself of these values, if it hopes to succeed internationally. These divergent beliefs might frustrate the efforts aimed at unlearning. Debates about the best way to address these issues often trickle down into the rest of the organization, polarizing members who might also disagree on the merits of the approaches being followed. Some of these debates unleash serious cultural backlashes especially if the concepts being debated reflect underlying national norms that define employees' values. While some employees might appreciate the need for unlearning some of these values, others might believe they are abandoning their own cultural heritage. These differences in beliefs might stir conflicts, intensify resistance to change, and slow down emerging multinationals' expansion.

Some emerging multinationals use dual organization structures: one that serves their domestic operations while the other embodies their international activities. This duality can foster agility and flexibility but can also create and even perpetuate tensions as expansion accelerates. National cultural norms are likely to persist in domestic operations. Spillovers from

domestic to international operations are common and could create tensions for managers.

Friendship networks that pervade expansion-type emerging multinationals keep alive old practices, routines, and informal systems. These problems are compounded when employees are chosen from the domestic operations to lead international operations. Even with extensive training and socialization, the effect of the domestic experience might endure.

The situation is further complicated by the possibility of forgetting newly acquired knowledge. Such knowledge might dissipate as members of the organization fail to realize its significance in time, do not capture it fully, or do not store it in ways that allow others to retrieve it when necessary (De Holan & Phillips, 2004b). A manager of an emerging multinational's foreign subsidiary, for example, might learn something new in that market but fails to share the knowledge with employees or store it in a way that enables others to use it. It is also possible that new knowledge is purposefully abandoned through unlearning before it is deeply embedded in the firm's practices. This may happen because of a misjudgment that the knowledge is of little significance or even counter-productive.

4.6 The Effect of Organizational Origin on Unlearning

Our discussion thus far overlooks several contingencies that could have a profound effect on unlearning. For instance, an emerging multinational's organizational origin could have such an effect. Some of these companies, such as the Egyptian coffee chain mentioned earlier, are newly created and have operated for a short period of time in their domestic markets. The coffee chain also enjoys its independence as it has the resources and expertise needed for international expansion. The company's managers have unconstrained discretion in making their decisions independently. A company like this does not have to concern itself a great deal with unlearning or memory decay, except to safeguard against founders' cognitive biases (Huber, 1991a).

Instead, the company should focus more on avoiding bad habits and losing any new knowledge it has gained from its experience in international markets.

Some emerging multinationals, especially those from India and Korea, are parts of business groups, receive resources from these groups, and administratively report to them. The international expansion of such emerging multinationals is coordinated with other companies in their business groups. These emerging multinationals have to learn to avoid bad habits, unlearn, capture new knowledge and diffuse it to sister units, and safeguard against memory decay. Relationships with other members of the business groups make it essential to work hard to unlearn and learn, and to avoid forgetting valuable knowledge.

Still, other emerging multinationals, such as some of those from Mexico, are the offspring of former state monopolies that have been privatized to give them the discretion and resources needed to expand internationally. Privatization can bring about fundamental changes in these companies' knowledge bases. Yet, most of privatized companies have to unlearn many of the skills they have mastered as state monopolies that are immune from competition domestically. To transition from domestic to international standards, these companies need to retool their operations, rethink their branding of their products and customer service, and redefine the competencies needed to create value. As these companies become more active in international operations, some of the traditional practices may disappear through memory decay.

Finally, there are emerging multinationals that remain as state-owned enterprises. Some emerging multinationals from China belong to this category. Compared with their peers that have been privatized, the challenges of unlearning are even greater. These emerging multinationals have to abandon their reliance on the financial and institutional support enjoyed in their domestic markets, and prepare to compete in the level playing field overseas. Moreover, their status as

state-owned enterprise can become an obstacle when they acquire foreign firms or operate in industries that are related to national security. Considerable unlearning and adjustments are necessary to cope with such deterioration of status in foreign markets.

4.7 The Role of Entrepreneurial Capability

Like other companies, emerging multinationals entering advanced economies need to explore, identify and exploit opportunities. This requires gaining a thorough understanding of these firms' own capabilities, particularly their EC. Using EC, emerging multinational could compete in a different market space, using unique competitive approaches. Building and sustaining a firm's EC entail learning and unlearning as emerging multinationals attempt to effectively integrate their different resources, processes and capabilities to explore and exploit opportunities. This demands deftness in realizing and pursuing opportunities across multiple national markets.

Emerging multinationals' internationalization process often gives them access to new customers, innovation and technological hubs as well as several possibilities to experience new things that were not available or feasible in their local markets. Exploiting these opportunities in the new context requires firms to build an EC that allows them to simultaneously leverage their inherent capabilities while stretching and learning to build new ones. For this reason, learning by doing pervades the process of developing EC. This learning makes it essential for these firms to learn how to capitalize on their own idiosyncrasies (represented by their own resources and capabilities) in relation to the new environment in which they compete. Emerging multinationals also learn vicariously by observing and imitating other foreign and local companies, potentially expediting the development of their ECs. This is why sometimes learning to design, build and

use EC occurs as an integral part of the larger milieu of crafting these firms' international identity and developing their competitive arsenal.

Emerging multinationals seeking to build EC can learn across various opportunities, thereby enriching their knowledge by infusing new knowledge about operations and the various interdependencies among their different capabilities. These interdependencies emerge as firms learn to assemble their capabilities, aiming to understand their individual and collective contributions to the firm's strategies used in pursuing various opportunities. This learning process defines new links between capabilities that were previously unrecognized, allowing these companies to make appropriate resource allocations. This suggests that capitalizing on these interdependencies could spur the discovery (and even creation) of new opportunities in international markets, thus accelerating these firms' competitive positioning. For example, Haier, a Chinese manufacturer, targeted the US niche market of compact refrigerators and wine cellars as a means to enter the high-end products market. Haier exercised its home-based capabilities in a relatively safe environment that reinforced its learning efforts to adapt its capabilities (including EC) and develop new ones that are well attuned to the US market.

A key difference between exercising EC domestically and internationally lies in the time factor. The meaning of time differs from one business context to another, compelling firms to adjust their speed in spotting, creating and acting upon opportunities. Advanced economies usually experience rapid changes in their competitive landscapes because of rampant technological innovation. Consequently, emerging multinationals need to learn and develop a different pace at which they identify opportunities and exploit them in a timely fashion. Building the firm's EC promotes learning to capture and interpret the various signals in its new international environment in a timely manner. These interpretations are then mapped to these

firms' capabilities to enable the appropriate selection and further exploitation of opportunities.

For instance, Teva pharmaceuticals leveraged its capability to produce a wide spectrum of generic drugs by entering the US market at the time where national pharmacies were expanding. Effective timing has made the firm's existing capability appear more relevant to expanding chains that are willing to cut down their sourcing costs.

Of course, emerging multinationals do not experience the same degree of embeddedness in their home country. Still, the fact that they are internationalizing to a new environmental context with different characteristics underscores the need to unlearn while building EC. Sensitivity to the local context requires exercising EC differently in host markets from exercising them in the firm's home country. Environmental conditions that spur opportunity exploration will be different across the two settings, requiring these firms to unlearn and shift focus from analyzing past signals to understanding and interpreting new ones. For instance, spotting and foreseeing serious institutional voids are a source of entrepreneurial opportunity in developing economies, a skill that emerging multinationals need to unlearn as they move to advanced economies where institutions typically are well developed. The failed acquisitions in Germany and France by TCL Corporation, a Chinese consumer electronics manufacturer, could be traced back to its inability to realize that it needed to move beyond the capability to reduce costs, as was common in its home country. Beyond unlearning, TCL needed to experiment more before aggressively pursuing such a broad set of acquisition targets. Unlearning while building EC fosters experimentation, possibly safeguarding against dissipation of scarce resources.

4.8 Studying Unlearning, Learning and Entrepreneurial Capability

Given the subtlety and complexity of unlearning and learning as well as the time it takes for the processes to materialize, researchers are likely to encounter a myriad of difficulties in empirically studying them. The conditions leading to each of these phenomena and the theories attempting to make sense of them are numerous. The same could be said about the mechanisms through which unlearning and learning can influence EC and other various organizational outcomes. Tackling these issues is likely to require the integration of qualitative (especially ethnographic) and quantitative methods. Researchers may find it essential to use case studies, lab experiments, face-to-face interviews, mail surveys and archival data to study learning (Argote, 1999) and its effects on organizational outcomes. Given the unobservability of unlearning and learning, researchers may need to apply diverse methods to gather data and discern the dimensions of the phenomena being examined. Future research could address several important questions, as follows:

Is unlearning a precondition for learning? While this issue has been debated in the literature for nearly three decades (Tsang & Zahra, 2008), a satisfactory conclusion has not emerged. If unlearning is a precondition for successful learning, then managers need to devote the resources necessary to ensure unlearning. If not, then both unlearning and learning could be simultaneous targets for managerial action—which would affect the speed and quality of learning and subsequent decision making. These are important considerations in strategy making, introducing strategic change, reconfiguring the firm's value proposition, reconceptualizing the competitive arena and the effective design of EC and innovative business models.

When does unlearning stifle learning? A widely held assumption in the literature is that unlearning fosters organizational learning (Tsang & Zahra, 2008). Yet, it is possible that unlearning can handicap learning. Knowledge is not easy to dissect and separate. The loss of one

piece could reduce the value of other pieces. Discarding some supposedly obsolete practices can slow down or even stifle organizational functioning and subsequently learning. Researchers have not explored these possibilities even though there is recognition that some resources, such as knowledge, remain dormant till they are rediscovered and re-used. Experimental studies and simulations can enrich our understanding of these issues and the conditions under which unlearning induces versus handicaps learning and, as a result, different organizational outcomes.

How does the organizational heritage of the company influence its unlearning and learning processes? Heritage refers to a company's endowments (resources, reputation of founders, and regional or national advantages) at founding, including the socio-economic milieu in which it was created (Klepper & Sleeper, 2005). Some emerging multinationals come from countries whose cultures value deliberateness, careful analysis, and risk avoidance. Others come from countries whose cultures are attentive to global market realities and therefore favor and reward speedy decision making, agility, resilience and calculated risk taking (Cook & Yanow, 1993). Organizational and national cultures do not always coincide. Indeed, some emerging multinationals might have been created to circumvent the shortcomings of existing national cultural norms. The potential (in) congruence between the two value systems might have serious implications when selecting those practices to be unlearned. This is likely to be the case when the dual organizational structures we described earlier co-exist in the emerging multinational, causing tension among executives. In-depth case studies can help delineate these issues.

In what ways do emerging multinationals' internationalization objectives affect how and what they unlearn as they move to developed economies? International expansion often serves multiple purposes such as asset augmentation and/or exploitation, resource acquisition, capability exploitation, learning, search for new markets, and wealth creation. These different goals might

affect emerging multinationals' decision making and investment time horizons, possibly influencing the strategies used to unlearn and/or learn. Using survey, interview and archival data, taxonomies of emerging multinationals' goals could be constructed and applied to delineate key differences in their unlearning approaches. These analyses could be tied to emerging multinationals' origin and heritage as researchers explore the implications of different modes of unlearning for innovation, profitability and growth.

How different is EC in emerging multinationals compared to other companies? In learning and unlearning to build EC, emerging multinationals can draw upon their experiences, which vary based on size and type (born global vs. expansion). Thus, a question to examine is the empirical relationship between these firms' experiences and the learning and unlearning processes associated with building EC. One would expect smaller emerging multinational to have less sophisticated experiences related to learning and unlearning. Meanwhile, established companies are more likely to have better developed experiences or these experiences may not be easily accessible to provide them with learning advantages.

What are the effects of different opportunity types on emerging multinationals' learning and unlearning processes as they build EC? Building EC is focused on the exploration and exploitation of opportunities of different types. Empirically examining the effect of opportunity types on the learning and unlearning processes would yield fresh insights into the relationship between EC and these processes. One would expect opportunities closer to firm's existing business in a new international market to exhibit extensive unlearning processes, thus helping to adjust the firm's capabilities to the newly entered environment. Meanwhile, opportunities that are new to the firm's business are expected to exhibit radical, but sometimes slower, learning. Empirical research can help to clarify these differences and their implications for EC.

4.9 Conclusion

Organizational learning is essential for successful adaptation and superior performance. In this paper, we have suggested that emerging multinationals (especially those that maintain domestic operations while expanding) need to unlearn as a precondition to learning. We have also discussed the various challenges emerging multinationals may experience as they attempt to unlearn, noting that there are different ways to unlearn. We emphasized that unlearning *per se* does not automatically lead to learning; it merely sets the stage for those actions or activities that induce and capture learning. When unlearning occurs, it could be painful, time consuming and costly. It can also elicit strong negative emotions among the firm's employees. Yet, unlearning could also be an important forum for socializing employees and re-orienting them in ways that are consistent with the firm's changing identity and strategy. Learning provides the fuel that ignites emerging multinationals' entrepreneurial capabilities⁴, enabling them to explore and exploit lucrative opportunities that enhance value and wealth creation.

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Chapter 5 Family Firms and Social Innovation: Cultivating Organizational Embeddedness⁸

5.1 Abstract

Social innovations focus on solving some of society's most perplexing problems. We propose that family firms have an important role to play, along with other organizations, in promoting these innovations. This, in turn, enhances family firms' ability to create both social and economic wealth, thereby enjoying the privileges arising from their embeddedness in a community. To develop this proposition, we first define social innovation and discuss how it relates to other concepts, particularly social entrepreneurship. Next, we highlight the role of family firms in supporting and undertaking social innovations. Our discussion then focuses on key barriers to family firms' contributions to social innovations. Finally, we outline promising research directions, suggesting that the study of social innovations can help to clarify the social role of family firms.

5.2 **Introduction**

Mounting evidence highlights family firms' contributions to their communities and societies (Bingham, Dyer, Smith, & Adams, 2011; De la Cruz Deniz Deniz & Suarez, 2005; Uhlaner, van Goor-Balk, & Masurel, 2004). Family firms create jobs and introduce innovative technologies that improve their communities' quality of life. They also enrich their communities' cultural, artistic, and social life (Dyer & Whetten, 2006). These firms' embeddedness in their communities also creates an expectation that they will contribute to the common good (Perrini &

⁸ This chapter is written by Shaker A. Zahra (University of Minnesota), Rania Labaki (University of Bordeaux IV, France), Sondos G. Abdel Gawad (ESADE, Spain), and Salvatore Sciascia (IULM University, Milan). This chapter is forthecoming in L. Melin, M. Nordqvist & P.Sharma (Eds.), *Sage handbook of family business*.

Minoja, 2008; Zahra, 2010). Family firms are usually interwoven with their communities and derive considerable value from their identification with them.

Despite these crucial contributions, the social role of family firms has fuelled debate. Some believe that family businesses enrich the financial (Amit & Villalonga, in this volume; Anderson & Reeb, 2003) and social performance of a country. They also note that family firms engage in socially responsible practices on their own (Capron & Quairel Lanoizelée, 2007), while pursuing financial and socioemotional wealth creation (Astrachan & Jaskiewicz, 2008; Berrone, Cruz, & Gomez-Mejia, in this volume; Gomez-Mejia, Haynes, Nunez-Nickel, Jacobson, & Moyano-Fuentes, 2007). Yet, others have noted that some family firms gain considerable powers which they use to stifle competition and innovation (e.g., Banfield, 1958; Morck & Yeung, 2004; Putnam, Leonardi, & Nanetti, 1993).

These conflicting views on family firms' social role stems, in part, from researchers' broad and often abstract focus on "social performance" (e.g., Barnea & Rubin, 2010) and "corporate social responsibility" (e.g., Perrini & Minoja, 2008). We believe that a more focused approach that examines these contributions to particular facets of this role might yield deeper insights. One area where these contributions become evident is social innovation, defined as "new concepts and measures that are accepted by impacted social groups and are applied to overcome social challenges" (Hochgerner in Howaldt & Schwarz, 2010, p. 23). These innovations address society's most perplexing problems. Given family firms' embeddedness in their communities and the symbiotic relationships that exist between them and their society (Zahra, 2010), the contributions of family firms to social innovation is the focus of this chapter.

Objective and Contributions

Specifically, we examine the potential contributions of family firms to social innovations, highlight the key factors that enhance (or limit) these contributions, and outline key areas worthy of future research. While definitions of family firms abound in the literature, we define them as those companies that benefit from the strong presence of an owner family that controls a large percentage of their equity (Anderson, Duru & Reeb, 2009; Zahra, 2005, 2010). To understand these firms' role in social innovations, we will first define these innovations and how they relate to social entrepreneurship. Next, we will discuss the role of family firms in promoting social innovations. We will then highlight key inducements and barriers to family firms' involvement in social innovations. We conclude by outlining key areas that require research attention and the theories that could be useful in this regard.

Our focus on social innovation is timely because of the growing recognition of the multiplicity and complexity of the social issues left unaddressed by governments and states. Family firms have the credibility, resources, and capabilities that could be combined with those of other groups to ameliorate these problems. As a result, communities and societies have come to expect private and public organizations to join forces to address these persistent problems through collective action. Private companies and public organizations often have different but complementary resources, skills and capabilities that could be deployed to introduce innovative solutions to these problems, without regard for profit.

Studying social innovations also allows us to examine how family firms add to the creation of social *and* financial wealth. Social wealth refers to the social value created minus social costs (Zahra et.al., 2009). By focusing on social innovations and social wealth creation, we can better appreciate what the consequences of family firms' embeddedness in their communities are and how they use non-market strategies to adapt, gain and retain legitimacy and amass social

capital (Zahra, 2010). Yet, embeddedness challenges the autonomy of family firms and sometimes constrains their ability to gain access to resources or even revise their missions.

Social innovations also enable family firms to gain greater discretion when navigating their often competitive landscape. Moreover, by connecting with other companies, non-governmental organizations (NGOs) and governmental agencies, family firms become better linked to key players in their broader ecosystems where they can influence and shape events, learn and gain new knowledge, ensure the supply of resources needed for their operations, and use as well as apply their unique capabilities in creating wealth for the common good. Social innovations further bond family firms with their external environments, enabling these firms' executives to manage critical interdependencies that could influence their long-term performance and even survival. Focusing on social innovation, therefore, gives researchers an opportunity to understand how family firms' embeddedness can influence their strategic choices and actions, potentially improving their entrepreneurial activities.

Studying social innovations can also contribute to improving our understanding of how these companies create socioemotional wealth. Family members have their own social causes which they would like to support through active engagement. This can contribute to creating business opportunities that support family firms' growth. Participation in social innovations could also fulfill the social and relatedness needs of family members, creating greater satisfaction. This, in turn, can promote these family members' willingness to explore additional areas for social innovation, generating positive social capital that can enhance the exploration of new opportunities (Zahra, 2010), promoting entrepreneurship and market responsiveness.

5.3 Social Innovations and Entrepreneurial Capability among Family Firms

Social innovations mean different things to different people. As Brooks (1982) notes, they typically embody such a different set of activities as market innovations (e.g., introducing new forms of transacting), management innovations (e.g., developing and institutionalizing new forms of organizing), political innovations (e.g., building new forms of coalitions), and institutional innovations (e.g., creating new organizational models and forms). These innovations target social issues and needs that have not been satisfactorily addressed because of their complexity and costliness, market failure, institutional voids or gaps (e.g., the collapse of central governments, the lack of social regulations and systems), and the aggressive pursuit of privatization and austerity programs around the globe. Privatization programs have often been accompanied by efforts to reform the content of state social networks (e.g., types of help offered) or how these efforts are supported (i.e., who pays for which services and how much the pay is).

5.3.1 Social Innovations vs. Reform Programs

Social innovations typically go well beyond the familiar "reform" programs enacted by states or countries. In Table 5.1, we differentiate between these reforms and social innovations. Reform programs are issue-driven and cost-oriented with quantitative performance criteria. These reforms might change the way these programs are organized and managed. In contrast, social innovations typically focus on bringing about fundamental social changes by altering (or improving) the way things are done (processes), who is involved (e.g., key actors), and the goals emphasized (e.g., improving quality of life). As we note in Table 5.1, these innovations often require the effective partnership of private and public institutions (corporations, government, not-for-profit organizations and NGOs) along with traditional institutions (family, religious, and

tribal institutions) to address social issues. These partnerships focus on developing and implementing innovative solutions, not only reducing costs.

Table 5.1 Reform Programs vs. Social Innovations

Variables	Reform Programs	Social Innovations
Focus	Public services	Social issues, problems and needs.
Objective	Usually cost reduction by streamlining operations and processes	- · · · · · · · · · · · · · · · · · · ·
Agents of change	Public bureaucrats and politicians	Coalitions of different companies
Performance Metrics	Cost, timeliness, efficiency, number of services, and number of recipients	Same as reform programs, plus empowerment, improving quality of life, and promoting civic engagement.

5.3.2 Social Innovation vs. Social Entrepreneurship

Social entrepreneurship "... encompasses the activities and processes undertaken to discover, define, and exploit opportunities in order to enhance social wealth by creating new ventures or managing existing organizations in an innovative manner" (Zahra, et al., 2009, p. 522). Social entrepreneurs locate needs that require attention, setting the stage for social innovations of different types and then diffusing them locally or even internationally (Zahra et. al., 2008). Conversely, social innovations generate momentum for new forms of organizations, processes and practices that provide the services necessary to respond to social needs and create social wealth. Only some social innovations lead to the creation of social ventures. Many of these social innovations take the form of collaborative ventures that address local issues and concerns, without regard to scaling up their operations or pursuing a profit—as commonly done in many social ventures (Zahra, et al., 2009).

Overall, three qualities distinguish social innovations from social entrepreneurship. First, these innovations are broader than social entrepreneurship which frequently focuses primarily on new venture creation and growth. Second, social innovations emphasize addressing social issues and improving the social and economic wealth of their communities. These innovations focus on enhancing and enriching the quality of life in a community, region or society. Social entrepreneurs typically pursue the dual goal of addressing social issues *and* making a profit (Zahra, et al., 2009; Zahra, et al., 2008). Third, social innovators rely on collective action in pursuing their goals. Social entrepreneurs most often work independently or in very small teams as they create their ventures and devise solutions to chosen causes. Social ventures' founding teams are usually brought together by common interests, complementary skills or the desire to make a profit. The differences between social innovations and social entrepreneurship are summarized in Table 5.2.

Table 5.2 Social Entrepreneurship vs. Social Innovations

Variables	Social Entrepreneurship	Social Innovations
Focus	Social venture creation and growth	Using multiple organizational forms (including social ventures) to address social issues, needs and aspirations
Priorities	Addressing social issue while making a profit	Addressing social issues without regard for profit.
Locus of activities	Independent entrepreneurs	Collective action

The differences noted in Table 5.2 between social innovations and social entrepreneurship suggests that social innovations can have powerful effects on family firms' entrepreneurial capabilities⁴. Entrepreneurial capability refers to a firm's capacity to conceive, identify and pursue opportunities associated with social issues. This capability is at the core of what family firms' strategic renewal activities that promote risk taking in their operations as well as revitalize how they position themselves and compete. These capabilities can be an important means of successful learning that revises family firms' knowledge bases and enables them to chart new strategic directions. To understand these important contributions, we need to reflect on the role of innovation in family firms' strategic moves, especially their innovativeness.

5.4 Family Firms' Innovativeness

Innovativeness refers to a firm's ability to introduce discoveries and novel solutions through experimentation and creative problem solving (Lumpkin & Dess, 1996). As such, it can occur in the firm's products (goods and services), operations, decision making processes, internal organizations, resource allocations, and strategies. Innovativeness enhances a company's competitiveness.

The literature on family firms' innovativeness and entrepreneurship is growing (McKelvie, McKenny, Lumpkin & Short, in this volume). Evidence indicates that family firms are innovative, though they spend less on R&D activities than other companies (Zahra, 2005). One reason is the "long-term nature of family firms' ownership [that] allows them to dedicate required resources for innovation" (Zahra et al., 2004, p. 363). Family firms have several other qualities that can promote innovativeness, including their external orientation, decentralized structures, and focus on long-term investment horizons (Zahra, et al., 2004). Research suggests that the stronger the long-term orientation, the higher the firm's innovativeness because longer

time horizons stimulate experimentation and unleashes creativity (Lumpkin et al., 2010). Family ownership is also conducive to venturing into new markets to develop new revenue streams that can enrich family members while creating growth options. When the family is also involved in the management of the company, firms are more likely to develop more radical innovation than non-family firms, except when the CEO enjoys a long tenure (Zahra, 2005). Innovativeness also increases with generational changes in family firms' leadership.

What makes these research results intriguing is the growing recognition that some family firms are reluctant to support R&D. Morck et al. (2000) reached this conclusion using Canadian data. Recently, their results have been further validated by Munari et al. (2010) in Europe, by Block (2010b) in the USA and by Muñoz-Bullòn and Sanchez-Bueno (2011) again in Canada. According to Munari et al. (2010), higher shareholdings by families are negatively associated with R&D investments because controlling families tend to be risk-averse and need to stabilize cash flow. Also, family owners are less able to monitor managers because of family conflicts and may seek private control-oriented benefits; i.e., dividends over firm growth (Block 2010a). Furthermore, Muñoz-Bullòn and Sanchez-Bueno (2011) note that family firms are limited in resource availability, which may reduce their capability to invest in R&D.

Research on family firms' innovativeness has long viewed R&D spending as well as product and process innovation—related activities through a competitive lens. Accordingly, innovative activities help the firm to serve the customer better or cheaper than rivals and thus to increase a firm's wealth. However, there are limits to the competitive and economic gains family firms are able to achieve through innovation. Products and processes become obsolete quickly and knowledge about them diffuses, encouraging imitation. Competitors can also invent around rivals' innovations. Gains from family firms' innovations could be sustained or even enhanced if

family firms also engage in social innovations. Social innovations help family firms make significant inroads into market arenas, even though this is not always the primary motivation for family firms to pursue these innovations. Yet, researchers have not examined family firms' social innovativeness and their implications for companies or communities. This research gap is puzzling, given the growing attention to family firms' social role.

Family firms' innovativeness can improve social conditions and enhance the quality of human existence. The rapid pace of social changes around the globe means that social issues change constantly, becoming global in their scale and effects. These issues, in turn, demand innovative solutions. Further, several governments have dramatically cut their spending on social services such as community development and education, emphasizing the necessity of addressing rising social challenges, albeit with fewer resources – a classic challenge for innovators.

Globalization has also increased awareness of opportunities for social improvement.

Innovativeness offers entrepreneurs the tools to spot promising opportunities to increase social wealth. Poverty, malnutrition, disease, illiteracy, and unemployment have been common problems in developing and emerging economies. Many of these problems are now afflicting developed economies as well. Therefore, innovations that tackle these problems could be adapted and introduced across the globe. This makes it possible to reduce costs, share expertise, and build momentum for developing and implementing social innovations. As family firms join other groups seeking to address these issues, they are also likely to learn about the dynamics of innovations and how to cultivate their embeddedness in their communities. As a result, researchers need to examine the intimate links between the characteristics of family firms and the social innovations they can develop alone or in collaboration with other groups.

5.5 Family Firms' Contribution to Social Innovation

Over a decade ago, Litz and Kleysen (2001, p. 335) inspired research by asking the question, "What is the relationship between the presence of family within a business enterprise and its capacity for innovation?" While scholars have studied the social orientation of these firms (e.g., Dyer & Whetten, 2006) and their entrepreneurial activities, only a few have examined innovations from a social perspective (e.g., Wagner, 2008). The few studies that have been published to date suggest that family businesses are more socially oriented and innovative than other businesses. Still, some have observed that families may take ethical risks as part of their entrepreneurial activities (Fisscher, Frenkel, Lurie, & Nijhof, 2005), caring more about their own needs to the detriment of their societies, engage in different forms of corruption, and even usurping minority stakeholders' wealth (Anderson, et al., 2009; Morck & Yeung, 2004).

Currently, there is limited empirical research on family firm's social role. Yet, it is worth reflecting on the key findings to better understand what family firms can do to promote social innovations. Researchers have studied the social orientation of family businesses—applying different theoretical perspectives that include stewardship, corporate social responsibility, corporate citizenship, social entrepreneurship, philanthropy, sustainable development, and socioemotional wealth, among others. While these studies have oftentimes relied on common theories (e.g., stewardship and stakeholders theories), confusion persists on the definition and content of the constructs used to gauge the social orientation of family firms. Researchers also appear to define social orientation in broad terms to denote their commitments to external stakeholders as well as their adherence to ethical codes of conduct. Applying this perspective, some researchers propose that family firms are more socially oriented than other businesses. This research suggests that family businesses contribute the most to the economy from financial (Anderson & Reeb, 2003) and social perspectives (Allouche & Amann, 1995). Other researchers

suggest that families may consider ethical issues as integral parts of entrepreneurial activities (Fisscher, et al., 2005) and justify their active involvement in corrupt business practices (Morck & Yeung, 2004). To better appreciate the diversity of existing views on the social role of family firms, in Table 5.3 we present a summary of prior research. Though our review is not exhaustive, it clearly shows that there is no agreement on the nature and effect of this social role.

Table 5.3
Overview of Empirical Research on the Social Role of Family Firms

Study	Focus	Key Findings
Allouche & Amann (1995)	Differences in social performance between French listed and non listed family and non-family firms.	Higher levels of performance referring to less employee turnover, higher employment flexibility, longer tenure, higher compensation, and higher levels of employee training and skill development.
Dyer & Whetten (2006b)	Social responsibility activities in 500 largest U.S. companies using data from S& P 500	Family businesses are more concerned about CSR and exhibit a more positive CSR behaviour than non family businesses.
Uhlaner, Goor-Balk, & Masurel (2004) Graafland (2002)	Survey of CSR in Dutch firms Survey of CSR in Dutch firms	Higher awareness and corporate sustainability activity of family firms. Perceived social responsibility is higher in firms where the family surname is included. Family firms are more concerned about CSR and exhibit a positive relationship between long-term added value CSR activities.
Mignon (2000)	Qualitative survey of French family firms' longevity antecedents	Social responsibility and values are key in explaining the family firms longevity.
De la Cruz Deniz Deniz & Suarez (2005)	Survey of Spanish family firms' determinants of different corporate social orientations and behaviours.	Family firms are not homogeneous regarding their social involvement and vision of social responsibility.
Gnan & Montemerlo (2002)	Survey of Italian SMEs	Family firms are unlikely to uproot their employees; they usually maintain their installations in the original places; and the owner families generally sit on the boards of hospitals, churches, schools, and charities that contribute to the welfare of the local community.
Block (2010a)	Relationship between family firms and downsizing in S&P 500	Family owners care more about their reputation for social responsibility than do other owners, motivating them to pursue less severe job cuts.

Study	Focus	Key Findings
Craig & Dibrell (2006)	US small and medium-sized firms	Family firms are better able to facilitate environmentally friendly firm policies associated with improved firm innovation and greater financial performance more effectively than their nonfamily competitors.
Niehm, Swinney, & Miller (2008)	Antecedents and consequences of community social responsibility (CSR) for family firms operating in US small and rural markets.	Commitment to the community, community support, and sense of community, account significantly for the variation in family business operators' CSR.
Miller, Le Breton- Miller, & Scholnick (2008)	Small Canadian family and non family businesses	Stewardship is manifested by unusual devotion to the <i>continuity</i> of the company, by more assiduous nurturing of a <i>community</i> of employees, and by seeking out closer <i>connections</i> with customers to sustain the business.
Wagner (2008)	Panel data for a set of U.S. firms	Moderating role of family firms on the link of sustainability innovation and performance. Being a family firm does not have a positive effect on actions that are beneficial for sustainability
Anderson, Duru, & Reeb (2009)	US publicly listed family and non family firms	Family firms exploit opacity to extract private benefits at the expense of minority investors.
Morck Yeung (2004)	Dimensions of societal progress (economic development, physical infrastructure, health care, education, quality of government, and social development) of family-controlled firms in 27 of the larger industrialized countries in the world.	Countries controlled by family businesses are more backward in a number of dimensions (worse public goods including worse infrastructure, worse healthcare, worse education, and more irresponsible macroeconomic policies) because family businesses seek to protect their own parochial interests at the detriment of the broader societies in which they are embedded by fostering corruption.

As the research cited in Table 5.3 makes clear, family businesses are not homogeneous in terms of their social orientations and behaviors (De la Cruz Deniz Deniz & Suarez, 2005).

Innovations are also likely to change over the course of family firms' life cycles (Bergfeld, 2011), reinforcing the need to specifically examine family firms' contributions to social innovation over time. The portfolio of these innovations is likely to change as family firms undergo their life cycle transitions.

One important factor that can explain this heterogeneity is these firms' geographical locations and the associated cultural context. Cultural and competitive differences across regions are expected to create pronounced differences in these firms' perceived incentives to pursue social activities (Table 5.3) and innovation. For example, family firms in developing countries may view social innovation as a means to address institutional failure, gain acceptance among the political elite and build relational contacts with special stakeholders (Bruton, Ahlstrom, & Obloj, 2008). As a result, social innovations become an important driver of these firms' business practices to improve access to state aid and debt financing. Similarly, using social innovations to establish strong ties with powerful stakeholders may counterbalance the obligations that strong extended family ties may create in some world regions (Khavul, Bruton, & Wood, 2009). Thus, the type and frequency of the social innovations family firms implement are expected to be an outcome of their cultural, competitive and institutional factors.

Social innovations can make a major, positive difference in the case of family firms. These innovations provide the opportunity and the formalized means to focus family firms' corporate social responsibility (CSR) activities. Social innovations help family firms identify and target those issues and causes that can have significant social impact while enhancing these companies' market positions. Family firms often focus on innovations in the vicinity of their immediate customers and markets. This focus would reflect these companies' interest in remaining close to their businesses' center of gravity while rationing the use of their limited resources. As they gain experience in collaborating with other organizations and groups, family firms might pursue bigger projects by leveraging their expertise and resources. Family firms might also join other groups in drawing attention to the more complex issues facing their community, industry and society. With their commitment to social innovation proven, family

firms become an integral part of a growing movement that brings about desirable social change--without damaging their own reputation or market standing.

Family firms can also contribute to the success of social innovations by providing the technical and other types of expertise that not- for-profit organizations lack. Because some social issues are complex, solving them may require significant resources and "patient" capital over multiple years. These resources are not charitable contributions. Rather, they are important investments in building and cementing family firms' ongoing relationships with their external environments and stakeholders. The amounts and types of resources that family firms devote to social innovations is likely to vary based on their interests, the congruence of these innovations with their missions, and the magnitude of expected social outcomes. Paybacks and gains from social innovations cannot be measured solely using traditional financial models or economic criteria; these innovations contribute to social wealth.

Family firms can also contribute to social innovations by serving as a bridge that connects different actors who have an interest in promoting these innovations. This bridging role enables different parties with different cultures, goals and agendas to negotiate their differences and participate in these innovations. This role is conducive to family firms recognizing valuable business opportunities that they can successfully exploit. Given these potential contributions by family firms to social innovation, we should ask: What motivates these firms to engage in social innovation in the first place? Understanding these motives can provide rich insights into these families' extent and durability of the commitments to social innovation, as discussed next.

5.5.1 Inducements to Family Firms' Contribution to Social Innovation

Whereas some of the factors that encourage family firms to pursue social innovation are common to all organizations, others are unique to family firms. Below, we discuss key factors that can promote social innovations and highlight what distinguishes family firms in terms of the inducements to their contribution to these innovations.

Financial vs. Socioemotional Wealth Considerations

Social innovations provide a forum where family firms can connect to their stakeholders in their community, acquire valuable social capital, enhance their legitimacy, and improve their reputations and standing in their markets. Social innovations can also enrich a community's quality of life and may increase demand on family firms' products, thereby enhancing their financial performance. Improved quality of life could also help attract civic-minded employees who can work with these companies and thus contribute to improving the quality of the family firms' intellectual capital. These gains could improve family firms' performance.

Besides financial wealth considerations, connecting to external stakeholders is a good reason for family firms to champion and pursue social innovation. According to social exchange theory, parties will engage in mutually beneficial relational exchanges in pursuit of both tangible and intangible outcomes (Emerson, 1976). Social innovations are oftentimes intangible and their value lies in the satisfaction of transacting parties, a key determinant of future repeated exchanges (Makoba, 1993). Pursuing social innovation, therefore, generates benefits through exposure to various external stakeholders, co-developing these innovations with partners and creating inter-partner synergy. Family firms are best positioned to harness these effects because of the prevalence of altruism and long term orientation.

Altruism in family firms enables generalized reciprocity as a rule of social exchange theory. Generalized reciprocity refers to indefinite reimbursement period that lacks immediacy of returns. As a result, family firms will be best positioned to leverage their altruistic behavior to connect to external stakeholders through social innovation. However, sustaining these

connections is time consuming and requires perseverance on the part of all parties. Family firms have the necessary extended time horizon to nurture their complex relationships and harvest their long-term implications (Lumpkin & Brigham, 2011).

Participating in social innovations also provides an opportunity to maintain or increase the socioemotional wealth of the family. Engaging the next generations of family firms in the dynamics and challenges of social innovation can help the regeneration of their social capital by continuously building alliances and partnerships within and across industry lines with community organizations and NGOs. This training also prepares the next generations of family members to independently lead their own organizations, pursue their own civic interests, and develop their own networks. Members of the next generations can also learn new skills and different ways of managing which they can then transfer to their own family firms, contributing to the well-being of their family and other employees. Exposure to different knowledge sources can further improve the ability of members of a family's next generations to spot important opportunities for profitability and growth.

Sometimes, the pursuit of social innovations that increase socioemotional wealth can be detrimental to a family's financial wealth. This problem arises because family and the non-family stakeholders, in particular the minority stakeholders differ in the value they attach to socioemotional wealth and their preferences of the best approaches to achieve it. Some have noted that family firms expropriate wealth at the detriment of the society (Anderson, et al., 2009; Fisscher, et al., 2005; Morck & Yeung, 2004). The legal and cultural characteristics and/or gaps in a country play a big role in explaining potential discrepancies. These existing gaps may lead family firms to "take charge" of the development of the community through social innovation while amassing their own financial wealth. This is especially true in countries with major

economic problems, where corruption is widespread. Although sometimes non-family stakeholders are often aware of potential financial expropriation done by family firms, they may believe that the social benefits provided by the family business outweigh the financial expropriation (Goel & Labaki, 2010). These social benefits ("social dividends") could relate to the goodwill resulting from privileged relationships that the family employs "illegally" but benefit the business (Sachs, Dieleman, & Suder, 2008).

To summarize, social innovations serve multiple important purposes with regard to the next generations of family firm owners. They help connect family firms with external stakeholders. They also help empower and train members of the next generation(s), enhancing their leadership potential. These innovations allow members of a family's different generations to collaborate and make use of their respective resources, abilities and skills, creating a sense of commonality and growing cohesion across these generations. This cohesion facilitates the accomplishment of the family firms' financial and non-financial goals. It is also useful in resolving potential conflicts that could arise from these companies' missions and strategies.

Family vs. Non-Family Business Characteristics

Clearly, family firms are well positioned and have good reasons to contribute to social innovations which, in turn, can hone their entrepreneurial capabilities⁴ that improve their competitive advantages. However, as we indicate in Table 5.4, these advantages arise from these firms' flexibility in resource mobilization for social innovations, selectivity in pursuit of particular types of innovations, timing and speedy decision-making processes related to initiating social innovations, and the continuous commitment to social causes. A source of advantage for family firms lies in the ideologies and priorities that guide their decision-making and resource allocations as well as commitment to particular social causes.

Table 5.4
A Comparison of Family and Non-Family Firms' Social Innovations
Type of Firm

Variable	Family	Non-Family
Speed of the decision- making process related to social innovation	Fast	Slow
Timing of decisions related to social innovation across the business life cycle	Early, middle and late life cycle stages.	Mainly late life cycle stages
Strength and structure of social networks and partners	Predominantly closely-knit family and local /regional communities.	Predominantly weak but dispersed national and international partners.
Focus of Involvement	Causes related to the sphere of family firms' operations and networks and to the family background.	More akin to standard corporate social responsibility practices
Investment Ideology	Social-business portfolio	Primarily business portfolio
Social innovation elicitors	Mainly guided by the family business continuity across generations as a means to transfer values to and involve the next generation, and to strengthen family cohesion.	Mainly guided by competitive, ideological and regulatory considerations as a means to survive and increase performance.
Resource Mobilization	More Flexible	Moderately Flexible

The differences we highlight in Table 5.4 suggest that family firms are likely to use their entrepreneurial capabilities⁴ to target different types of opportunities, benefiting from different network-based relationships that reinforce their commitment to select social issues. These relationships renew and create social capital (Zahra, 2010), a key ingredient in transferring

knowledge and other resources from other organizations engaged with family firms in developing social innovations. Family firms' deep involvement in these innovations also facilitates their learning, allowing them to become more proficient in selecting and pursuing particular opportunities. As entrepreneurial capability becomes better developed and deployed, family firms can also identify a wider array of social issues in which they can participate. Having such entrepreneurial capability and honing it over time enables family firms to successfully pursue promising opportunities for social innovation.

5.5.2 Barriers to Family Firms' Contribution to Social Innovation

Despite the importance of social innovations for family firms, several factors might inhibit their participation in developing, diffusing and implementing these innovations. For example, social innovations have several features that distinguish them from commercial innovation. According to Austin et al. (2006), there are three key differences between social and commercial innovation. First, while commercial innovations are primarily oriented to generate private gains, social innovations are more concerned with creating social value. Second, while the effects of commercial innovation may be easily measured by well-known indicators of profitability and/or sales growth, the performance measures for social innovation are less standardized. Third, financial and human resources are more difficult to be mobilized for social innovation than commercial innovation, because of the limited allure of potential financial return for investors and employees.

Other differences exist between social and commercial innovations, reflecting the nature of the opportunities addressed. Zahra et al. (2008) note that there are four main features that distinguish social opportunities. First, compared to commercial opportunities, social opportunities are characterized by higher prevalence, i.e. the social needs to be satisfied pervade

a larger global population. Second, social opportunities are more urgent and require quick, immediate responses. Third, social opportunities are less accessible; i.e., they call for innovative solutions to problems that are unlikely to be met through traditional means in arenas less accessible to traditional providers. Last, social opportunities are characterized by radicalness, and radical innovation is needed to solve problems of lower accessibility and higher prevalence and urgency.

The above-mentioned variables may limit the potential contributions of family firms to social innovations. Together, these features make some social issues difficult to comprehend. Moreover, several factors related to family firms create additional difficulties in this regard. These include: the relational conflicts, the misunderstandings and misuse of altruism, the perceived riskiness of social innovations and their implications for the family firm, and the transient versus sustainable nature of these innovations, as discussed next.

Relational Conflicts

Family firms are "fertile fields for conflict" (Harvey & Evans, 1994, p. 331). They are often plagued by relational conflicts that include tension, animosity, and annoyance among group members (Kellermanns & Eddleston, 2004). Jehn (1995) posits that relational conflicts usually have greater negative effects in highly closed and interdependent communities, such as family firms, than in other social groups. Further, relational conflicts often overshadow task conflicts, or the disagreements that refine the firms' goals and strategies by considering options more comprehensively (Jehn, 1995; Kellermanns & Eddleston, 2004). Resolved satisfactorily, task-related conflicts could improve and enrich organizational performance. As relational conflicts surface, members of the organization may confuse them for task-related conflicts and vice versa. This can delay effective interventions intended to address task-related conflicts.

Relational conflicts usually arise from different perceptions regarding values, priorities, status, and other factors that determine interaction among the owner family members. Sibling rivalry might also intensify and perpetuate these conflicts. Relational conflicts often have negative effects on innovative activities. In fact, some research shows a negative association between relational conflicts and innovation behavior and group performance (Pelled, 1996)). These results may reflect the fact that relational conflicts reduce employees' ability to recognize innovation opportunities and exploit them by integrating heterogeneous knowledge sources (Jehn & Bendersky, 2003). Relational conflicts, that afflict family members, could become a barrier to social than commercial innovation. On the one hand, the greater difficulties encountered in measuring potential and actual results of social innovation may hamper the possibilities of agreement among family members on the actions to be taken. On the other hand, the fact that social innovations are more concerned with creating social value than private gains could raise the inertia of those family members that are just interested in dividends because it will be non-active in the management of the firm.

Altruism as an Impediment to Social Innovation

In family firms, altruism sometimes colors managers' perceptions of the quality of skills and abilities of other family members. As a result, altruism might reduce family members' monitoring and honest assessment of each other's contributions (Schulze, Lubatkin, Dino, & Buchholtz, 2001). Parents in particular may also act generously toward their children, compensating them well above their real contributions to the business. However, asymmetric family altruism may lead to distributive injustice, where less competent family members receive more support than the better performing members or non-family members. Misguided altruism might lead some family members to engage in self-indulging activities, instead of building the

firm's social or market position. Thus, the company's resources are consumed for self-gratification, instead of building effective relationships with the external stakeholders.

Over time, a focus on self-gratification might lead to diverting a firm's resources away from social innovation, whose value is uncertain. This situation is more problematic for social than for commercial innovation because of the pre-existing difficulties in mobilizing resources. In other cases, family members may adopt questionable social causes and divert important firm resources to support social innovations that might have little redeeming social or organizational value. These behaviors may impede the pursuit of other compelling social opportunities that require urgent interventions and massive resource mobilization for radical innovation.

Riskiness of Social Innovations

Despite the excitement surrounding social innovations, compelling empirical evidence about their implications does not exist. The bulk of existing evidence is anecdotal in nature. However, social innovations are risky and in most cases it is hard to find a partner to share the risks involved. Given the low accessibility of social opportunities, family firms might have to face the risk of opportunity exploitation unilaterally. In the best case of having a partnership, the diversity of partners can fuel opportunism and free riding problems. Given the social capital to be gained from social innovations, some companies might pledge their support and involvement but fail to deliver. Partners may also have incongruent goals and decision making styles.

Other problems could exacerbate the risks associated with social innovations. For instance, partners often work under internal organizational constraints that could slow down the flow of resources and other types of commitments. Poor partner selection and the complexity of coordination can undermine the success of social innovations because participating companies often have limited controls on social innovations. The failure of these innovations can damage

the family firm's reputation, weakening its market position and performance. Together, these factors might limit family firms' interest and participation in social innovations, creating risk-adverse organizations (Naldi, Nordqvist, Sjöberg, & Wiklund, 2007). This risk is likely to be higher for social than for commercial innovation because of its higher radicalness.

Sustainability of Social Innovations

Involvement in social innovations also serves as a means of ensuring a family firm's continuity for future generations. However, by definition, most social innovations are not sustainable because they spot urgent opportunities and have their own short life cycles. In the case of longer life cycles, benefits from social innovations vary across the stages of these cycles. Further, as social innovations become successful, they may attract more groups of stakeholders to participate, diffusing the family firms' gains. The success of social innovations also invites imitation, which increases social wealth but reduces family firms' ability to appropriate any idiosyncratic reputational or financial gains that might result. This risk is higher for social than commercial innovation, given the global prevalence of social opportunities. These factors might limit family firms' willingness and ability to participate in social innovations.

5.6 **Promising Research Directions**

The important role that family firms play in promoting social innovations offers researchers an opportunity to explore several issues. In particular, several issues deserve systematic research attention. These issues centre on family firms' social orientation, variety of social innovations, level of family firms' social engagement, the relationship between financial and social wealth, and the link between internationalization and social innovations.

Family Firms' Social Orientation

Earlier, we noted the paucity of empirical research into the social orientation and responsibility of family firms. We have also highlighted some key studies that examined family firms' social responsibility in Table 5.3. Given the social focus of family firms, it is essential to examine these issues closely in future research. There is a considerable body of research on both CSR and socioemotional wealth. Future researchers could build on the progress made in this research when mapping their research agenda.

Future studies need to give special attention to the dimensions of social orientation that might be especially unique to family firms. Once these dimensions are identified and measured, they could be empirically related to other facets of a family firm's social orientation. Researchers could then proceed to establish how these unique dimensions relate to family firms' strategic moves, financial performance, growth and survival. Researchers can also identify the contingencies that determine the gains that family firms might achieve by participating in social innovation. These contingencies might vary across industries, stages of firm growth, and different family firm ownership structures. It would be possible also to link these dimensions of family firms' social orientation to the various types of social innovations in which these firms participate or undertake. While it is reasonable and logical to assume a significant relationship between social orientation and social innovation, empirical research would help to clarify how this orientation might influence social innovation and vice versa.

Variations in Social Innovations

Social innovations differ significantly in their purpose, time span, resource and skill requirements, affected stakeholders, and potential social and financial results. Currently, there is no widely accepted typology of these innovations, making it essential to examine and document

the types of social innovations garner family firms' participation. This raises several questions. What role do the nature, scope, timeliness, and potential effect of these innovations have in determining this involvement? Do these firms favor social innovations that are likely to have immediate and mostly local impact? Further, what role does the identity of participants have in this regard? The composition of participants can significantly affect the potential social capital family firms can amass from their involvement; this might give some family firms an incentive to become more actively engaged in particular social innovations. Likewise, how do the potential gains from this involvement influence family firms' choices of social innovations?

Another important avenue for research is to explore the various mechanisms by which social innovations enrich family firms' entrepreneurial capabilities⁴. We have highlighted the importance of these firms' learning from and through social innovations. Other mechanisms might be relevant and need documentation. Toward this end, it would be useful to validate the potential differences between family and non-family firms that we have presented in Table 5.4 and understand how they might influence the types and evolution of their entrepreneurial capabilities⁴. Perhaps different types of family firms emphasize different constellations of capabilities that, collectively, lead to variations in pursuit of social innovations, profitability and growth.

Variations in Family Firms' Scale (Level) of Engagement

Family firms will typically have multiple opportunities to pursue social innovations.

Some may focus a specific social innovation. Others might pursue multiple innovations. This raises a question: How do family firms make these choices? If they pursue multiple social innovations, how do they sequence their participation in these activities? Being active in multiple innovation domains can tax both the resources of the organization and the attention of senior

executives. Consequently, we need to pay greater attention to understanding how managers sequence their involvement.

Another area that deserves research attention is how family firm managers learn from one innovation and subsequently use this learning when they undertake other social innovations. Innovation is rarely a straightforward process, and family firm managers learn from not only their efforts but also their mistakes. Also, there might be vicarious learning. These different types of learning can add to the knowledge base of the family firm, especially about social innovations. To understand this effect, researchers need to document family firms' different learning outcomes, learn from social innovations and how firms capture this learning, and use it in their own operations. Fortunately, the organizational learning theory (Argote, 1999; Huber, 1991) and knowledge-based view of the firm (Grant, 1996) offer a great deal of insight into these issues. Applying these theories to family firms could enrich the literature (Cabrera-Suarez, De Saa-Perez, & Garcia-Almeida, 2001). Similarly, regional and national institutions might influence collaborative activities such as social innovations. It would be instructive to extend the application of neo-institutional theory to examining family firms' decisions about these innovations.

Different members of the owner family might also support different innovations and resist coordination, hoping to retain their flexibility and responsiveness as conditions change. This approach can lead to the fragmentation of focus and effort, raise costs, and even deprive family firms from achieving the benefits that could accrue from social innovations. Empirical research would help us better understand how family firms coordinate the various activities associated with social innovation. Some firms might keep these activities independent while others may follow a portfolio approach to developing and managing these innovations, thus

capitalizing on their interdependence. Research into these issues can clarify why family firms may benefit differentially from their involvement with different types of social innovations. Future research should also document how a family firm's culture might promote or discourage this coordination. As with other innovations, social innovation can be encouraged at the family and business levels through the organizational culture of the family business (Zahra, et al., 2004). Since organizational culture often influences a firm's most important decisions, this influence also pertains to social innovation-related decisions. In organizational cultures that focus on the group rather than the individual (Hofstede, 2001), one can expect greater interest in social innovation.

The Relationship between Financial and Social Wealth

Some social innovations ameliorate particular social problems but may not result in financial wealth creation. Other innovations simply promote social wealth. This raises the question: How do family firms transform this social wealth to competitive or financial gains? What are the key mechanisms that effect this transformation? We have addressed this issue partially by underscoring the critical importance of social entrepreneurship. However, other mechanisms might exist and our earlier discussion highlights some of these, including the creation and maintenance of social capital (Zahra, 2010), building connections to existing networks, solidifying and improving the firm's reputation, enhancing the legitimacy of the company and its operations, attracting new customer groups, accumulating slack resources, and promoting learning as well as increasing knowledge production and use. Researchers need to identify the approaches that family firms employ to capture value from participating in social innovations. They also need to explore key conditions under which these benefits materialize and, in turn, how they relate to financial wealth which is essential in building the slack resources

that enable family firms to support social innovations and CSR activities that generate social wealth.

Internationalization and Social Innovations

With family firms rapidly increasing their international operations (Fernández and Nieto, in this volume), it becomes important to explore how their growing global presence might influence their support for social innovations. Opportunities for social innovations frequently transcend national borders because of the growing connectedness of countries, industries and businesses. Indeed, some of the same social issues appear to afflict different parts of the globe, sometimes for different reasons but with the same devastating effects. Solutions devised in one country could be diffused to other countries.

The prevalence, scope and adverse effect of social problems often influence family firms' attention to them (Zahra, et al., 2008). This is why we need to probe how family firms decide which social issues to tackle domestically and which ones globally. What are the variables that determine such differential attention? Do these firms allocate different resources to these causes? How do they coordinate the various activities related to domestic and internationally-focused social innovations? Given that family firms make decisions based on financial and non-financial considerations (Hirigoyen & Labaki, Forthcoming), how do these variables influence the mix of global opportunities pursued and types of social innovations introduced? Given that internationalization provides a setting in which organizations learn, we should ask: What do family firms learn from their engagement in such innovations that are global in scope and scale? Is this learning different from what family firms experience domestically? How do these companies capture and then use that learning from social innovations in their domestic and

international operations? Does engagement in global social issues open business opportunities for family firms? If so, how and when does it happen?

5.7 Summary and Conclusion

The important role of family firms has drawn attention to their potential contributions to social innovations. These innovations are usually complex, expensive and time consuming. They also require collective action, prompting family firms to join forces with other private companies, public organizations, non-government entities and traditional institutions (e.g., religious, tribal etc.). Social innovations, however, focus on improving the common good, transcending the reforms enacted by the state and exceeding familiar social entrepreneurial activities. Yet, these innovations are also risky and their failure can undermine the reputation and market standing of family firms. Conversely, social innovations can enrich the family firms' knowledge base through learning, enhance firms' innovativeness and social capital, and provide opportunities to engage and develop members of the family's next generations. By pursuing these innovations, family firms stand to profit and grow while enriching their community or nation's social wealth. Clearly, social innovations and the role family firms play in promoting them are an area that demands thoughtful analysis and study. We hope our work encourages future researchers to systematically examine the contributions of family firms to social innovations and how their participation in these innovations might transform their businesses and operations.

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Chapter 6 Creative Entrepreneurs: The Business Models of Haute Cuisine Chefs⁹

6.1 Abstract

This chapter zeroes in on artists as creative entrepreneurs, examining the role of their business models as a means to live off their talent, having more power over their work and appropriating larger part of the value created with it. It introduces four questions that determine the nature of creative business models and outlines their elements and particularities. Further, it reveals how entrepreneurial capability influence the functioning of a business model and advances two main types of artists' business models depending on the scale and scope of their activities—workshops and enterprises. The theoretical discussion is illustrated with examples of renowned international haute cuisine chefs who are creative entrepreneurs. The chapter extends the central business model notion of entrepreneurial opportunity, traditionally depicting business and social prospects, to encompass artistic openings. It also adds to the discussion on what creative industry is, suggesting why haute cuisine can be considered one.

6.2 **Introduction**

The cultural industries are a "fascinating forest of power plays" (Hirsch, 2000).

Producers, distributors, dealers, and investors, driven by economic interests, search for, select and shape cultural products, exercising control over what gets made and shown, assigning value to it and appropriating part of that value (Caves, 2000; Lampel, Lant, and Shamsie, 2000;

⁹ This chapter is written by Silviya Svejenova (Copenhagen Business School, Denmark), Barbara Slavich (IESEG School of Management, France), Sondos AbdelGawad (ESADE Business School, Spain). This chapter is forthcoming in C. Jones, M. Lorenzen, & J. Sapsed(Eds.), *Oxford University Press Handbook of Creative Industries*.

Wijnberg and Gemser, 2000; Khaire and Wadhwani, 2010). Artists, in turn, driven by the need for expression, seek to maintain control over their artwork and make a living with it (White and White, 1965; Storr, 1985). Yet, most of them seldom reach audience. When they do so, their rewards are usually "precarious and meager" (Storr, 1985: 33). They have to get other jobs to support themselves and sustain an artistic career (Menger, 1999; Strom, 2006). In the words of film director David Lynch, "It's such a tricky business. You want to do your art, but you've got to live. So you've got to have a job" (Lynch, 2006: 163). A question remains how artists can live off their talent, having more power over their work and appropriating larger part of the value created with it.

Scholars have pointed to *creative entrepreneurship*, i.e. an artist starting up a firm, as a means to achieving autonomy and securing income (Lampel, Lant, and Shamsie, 2006; Strandgaard Pedersen et al, 2006). An artist's firm, as any other venture, requires a sound *business model*, i.e. a "content, structure, and governance of transactions designed to create value through the exploitation of business opportunities" (Amit and Zott, 2001: 511). The business model reveals what a firm does to make money (Magretta, 2002). It is also a source of identity that legitimates the venture to multiple stakeholders (Perkmann and Spicer, 2010).

Despite the growing interest in business models, they have been rarely examined in the context of creative ventures (for exception, see Svejenova et al, 2010, 2011). However, these ventures exhibit a number of unique properties (Caves, 2000; Lampel, Lant, and Shamsie, 2000; Jones, 2001) that challenge received ideas on business models and are of relevance for broader issues (Lampel, Lant, and Shamsie, 2006a). *First*, they are established to serve the needs of a creative founder, not those of customers. As such, they operate through individual business models, which are strongly dependent on the personality, talent and brand of the artist and, as

such, are difficult to sustain beyond the founder's lifetime (Svejenova et al, 2010). *Second*, creative entrepreneurs seldom take an interest and have abilities to pursue profits through their ventures. For that, they usually establish and co-own them with trusted associates, mostly close relatives or friends who understand their artistic needs and shield their creative process from isomorphic and other pressures (Alvarez and Svejenova, 2002, 2005; Alvarez et al, 2005). Further, they usually shape the venture's *entrepreneurial capability*, i.e. the abilities to envision and mobilize action for the exploration and exploitation of opportunities (Zahra et al, 2011), which are particularly relevant in a context of profound technological changes in the way creative products are conceived, reproduced, distributed, and consumed.

In this chapter we put forward the understanding of creative entrepreneurs' business models by highlighting, defining, and illustrating their particularities. We suggest that, depending on the scale and scope of their activities, creative entrepreneurs use different types of business models. Further, we extend the central business model notion of entrepreneurial opportunity, traditionally depicting business and social prospects, to encompass artistic openings. Finally, we also add to the discussion on what creative industry is, suggesting why haute cuisine can be considered one.

The chapter is structured as follows. First, we introduce haute cuisine as a creative context. Second, we delineate four questions that determine the nature of creative business models and outline their elements. We also discuss the value created with an artist's business model. Next, we suggest how entrepreneurial capability influence the functioning of a business model and propose two main types of artists' business models—workshops and enterprises. We illustrate the theoretical discussion with examples of renowned international haute cuisine chefs

who are creative entrepreneurs. We conclude with implications for professionals who seek to live off their passion and suggest opportunities for further research.

6.3 Haute Cuisine as a Creative Context

Chefs engage in creativity and enact symbolic value, the two dimensions employed by

Jones et al in the introductory chapter of this Handbook to define creative and cultural industries.

Chefs are increasingly creative in their work. They are no longer employees who keep their recipes a secret and replicate them for years in small, overcrowded and overheated kitchens.

Rather, they are more than ever creators who explore and experiment with ideas in dedicated culinary labs and continuously evolve the menu of their restaurants. Their innovations are presented at international events, such as summits, competitions, or food festivals, where novel practices are shared, culinary excellence celebrated, and local distinctiveness recognized.

Chefs operate in the realm of the symbolic. Regardless of their inherent materiality, haute cuisine meals are experiences enjoyed not so much for their functional value as nourishment but, rather, for their aesthetic, emotional and intellectual worth. For example, at elBulli, the no longer existing legendary restaurant of Spanish gastronomic innovator Ferran Adrià, acknowledged five times best restaurant in the world, "[d]econtextualisation, irony, spectacle and performance are completely legitimate" (in Hamilton and Todolí, 2009: 281). Similarly, the website of Italian Michelin-starred chef and restaurateur Moreno Cedroni of Madonnina del Pescatore reveals that on the menu "you can discover … ingredients such as irony, linguistic games".

Beyond the expected superb taste and zero defects in a meal's preparation and serving (Slavich, Capetta, and Salvemini, 2011), chefs seek to provoke diners and evoke emotions in them. They draw inspiration for their dishes from different art forms and use artistic analogies to explain what they do, e.g. choosing a "pallet" of ingredients, "composing" a menu, and

"performing" it to the restaurant patrons. For example, USA chef Grant Achatz of Chicago-based Alinea, sixth in the 2011 St Pellegrino world's best restaurants ranking, explains:

For this course, "rabbit, parfait, rillette, consommé," we wanted an unmistakable association with autumn. So we chose a palette of oranges, browns, and black, as well as flavors of brown spices, apple, cinnamon, wild mushrooms, and squash—all of which go well with the various manipulations of rabbit. The course progresses in temperature from a chilled section in the beginning, to a warm one in the middle, to a hot one in the end. The unveiling of each section adds an element of surprise and anticipation for the guest. (quoted in Kummer, 2011)

The meal's symbolic value is further enhanced by the use of industrial design for the dishes and architecture and interior design for the space in which it is consumed. Overall, its symbolic value is an outcome of engaging in creativity throughout all stages and aspects of the culinary process and experience. Thus, haute cuisine is a creative industry and chefs are creative entrepreneurs.

6.4 Business Models of Haute Cuisine Chefs

Below we discuss the main questions and elements of creative entrepreneurs' business models, the value created with them, and the role of entrepreneurial capability in business models' operation.

6.4.1 Questions and Elements

The questions advanced here are derived from and extend previous work on business models of creative entrepreneurs (Svejenova et al, 2010; Svejenova et al, 2011; Vives and Svejenova, 2011). They can be used analytically, to examine and compare business models across creative and other contexts, as well as practically, to design, operate and transform them. There are four questions at the heart of a business model: (1) Why?, or what motivates the creation of a venture; (2) What?, or the nature and range of opportunities pursued; (3) Who?, or

actors targeted and mobilized, and (4) How?, or activities involved in opportunity realization. Below we discuss and illustrate these questions and their elements.

6.4.1.1 Why? Motivation for Establishing a Venture

To realize their passion for creation, artists are willing to accept payment below "their opportunity cost in humdrum employment" (Caves, 2003: 74). However, as they become entrepreneurs, they can increase the economic rewards from their work, while enhancing their professional gain in terms of authenticity and freedom of expression. That allows them to claim entrepreneurial identity and legitimately engage in business transactions (Perkmann and Spicer, 2010), which permits them to appropriate a larger part of the value they create. In addition to the quest for professional gain through the pursuit of their passion, artists can be motivated by secondary motives, such as financial gain, power and fame (Storr, 1985). They can also combine the pursuit of passion, profits, and social gain (Vives and Svejenova, 2011).

Some chefs engage in entrepreneurship in order to innovate without restrictions. For example, chef Ferran Adrià and restaurant manager Juli Soler acquired elBulli from its founders to have control over its future so that the chef is able to pursue a novel, risky style of cooking (Svejenova et al, 2010). Similarly, Grant Achatz's co-ownership of restaurants Alinea and Next with manager Nick Kokonas is driven by the chef's need to operate and experiment with new ideas "at a level of creative and financial freedom enjoyed by very few artists and only a handful of chefs in history" (Moskin, 2011).

Chefs also become entrepreneurs for greater profits, which they can realize through launching new fine dining concepts and other luxury experiences. In that, they have to perform management roles and are rarely present, if at all, in the kitchens of their numerous restaurants. For example, French chef Alain Ducasse keeps launching predominantly high-end restaurant

concepts that offer "durable luxury" in France and internationally, and compete for Michelin stars. He is interested in differentiating the restaurant concepts, yet, in the main, he is not seeking to grow them into chains, as luxury requires exclusivity. Overall, he is "more of a chef d'entreprise than a chef de cuisine" (Passariello, 2003) and delegates the high-end restaurant kitchens to trusted disciples who have been trained in his own culinary school.

Finally, chefs may become entrepreneurs for the social gain that can be obtained through their creative and business endeavors, such as generating employment opportunities for others, reviving local traditions, or supporting producers of indigenous varieties. For example, Peruvian chef Gastón Acurio continuously introduces new restaurant concepts related to Peruvian cuisine and then swiftly franchises them. Beyond immediate economic gain, Acurio's broader agenda involves using "Peruvian food as an instrument to put our culture in the world" (McLaughlin, 2011b) and "a way of transforming lives to help build a more just, prosperous and democratic society" (Chauvin, 2011). As he explains, "you can do thousands more things by being a cook for your country than you can by being a politician" (Mapstone, 2009). Overall, the motivation of creative entrepreneurs is a combination of professional, economic, and social gain, and influences the opportunities they explore and realize.

6.4.1.2 What? Nature and Range of Opportunities Pursued

Entrepreneurial opportunities reside in sources of input, production methods, new products, ways of organizing, and markets (Schumpeter, 1934). Creative entrepreneurs pursue three types of opportunities: artistic opportunities that involve introduction or recombination of input resources and invention of methods that open up new avenues for artistic expression, business opportunities that entail the creation of new products and initiation of novel activities

and ways of organizing for profit, and social opportunities that consist in creation or expansion of markets for the advancement of causes.

Artistic opportunities are of highest priority for creative entrepreneurs, as they permit the fulfillment of their primary motivation – engagement with art for art's sake (Caves, 2003). Chefs experiment with ingredients, techniques, and aspects of the culinary process and dining experience. For example, according to elBulli's philosophy "[t]he search for technique and concept is the apex of the creative pyramid" (in Hamilton and Todolí, 2009: 280). That is, the most significant artistic opportunities in haute cuisine reside in the discovery and introduction of new culinary concepts and techniques. An example of such path-opening discovery is "basic spherification", defined as "the instantaneous, interrupted jellification of a liquid to form spheres of varying sizes with a liquid interior", employed for the making of caviar, marbles, or balloons, among others (Exhibition leaflet, 2012: 40). Further, dishes such as elBulli's "Textured vegetable panache", in which a range of vegetables are served presented in different textures, are considered "representative of the start of a revolution" and mark a "new path" (in Hamilton and Todolí, 2009: 290).

According to Italian chef Massimo Bottura, owner of Osteria Francescana, forth in the 2011 St Pellegrino world's best restaurants ranking, "There are two paths open to today's chefs. Both of them right. One is to follow the score as a musician would; ... following the recipe to produce a good cover version. Others are trying to create their own way, their own music". In its highest form of expression, artistic opportunities are about the creation of new genres and styles, i.e. an entire new system or language, as the one developed by Ferran Adrià, with novel culinary concepts (e.g. foams), techniques (e.g. spherification), and principles for creating and consuming food (e.g. use of acoustics, irony).

Business opportunities are geared towards revenue generation through the introduction of new products that leverage artists' talent and brand as well as new activities that guarantee resources for sustaining creative work. Although unprofitable or low margin undertakings, elite restaurants are the backbone of chefs' business models as they allow for the accumulation of reputation and expertise. Brand recognition and know-how then become resources employed in the pursuit of other business opportunities that bring in revenues. In addition, they help sustain artwork and pursue social causes.

Chefs can leverage their individual and/or restaurant brands as well as their expertise in creativity into related activities, such as catering, consulting, training, managing restaurants for others, product development, or food-related media productions. Further, they may want to "democratize" the gourmet dining experience by translating it into restaurant concepts and products that are affordable for a wider range of customers. For example, José Andrés, American celebrity chef of Spanish origin and co-owner of the ThinkFoodGroup, pursues business opportunities that range from exclusive Chicago-based *minibar by josé andrés* to The Bazaar by José Andrés in the SLS Hotel at Beverly Hills. The former is a restaurant within the restaurant, offering an imaginative menu to only six diners twice-a-evening, while the latter consists of different spaces that combine dining, lounging, and shopping experiences. He is also the executive producer of the PBS series *Made in Spain* and is engaged in numerous other media initiatives. Further, he receives revenues from consulting, as culinary director for a luxury hotel brand.

Social opportunities draw on artists' reputation and skills, as well as on other resources they obtain through their business activities. They involve the creation or expansion of employment or product markets that help realize important causes that affect communities. Chefs

are using their know-how, economic and organizational resources and influence as public figures to support and realize important social causes.

For example, chef Ferran Adrià is the leading force behind the Spanish food and science foundation Alicia, which employs cutting edge haute cuisine techniques and knowledge to pursue projects that improve the food diet of patients with rare diseases and food intolerances. The team at Alicia also engages with local farmers for the recovery and preservation of homegrown varieties and aims to promote and support their distribution. Peruvian chef and food ambassador Gastón Acurio pursues a range of social opportunities that aim at "globalising Peruvian food' (Mapstone, 2009). Further, he expands the employment possibilities for lowincome youth through the Pachacútec Cooking Institute that offers training into the craft of fine cooking by the best Peruvian and international chefs in one of Lima's poorest areas.

A creative entrepreneur can discover or create opportunities (Alvarez and Barney, 2007; Zahra, 2008) through prior knowledge (Shane, 2000), alertness (Kirzner, 1973), or replication (Winter and Szulanski, 2001). She can also fabricate them "from the mundane realities of her life and value system" (Sarasvathy, 2008: 10). These opportunities are usually time and location-bound, and require entrepreneurs to set priorities in their pursuit (Bingham, Eisenhardt, and Furr, 2007). Further, they pose demands on the chefs' time and attention, as far as their personal involvement is required, as well as on the entrepreneurial capability of the venture team. For chefs who seek to maintain elite status, business opportunities need to be approached with coherence and moderation, and with thoughtful selection of actors to target and mobilize.

6.4.1.3 Who? Actors Targeted and Mobilized

Creative work and the pursuit of business and social opportunities require the involvement of a "motley crew" of actors (Caves, 2003; Townley, Beech, and McKinlay, 2009),

such as partners, consumers (foodies and others), or critics, each playing a distinctive role in a creative entrepreneur's business model.

Partners engage in activities that support the realization of artistic, business and social endeavors. Even the most individual forms of art require the support of an art world in order for artwork to be brought to life and reach audiences (Becker, 1982). To be coherent and compatible with an artist's vision and reputation, partners are usually selected on the basis of status (Faulkner and Anderson, 1987) and complementary competencies and approaches, with preference given to repeated relationships as a source of authenticity (Svejenova, 2005) and ease of collaboration (Bechky, 2006).

For example, Spanish chef Joan Roca, co-owner of the 2011 St. Pellegrino world's second best restaurant, El Celler de Can Roca, as well as Italian chef and restaurateur Moreno Cedroni, of Madonnina del Pescatore, get inspiration from and collaborate with renowned perfumists, "translating" perfumes into dishes, and dishes into perfumes. Moreno Cedroni works together with industrial food companies and supermarket chains to create, produce, and sell high quality long-term expiration food (e.g. marmalades, pasta sauces, canned fish). Chefs, such as Ferran Adrià or Rene Redzeppi, collaborate with Phaidon, a prestigious publisher with global network, to enhance the outreach of their books.

Consumers of experiences in haute cuisine restaurants are mostly foodies, gastronomic connoisseurs and chefs' most dedicated audience, who take keen interest in culinary innovation and travel across the globe in search of new dining experiences. Chefs may also reach larger customer groups through other restaurant concepts or food products. For example, when introducing new restaurant concepts that are to be franchised, Gastón Acurio relies on precise segmentation, "because restaurants are spaces for different typologies of customers with different

needs and different economic availabilities, who consume products in different moments" (Acurio, 2006). Unlike the case of ventures in other industries, customers' needs and wants are rarely taken into account when creative products are created.

Critics offer judgment on the works of art and educate the audiences of their value and significance. They provide both evaluative reviews and publicity, drawing the attention of the audience to innovative works of art. Further, they also help consumers "understand and admire the technique and theoretical knowledge of the artist and to make its value judgment on these terms" (White and White, 1965: 120). With the spread of internet, diners increasingly take on the role of critics, providing - through blogging, twitting and other forms of social media interaction - immediate evaluations of and images from their fine dining experiences.

In haute cuisine, traditionally critics confer value and reputations to chefs by assigning coveted Michelin stars or leading positions in rankings of best restaurants. The Michelin Guide has dominated the role of defining quality and endorsing restaurants, recognizing in 2011 only 93 restaurants around the world with three stars, its highest recognition. Since 2002, it has had to deal with competition from UK Restaurant Magazine's world ranking of best restaurants, which recognizes culinary innovation, with rare presence of French chefs on the top 10 list. The increase in stars has further effects on the chefs' business model and profits, drawing customers in, allowing price increases, attracting media attention to the chef as well as business interests in collaboration with him or her.

6.4.1.4 How? Activities for Opportunity Realization

Creative entrepreneurs realize the opportunities they have selected to pursue by engaging in a set of activities, which in turn need resources, organizing and governance (Zott and Amit, 2010; Svejenova et al, 2010). Some of these activities have to do with the creative act, while

others capture aspects of production, management, and "humdrum" commerce needed for the artwork to reach markets and audiences (Caves, 2000). The commercialization and market acceptance of these products is usually beyond creator's immediate interest and attention, and requires involvement of intermediaries from the cultural industry system (Hirsch, 1972). Overall, creative entrepreneurs engage in innovation, replication, and diffusion activities.

Innovation activities involve the creation of new ideas. Elite chefs from Spain, Italy, Peru, or Scandinavia, among others, have embarked on major reinvention of their national or regional culinary traditions, shifting their practices away from the dominant models of French classical and nouvelle cuisine. Inspired by the pioneering efforts of Ferran Adrià to introduce creativity as a separate activity at elBulli in 1994, which later became elBullitaller, a permanent, dedicated creativity workshop, a growing number of chefs engage in research and development, not only for the creation of new dishes but also of new restaurant concepts. For example, Cedroni explains: "The evolution of my business initiatives is the result of the development of my continuous research on food. Madonnina del Pescatore is a gourmet restaurant; with Clandestino Susci Bar I have started my research on raw fish, with Anikó I have started my research on pret-à-porter street food, and through Officina, I have been able to create exclusive recipes for long term expiration high quality food" (quoted in Slavich et al, 2011).

Similarly to other sectors, novelty in haute cuisine comes from recombination of familiar and foreign elements (Powell and Sandholtz, 2012), which have been transferred into cuisine from other domains, geographies or time periods through transposition and translation (Djelic and Ainamo, 2005; Sahlin and Wedlin, 2008; Jones et al, forthcoming). For example, chef Carles Tejedor of Via Veneto in Barcelona employed xanthan gum, an industrial food thickening agent, to create olive oil jellies (Chang, 2010). Chef Grant Achatz's menu for his restaurant Next is

based on travel in time and space, and was inaugurated with dishes capturing the spirit of Paris in 1906. Innovation activities, particularly those of a radical kind, require persuasion to ensure support and adoption. For that, creative entrepreneurs use rhetorical strategies (Jones and Livne-Tarandach, 2008) and stories (Lounsbury and Glynn, 2001; Wry, Lounsbury and Glynn, 2011) to persuade investors, partners, critics, or customers of their worth and uniqueness.

Replication activities entail standardization and codification of practices to ensure growth. As chefs introduce and expand new restaurant and other business concepts, they are expected to articulate a success formula (including recipes, menu structure, restaurant layout, service) that has to be perfectly reproduced across time and space in order to guarantee zero defects (Slavich et al, 2011). Replication entails articulation of routines, standardization and codification of practices, and knowledge transfer.

For example, on the preparation for franchising of his restaurant concept La Mar, Gastón Acurio (2006) emphasizes the importance "to standardize some elements ... and to guarantee a good service and a friendly atmosphere". Further, knowledge transfer that ensures replication could be achieved through training. For example, with the growth of his operations, Alain Ducasse opened a professional training center in November 1999 to ensure the preparation of talent for his growing number of restaurants. The opening of the training school required from Ducasse involvement in a new set of activities, ranging from developing teachable experiences to transferring them in an appealing and professionally useful way.

Diffusion activities facilitate the communication and flow of innovation among the actors of a system (Strang and Meyer, 1993). They enable creative entrepreneurs to spread their ideas and practices and enhance recognition and influence. In an industry where intellectual property is hard to enforce due to the ephemeral nature of the culinary creations, chefs increasingly publish

books that reveal and explain their guiding principles, creative processes and innovations. For that they engage in activities akin to scholarly endeavors, such as theorization, which involves "development and specification of abstract categories and the formulation of patterned relationships" (Strang and Meyer, 1993: 492) by both critics (White and White, 1965) and creators (Svejenova, Mazza, and Planellas, 2007).

For example, chef Ferran Adrià and his team have judiciously registered and dated every culinary experiment and discovery, evaluated and "measured" its novelty, and positioned it on an evolutionary map that captures their evolution along different abstract categories, such as organization, philosophy, products, technology, preparations, styles and features. They have published that in an extensive, over 5,000 pages, General Catalogue of elBulli creations, referred to in the media as "culinary bible", which captures "the significance of each new contribution" (in Hamilton and Todolí, 2009: 271). Other diffusion activities involve participation in international culinary forums or the creation of documentaries on chefs' creative processes, such as Anthony Bourdain's Decoding Ferran Adrià or Gereon Wentzel's El Bulli: Cooking in Progress.

6.4.2 Value Creation

Entrepreneurs create economic value through their business models' profit and growth engine (Vives and Svejenova, 2011). Revenues, costs and investments are primary elements for value creation in haute cuisine.

In the case of haute cuisine, the primary source of revenues is the price charged for a meal, usually for a fixed menu, which could be in the range of 100-500 euros, depending on the restaurant and whether it involves wine pairing or not. Chef Alain Ducasse justifies his pricing strategy: "I've had criticisms of my prices for years ... Haute gastronomy is like haute couture:

the materials are so expensive, it requires so much rigour. It's expensive, but it's the right price. And I have bistros that are not expensive" (quoted in Day, 2011). Similarly, Kokonas – the business partner of chef Grant Achatz – explains why they had to drop Alinea's \$145 multicourse menu in favor of a larger one at \$195: "It's not because we want to make more money. It's because we're thinking long term. We're really, really trying to steer Alinea toward being the best in the world" (quoted in Tanaka, 2011). As Kokonas argues, that brings less money, as with the shorter menu of \$145 they could do two sittings at a table per night, while the longer, 22-course menu takes four hours to consume and rarely allows reseating.

In recent years, chefs have introduced innovation in their restaurant pricing models. For example, at Achatz's Next restaurant diners pay a fixed fee, a ticket of sorts, as if a performance, which varies depending on the attractiveness of the time of the seating selected. Further, tickets can be auctioned, creating a secondary market and opportunity for diners to appropriate the extra value obtained. Further, ancillary revenues at the restaurant come largely from beverages consumed and chef's books sold. Chefs receive additional income from franchising, licensing, product endorsements, consulting and management fees, as well as catering, book publishing, participation or production of TV shows, and creation of culinary products.

The cost structure of an haute cuisine restaurant is heavily burdened, and contributes to it being a breaking-even or money-losing operation. It is represented by the high prices of luxurious perishable ingredients, the high staff-to-customer ratio, the impossibility to better leverage space as a table cannot be used several times during a meal due to the length of a menu that requires hours of consumption, and the need to maintain certain quality standards at the venue. A way to decrease the impact of labor on cost structure is the growing use of unpaid *stagiers* who work in elite kitchens for the learning and career opportunities they offer.

In addition to revenues and costs, investments in initiating and sustaining certain level of operation are also important. For example, chefs embark on substantial renovation of their dining spaces and kitchens to update their appearance and equipment, or creation of such spaces anew. For that, they usually count with partners who get involved through capital and management. Growth also poses capital requirements, especially if quality and reputation standards are to be maintained. Thus, chefs generate not only symbolic value through their imaginative dishes, but also profits that can be further reinvested in the business. In addition, they also create value for the profession, by developing new practices that help it evolve, for managers of business from other industries who benefit from the chefs' advice, and for society at large, which can create a strong identity along with a wealth of income opportunities through the activities put in place by haute cuisine chefs (Svejenova et al, 2010).

6.4.3 Entrepreneurial Capability

The functioning of a creative entrepreneur's business model requires entrepreneurial capability, i.e. ability to envision and mobilize actions for the exploration and exploitation of opportunities through the integration of diverse inputs and actors (Zahra et al, 2011). This capability is necessary both for translating a creative act into a product that reaches the audience and for exploiting other opportunities that bring in revenues and/or enhance a creator's brand equity. Entrepreneurial capability influences the business model through its role in sensing, selecting, shaping opportunities, and synchronizing their realization (Zahra et al, 2011).

For example, Chef Ferran Adrià's business model included elBullicarmen, a dedicated unit whose team identified and selected opportunities for applying creativity to business endeavors and obtaining revenues from them. These opportunities ranged from consulting services for the executives of hotel chains who required novel restaurant concepts, to

collaborations with food and beverage manufacturers for the creation of innovative products. For example, the partnership with the Damm Group resulted in the introduction of Inedit, a wine-like concept for a high-end beer. These opportunities were shaped and synchronized so that their resource needs did not interfere with the operation of the chef's restaurant and creativity workshop.

Similarly, by observing canned products in supermarkets, Cedroni identified an opportunity for creating high-quality, long-term expiration food, what he denoted "food's eternity". He started investigating how to do that on an industrial scale, without compromising his reputation in the field of haute cuisine. He selected SSICA, Experimental Lab of the Industry of Preserved Food, as a partner in the creation of a modern lab that could support the fusion of hand-made quality with quantities allowed by industrialization. He also partnered with Bontà del Mare and Iper to sell the products in the supermarkets. However, as that did not bring the expected success, he started selling the products under his own brand. While he succeeded in achieving good quality, he did not obtain enough revenues. As he concludes: "In this period I won as a chef, but not as an entrepreneur" (Cedroni, interview 2011). Hence, for chefs to embark on mobilizing partners and realize new value propositions, they need entrepreneurial capability to sense, select, shape, and synchronize the opportunities pursued.

6.5 Types of Business Models: Workshops and Enterprises

Depending on their motivation and the scale and scope of their activities, creative entrepreneurs differ in the type of business models they establish and operate. Two main models are discernable: workshop and enterprise.

The *workshop business model* has as its center of gravity the creative activity itself. The pursuit of opportunities is rather focused on those that allow for artistic expression, innovation,

and learning, and in their sequencing priority is given to research and development rather than growth and expansion. These business models are geared towards discovery, advancement and diffusion of novel ideas and approaches, more so than to their monetization. While creative entrepreneurs operating with workshop business models do engage in the pursuit of revenue-generating opportunities to cover the costs of their creative operation and have the freedom to create, they rarely reach significant size and usually operate with a small core team and numerous partners. Their primary audience is the profession, as they seek to improve it and the extensions to other audiences are largely with social gain in mind, through their foundations. The entrepreneurial capability required for the operation of such business models is oriented towards synchronizing different activities for achieving coherence around artwork.

An example of workshop business model is that of Ferran Adrià, for whom the anchor was in the creativity lab where innovation took place, and the restaurant, with its uniqueness and exclusivity, the only place where the chef's creations could be tried. Additional revenues used to come from catering and consulting but in both cases they had to do with the selective leveraging the core competence in creativity to different audiences and domains. Similarly, Massimo Bottura's business model is rather focused and oriented to creation, rather than profit generation. Also, Grant Achatz works with a rather narrow business model, pursuing fewer business opportunities and focusing on a limited number of restaurants.

The *enterprise business model* is oriented towards the pursuit of opportunities that have strong potential for growth and profitability. With it, chefs pursue both scope and scale. They engage in internationalization and diversification of their operations, branching out to more or less related activities and spreading their efforts across different customer segments. They open restaurants outside their home countries, in fashionable cities, such as New York, Tokyo, or

Dubai. By producing and running TV shows or writing books and magazine columns, they are also powerful media brands and opinion leaders who attract followers and shape consumers' behaviours.

Both Alain Ducasse and Gastón Acurio's ventures are examples of the enterprise model. Ducasse pursues opportunities locally and internationally through the Alain Ducasse Entreprise, co-owned with Laurent Plantier, the firm's General Manager. He does so through over 27 haute cuisine and other restaurants in 8 countries, representing different dining concept, as well as other activities, such as business events, gastronomy school and hotels. He seeks to create unique personality for each of his restaurants. He seems to have "a knack for expansion without overstretching" (Day, 2011). Gastón Acurio has 32 restaurants in 14 cities around the world (McLaughlin, 2011b). In 2009, his brands' worth was estimated at \$60m (Mapstone, 2009). The case of Acurio is that of creating restaurant concepts with appeal to different segments, standardizing the know-how and franchising them, obtaining fast and profitable growth.

Given that both workshop and enterprise are individual business models, largely dependent on their creative founders, succession is an issue for both. In some cases, it can be secured by moving into a partnership structure with younger artists whose styles are aligned with the founder's values and vision, as have done some architects. Creators may also sell their brands and/or labels to larger companies or on the market, through an initial public offering, as in some cases of fashion design. Also, they can convert a firm into foundation or establish foundation anew, to sustain influence, preserve legacy, and enhance revenues from their work.

6.6 Implications for Creative Entrepreneurs and Opportunities for Further Research

In this chapter we advanced novel insights into creative and cultural industries by bringing in creative entrepreneurship, business models and entrepreneurial capability as understudied, yet important notions for understanding the interaction between art and commerce. We explored main questions and elements related to business models, as well as the value created with them and the role of entrepreneurial capability in their operation. We also advanced two main types of business models – workshops and enterprises – that reveal different trajectories pursued by creative entrepreneurs. Further, by using illustrations from cases of haute cuisine chefs, we broadened the contexts in which business models have been examined.

These insights can be of relevance for other professionals who seek to live off their passion and capture more value from their work (Svejenova et al, 2010). They can be used as a recipe for action (Baden-Fuller and Morgan, 2010) in the design, management and transformation of business models by artists and other professionals who seek to combine professional, economic, and social gain. As a framework for thinking (Baden-Fuller and Morgan, 2010), they allow comparisons among ventures across cultural and creative industries, and different geographic contexts. Further work may also address the business models established and entrepreneurial capabilities⁴ used by artists' foundations as well as the trade-offs and opportunities for the creative activity when it unfolds in a creative entrepreneur's venture versus another organization, in which the artist is a hired hand.

6.7 **References**

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Chapter 7 Conclusions, Theoretical and Practical Implications, Limitations and Future Research

This dissertation has attempted to theoretically define the concept of EC and distill its dimensions. In addition, to ensure the robustness of my conceptualization, I explore the role of EC across multiple contexts. This allows the examination of different research questions discussed in the preceding chapters. Hence, in this chapter I reflect on how these chapters realize the original intent of the dissertation. Furthermore, I show how their collective contributions could provide a distinct research agenda for future research. Thus, I begin with a brief summary of each of the chapters and an assessment of their theoretical and practical implications, as well as their limitations. Then, I conclude with a future outlook of the dissertation, suggesting future research questions that could further progress its contributions.

7.1 **Paper 1 (Chapter 2)**

7.1.1 Conclusion

This study examines the role of strategic leadership in building and developing EC to influence firms' game changing strategies. Our conceptual analysis indicates that senior leaders play a pivotal role in developing various EC's dimensions. Senior leaders contribute to these dimensions through developing a peripherals vision, directing attention to diverse and contradictory information, connecting the pursuit of opportunities to the larger purpose of organizations, and linking its internal and external conditions. Furthermore, we address the conditions under which EC is more likely to initiate game changing strategies. We find that EC integration and embeddedness affect firms' opportunity realization and novelty generation, which are conducive to introducing game changing strategies and ecosystem transformation. Our

conceptual development and discussion generate some interesting theoretical and managerial implications.

7.1.2 Theoretical Implications

This study contributes to the entrepreneurship and capability literature in several ways. Past research concerning the link between entrepreneurship and strategic leadership has concentrated on the role of leaders in encouraging and facilitating individuals' creative and entrepreneurial efforts (Kuratko, Montagno, & Hornsby, 1990). Consequently, the role of strategic leadership in influencing collective organizational entrepreneurial activities has been left unexplored. Thus, our research demonstrates the role of senior leaders in harnessing firms' collective intelligence to build and develop EC. Hence, we extend the impact of strategic leaders' behavior beyond the direct influence on subordinate's innovation and entrepreneurial initiatives, to include firm-level entrepreneurial capability. This addition is important because it allows examining the links between strategic leaders' behavior and organizational strategic outcomes such as game changing strategies.

Additionally, prior work in entrepreneurship research has largely focused on the debate of creation versus discovery (Alvarez & Barney, 2007). Our discussion shows how EC can allow the interaction of creation and discovery to influence organizational outcomes of strategic and competitive importance (Zahra, 2008). This suggests that entrepreneurship research may advance by shifting focus from investigating the origin of opportunity (whether created or discovered) to their combined existence and dynamic interplay, through studying how they may jointly shape firm's entrepreneurial capability. This would allow systematic investigation of the relationship between firm-level entrepreneurial actions and different types of opportunities.

Furthermore, a focus on firm's EC may provide useful insights into the role of collective harnessing of its members' individual efforts. EC encourages knowledge sharing and distribution across the firm, which would encourage collective sense making at the organizational level to link this information and funnel it towards new breakthroughs. A focus on collective intelligence would ascribe firms' entrepreneurial initiatives to firm wide abilities that transcend specific individuals' contributions. This is of particular importance in today's competitive landscape where competition is platform based. In these platforms, firms seek to rule their own territories and venture into uninhabited ones, through focusing on their collective abilities while comparing and matching them to external forces and constituents.

As a result, our research focus on EC and firms' ecosystems sheds light on the importance of balancing firms' internal and external conditions. Current research on capabilities emphasizes organizations' efforts to balance dynamic and operational capabilities, which confines firms' attention to their internal resources and operations (Helfat & Peteraf, 2003). Meanwhile, our conceptualization and discussion of EC as a distinct type of dynamic capabilities may generate crucial insights into firms' abilities to manage its processes and actions to carve out strategies that shape their ecosystems.

7.1.3 Practical Implications

Leaders should be encouraged to examine their behaviors and their underlying assumptions in relation to the various dimensions of EC. Managing these dimensions requires different leadership skills that enable organization wide opportunity realization. Thus, leaders should observe the relationship between particular skills and EC's dimensions to reinforce these dimensions throughout the opportunity realization process. Leaders' roles could be tracked by surveying organizations to determine leaders' behavior that supports EC's dimensions and those

that hampers their development. This will allow leaders to assess the effect of their behavior on firm-level entrepreneurship.

Another important practical implication of this study is that to better understand the influence of leaders' behavior on firms' innovative and entrepreneurial outcome, it may be necessary to look beyond the direct level of subordinates and consider organization wide capabilities. This will enable obtaining a complete picture of the locus of firms' entrepreneurial activities. Our conceptual discussion suggests that building firm's entrepreneurial capability requires viewing strategic leadership as a key driver of an integrated organizational level capability that operates within and across internal and external elements.

Therefore, a focus on an organizational level capability will allow leaders to continuously subject their assumptions and expectations to challenges that may seem distant from competitive realties. One important implication of developing EC is questioning firms' dominant logics that keep firms confined to their established boundaries and standards. Moving beyond these boundaries and standards is one important mechanism through which firms could strike out into different domains and sometimes into uninhabited lands. It is this stretching exercise that opens up new opportunities and provides firms with tools to conquer new lands that contain the seeds for tomorrow's victory.

7.1.4 Limitations and Future Research

This study, of course, has some limitations that open avenues for future research. It remains a theoretical delineation of entrepreneurial capability and its proposed relationship to game change. Future research could empirically investigate the role of firms' ECs in transforming their ecosystems and initiating game change. Additionally, systematic research could empirically document the various configurations of EC across various opportunities.

Studying these configurations over time and the associated patterns of capability choice and use would provide deep understanding of the composition of EC. EC offers a promising research avenue to see how variety of opportunities is harnessed to keep EC current and relevant.

Furthermore, in this study we focus on the positive consequences of EC. However, it could be possible that continuous honing of EC for novelty generation leads to unfavorable outcomes.

Thus, an interesting topic would be investigating the dysfunctional consequences of EC.

7.2 **Paper 2 (Chapter 3)**

7.2.1 Conclusion

At the beginning of this study I have asked several questions that deserve reconsideration. The first question asked: why organizations such as Fuji film are able to use their resources to pursue new opportunities while others such as Kodak are past their prime? Empirical evidence shows that EC seems to be a reliable gauge of this ability. EC is a multi-dimensional construct that reflects firm's ability to proactively put its resources and capabilities in to use to continuously pursue opportunities.

The second question asked: what are the performance implications of EC? My findings are in line with dynamic capabilities' arguments; it appears that firms' ECs improve their performance outcomes as they become adept at using their organizational capabilities to enact opportunities. These firms understand that opportunities mean opening up new possibilities for new information, products, and services that help the departure from their dominant logic (Hamel & Prahalad, 1994). Considering options that defy the dominant logic allow these firms to experiment with several alternatives, this experimentation is expected to contribute to performance through deterring competitors' imitation. Thus, I posit that the focus of EC on opportunities will carry positive implications for firms' performance.

The third question asked: what are the firm-level variables that may explain EC's contribution to performance? Theoretical reasoning and statistical results suggest that EC is conducive to enriching firms' strategic variety repertoire and promoting a strong learning orientation. These findings are congruent with the literature on strategic variety. EC's pursuit of opportunities will generate an opportunity-driven search within organizations, which broadens the scope of these firms' information sources. Thus, firms will be encouraged to draw on a wide array of capabilities that were not previously considered. These capabilities diverse knowledge content will offer firms with a wide range of market oriented actions that enrich their strategic variety. In the meantime, this diverse knowledge content will call for a strong learning commitment and orientation to collectively make sense of this diversity to guide future actions.

As for the effect of strategic variety and learning on performance, empirical evidence is not fully in agreement with my theoretical reasoning. Particularly, I find support for the hypothesized positive influence of variety on performance, which is explained by the various strategic directions variety equips firms with. However, statistical results offer contrasting findings on the influence of learning to the ones originally hypothesized. These results indicate that learning is negatively associated with performance. These contrasting findings were surprising; however, my post hoc reasoning suggests that given the cross sectional nature of the study, these findings may reflect the negative influence of conflict that often times associate organization wide commitment to learning. Furthermore, previous studies show that learning commitment may not be directly tied to revenue generation captured by the traditional performance metrics in this study (Schilling, 2002).

7.2.2 Theoretical Implications

This study has implications for several issues that are important for theory building and research on firm-level entrepreneurship and dynamic capabilities. One has to do with the role of learning in the development of dynamic capabilities and its influence on performance. My findings challenge the current assumption that learning automatically yields capability development. Although the study design does not permit conclusive statement about causality, it is worth reconsidering the role of learning and specifically where it belongs in the nomological network of variables. It may be possible that firms' engagement in capability development effort, as it may be in the case of EC, elicits firms' commitment to learning to make sense of several opportunities.

In the same token, dynamic capabilities' arguments have predominantly focused on direct positive performance implications of these capabilities. I provide evidence that intervening firm-level variables such as variety and learning may transmit the effect of dynamic capabilities on performance. This calls for reconsidering performance determinants in the dynamic capabilities perspective, which would question existing presumption of direct relationships. This offers useful insights into the possible theoretical mechanisms that could be examined in future research and empirically validated. Likewise, findings of the negative learning implications for performance offer explanation to recent empirical evidence that report negative contributions of dynamic capabilities to performance (Drnevich & Kriauciunas, 2011).

Furthermore, a focus on opportunity as an objective enabled us to distinguish EC as a type of dynamic capabilities. Theoretical arguments on dynamic capabilities have often times cast responsiveness to change as the purpose of these capabilities (Teece, Pisano & Shuen, 1997). Even when creation of change was acknowledged (Eisenhardt & Martin, 2000),

opportunity was not clearly mentioned as the guiding logic for the development of one type of these capabilities. This logic is obvious in the various items that correspond to EC's dimensions. It became clear as I analyzed these items that opportunity is incorporated in the logic of these firms' actions.

The focus on action in my attempt to capture firm-level entrepreneurial phenomenon is a counterweight to the entrepreneurial orientation (EO) construct. Although, I do not deny the usefulness of the construct, I posit that it captures the dispositional aspect of the entrepreneurial phenomenon, which may need to be complemented by EC's gauge of firms' capabilities and actions. Therefore, the study points to the merits of addressing firm-level new entry from a capability perspective for future entrepreneurship theoretical efforts. This will be in spirit with early classical arguments of entrepreneurship that provide compelling reasoning that entrepreneurial firms are identified through their actions (Covin & Slevin, 1991; Gartner, 1989; Schumpeter, 1934).

7.2.3 Practical Implications

My study findings suggest that managers committed to developing EC could enhance performance outcomes by considering the two mediating variables: learning and variety. Managers may consider selecting opportunities that nourish their firms' strategic variety and induce learning commitment. This will help clarify both a selection and evaluation criteria upon which firms' members could assess their judgment and choice of potential opportunities. Also, managers need to understand that learning may not carry immediate positive returns to organizational performance, which requires them to consider long-term effects of learning. In light of the study's findings on learning, managers are encouraged to think about possible ways to carefully monitor and manage conflict that may arise from firms' learning efforts.

In addition, findings suggest that managers could develop and institutionalize EC to continuously pursue opportunity and proactively use their capabilities. Thus, managers should not view their resources and capabilities as static repositories, but rather as sources that ignite potential links and open up new possibilities. This requires viewing firms as part of their larger ecosystems, as some capabilities may be embedded within these ecosystems and not necessarily internally possessed by the firm. Transcending firms' boundaries when thinking about resources, capabilities, and opportunities is an important exercise that EC encourages and managers should prudently attend to.

Further more, the multi-dimensional nature of EC indicates that integration among these dimensions and their corresponding capabilities is an important determinant of EC's success. Yet, managers should note that fruitful integration is never a straight forward exercise, it requires collective interpretations of capabilities that go beyond their individual functional characteristics. It is about knowing the links among capabilities and how they apply to opportunities. EC involves a great deal of customizing to the opportunity at hand, as two opportunities are never the same. Thus, systematically exercising EC means that managers will gain experience with capabilities and how they should be applied from one opportunity to another.

7.2.4 Limitations and Future Research

Despite the important theoretical and practical implications of this research, it is important to consider them within the study's limitations that may open up future research avenues. First, my reliance on single respondent per firm and the common method bias this may imply suggest that future work employing multiple respondents per firm could offer more robust findings. Although the one factor test and the ability to corroborate self-reported measures of

performance with publically available ones decrease the likelihood that common method bias is a potential problem in the data. Second, the cross sectional nature of survey data does not allow to formally test for causality. Thus, I believe that future research deploying longitudinal panel design or qualitative, inductive theory building techniques may offer useful insights into the temporal processes behind EC development. Third, this study is based on a sample that is embedded in the Swedish context. Therefore, more generalizable and reliable findings would likely result from examining the hypotheses across multiple countries. Fourth, in this study the hypothesized mediators; learning and variety were assessed at the same time as the dependent performance measure. Future studies could assess these variables at different time periods to allow for lag performance effects.

7.3 Paper 3 (Chapter 4)

7.3.1 Conclusion

Increasingly, research is recognizing the importance of the contribution of emerging multinationals to the global economic landscape. Yet to date, little research has investigated the role of these companies learning and unlearning processes as they build their ECs. In this study, we show that these companies need to unlearn as they expand to advanced economies to free their knowledge base and pave the way for new learning. However, unlearning does not automatically translate to learning; these companies need to carefully exercise these two processes in relation to the knowledge content of their capabilities. Further, we have highlighted the difficulties associated with unlearning, showing that these difficulties vary according to the origin of emerging multinationals. In addition, our observations emphasize that building their ECs requires both learning and unlearning to simultaneously leverage their competitive capabilities and build new ones. The interplay between these two processes becomes

instrumental to EC integration of different resources and capabilities across opportunities in local and host environments.

7.3.2 Theoretical Implications

Our research suggests that emerging multinationals' origins may differentially affect their unlearning processes. Our discussion puts forward the challenges these companies may face as they unlearn, and how these challenges vary with their origin. This advances a set of contextual attributes that would prove useful in investigating the interactive interplay between learning and unlearning and how they jointly shape these firms' ECs. This may contribute to organizational learning theory through understanding when is unlearning detrimental to learning and under what conditions. Further, our discussion hints to the importance of considering the role of unlearning in addition to learning in examining firms' development of capabilities. Our observations underscore unlearning processes as enabling mechanisms for EC integrating different capabilities.

7.3.3 Practical Implications

An important implication of this research is its illustration of the difficulties emerging multinationals face in their attempt to unlearn. Managers need to be aware of these difficulties as their companies internationally expand to advanced economies. Awareness of these difficulties promises early attention to problems associated with unlearning and their implications for organizations' success. Our observations also show that managers need to jointly consider learning and unlearning processes, owing to the inseparable nature of knowledge. Discarding knowledge may seem useful to free organizational memory and provide a fresh inflow of information. However, managers should be attentive to the fact that this knowledge may prove useful in the future or may demonstrate vital links to existing knowledge of strategic importance.

This issue is further accentuated when viewed in the light of knowledge content diversity. Managers may exhibit a tendency to unlearn specific knowledge content viewed as irrelevant to their current operations in advanced economies. However, this tendency may be guided by a single minded logic that carries the threat of homogenizing organization's knowledge. This pose a serious threat to desirable heterogeneity in companies' knowledge content that is often times conducive to their entrepreneurial capabilities⁴. Thus, managers need to realize that unlearning may come at a cost of constraining knowledge diversity, which calls for its vigilant exercise.

Furthermore, our study demonstrates the effect of the dual setting of emerging multinationals on the development of their ECs. Although, emerging multinationals expand to leverage their core capabilities and stretch others, this is not an automatic process. This process requires judicious selection of capabilities that could be generalized from one setting to another to avoid misleading integration of capabilities. In addition, managers should note that opportunity signals and time frames could not be extended from one setting to another. Thus, managers should expect that exercising EC internationally will exhibit pronounced differences from exercising it domestically.

7.3.4 Limitations and Future Research

Our study has several limitations that may present fruitful future avenues for several research questions. To begin with, our study conceptually argued for the interplay of learning and unlearning processes, highlighting the need for emerging multinationals' unlearning to pave the way for future learning. However, future empirical research is needed to substantiate our observations and uncover the sequence and the causal link between these two processes. Further, our study noted the impact of emerging multinationals' attributes such as their origin on their learning and unlearning processes. Future research could build on this observation through

examining the role these companies' internationalization objectives play in their learning and unlearning processes. Internationalization objectives may prove detrimental to what these companies decide to unlearn. The fact that these companies are internationalizing suggests that they will pursue a myriad of opportunities, examining the types of these opportunities and how they impact EC are important areas for future research. Gaining an understanding of the type of opportunities would help future research to outline the differences between emerging multinationals' ECs and other companies.

7.4 **Paper 4 (Chapter 5)**

7.4.1 Conclusion

Previous research on family firms' innovation has pointed out their innovativeness while at the same time showing evidence of their low R&D spending that hinders their innovation potential (Chrisman & Patel, 2012; Le Breton-Miller & Miller, 2006). Yet, fewer studies have examined the social role of family firms. This chapter suggests that studying family firms' social innovation may prove useful in assessing these firms' innovation potential and their social role. We examine their role in promoting social innovation and its implications for their entrepreneurial capabilities⁴, highlighting the inducements and barriers for family firms' endorsement of social innovation.

7.4.2 Theoretical Implications

The primary contribution of this work lies in providing an alternative look on family firms' innovation that goes beyond traditional R&D and its associated outcomes. We suggest a focus on social innovation that may help explain why previous research has reported mixed results on family firms' innovation. Our research tries to challenge the assumption that R&D is best suited to assess these firms' innovation. In doing so, we propose that social innovation may

prove to be a useful metric that captures non-market rewards to innovation. Although these rewards may seem at the first glance void of favorable economic gains, we argue that social return on investment may accrue to these firms' entrepreneurial capabilities⁴. This may open up new and oftentimes non-traditional possibilities for products and services.

Our argument also clarifies the usefulness of considering social innovation as a potential variable in modeling family firms' innovation and social role. Thus, future empirical research could examine the relationship between social innovation and social and economic outcomes. In addition, our attempt to highlight the inducements and barriers for family firms' innovation draws attention to possible boundary conditions that should be considered while examining these relationships. Thus, our observations provide a comprehensive view on family firms' social innovation that could provide useful insights in guiding future theoretical and empirical investigation.

7.4.3 Practical Implications

The conventional wisdom is that the value of social innovation lies in the societal needs it attends to and social ills it cures. However, firms may need to consider the social return to investment that may reward their capabilities and operations. Social innovation may carry important rewards for family firms' entrepreneurship through encouraging links with several parties, attending to their vested interest, and leveraging their embeddedness in societies. Thus, family firms' managers and owners should be encouraged to expand their view about opportunities to include social ones that may not carry direct economic gains. This would carry important implications for managers and owners' decision making on which social causes to endorse and which social needs to attend to. Today's needs that seem to show only social benefits may be tomorrow's most rewarding industries and opportunities.

Furthermore, managers should develop an understanding of social innovation as long term endeavors that not necessarily carry immediate returns. The implementation of social innovation is time consuming and complicated process, letting alone realizing its implications for firm-wide operations and capabilities. Thus, managers need to be prepared to get engaged in exercises that may defy market logic, seem time consuming, and irrelevant. However, perseverance and careful analysis are the keys for materializing the benefits of endorsing and implementing social innovation.

7.4.4 Limitations and Future Research

This chapter has limitations leading to unanswered questions, thus, providing opportunity for future research. Although this study focuses on social innovation as a promising concept for studying family firms' social role, like any other concept, social innovation could be expressed in multiple dimensions, including objectives, parties involved, and resources employed. Thus, future research should identify these dimensions and ways to measure them. Linking these dimensions to other facets of family firms' orientation would yield a more comprehensive view of these firms' social orientation. In addition, research could tease the links of these dimensions to several performance outcomes such as growth, market acceptance, and even social value.

Furthermore, identifying these dimensions would help create a typology of social innovations. This typology could help explain the level of involvement of family firms in promoting social innovation. Some firms decide to participate in one social opportunity while others get engaged in multiple ones. Understanding the several types of social innovation and their associated opportunities would help clarify the motives behind family firms' decisions. These motives will illuminate the role social initiatives play in the overall climate of family firms' quest for coherence and conflict avoidance.

In addition, our discussion hints that social innovation gains may go beyond social value and impact to include these firms' performance and skills. Thus, an important avenue for future research is to identify how family firms could leverage social gains into competitive and financial gains. Addressing this question and examining the mechanisms that may lead to this transformation would carry important implication for managers' choice of particular activities and opportunities. Therefore, clarifying useful means through which family firms could capture value from their social initiatives, which would encourage future inclination to participate in social innovation.

7.5 **Paper 5 (Chapter 6)**

7.5.1 Conclusion

The purpose of this chapter is to explore the nature of creative business models and the role of EC in their operations. Our conceptual analysis reveals four elements that correspond to four questions addressing the motivation, types of opportunities pursued, actors involved, and the activities enacted in a business model. Evidence from cases in the haute cuisine industry suggests that creative entrepreneurs' business models could be classified as either workshop or enterprise type. Importantly, both types demonstrate the vital role of EC in shaping these business models through the continuous exploration and exploitation of opportunities.

7.5.2 Theoretical Implications

The insights generated from this chapter complement what we have learned from previous studies on business models, which view them as templates of how firms conduct business and deliver value to stake holders (Shafer, Smith & Linder, 2005; Zott & Amit, 2007). However, instead of just focusing on firm-level components of business models, this study acknowledges the role of the individual creator in the nature of creative ventures' business

models. By adopting this approach, we were able to outline the elements of these ventures' business models and the role of EC in their operations. Specifically, we have learnt that depending on the motivation of creative entrepreneurs and the scale and scope of their activities, they either develop a workshop or an enterprise business model.

In particular, the workshop type is driven by the power of conveying artistic expression, and linking actors that work closely together to trigger creative ideas. The role of EC in this type appears to be the synchronization of activities around the generated art work to ensure coherency. On the other hand, the enterprise type is driven by growth and expansion, addressing a wide set of opportunities that act as a catalyst to ensure the participation of diverse actors. The role of EC in this case is to ensure synchronization among distantly linked and diverse parties to conduit diverse set of knowledge domains, which ensures the realization of opportunities at the right time and place.

An important advantage of examining the effect of the individual talent and skills on creative ventures' business models is that it allows examining the role of creators in the generation of their ventures' business models. First, this study provides further insights into the role of the concept of business models in harnessing and leveraging individual creativity.

Previous research has suggested that business models are conducive to firms' viability and growth (Mullins & RandyKomisar, 2009). Moreover, there is evidence showing that creative business models could be a significant predictor of firms' success (Magretta, 2002). We complement this line of research by considering the role of individual creativity in generating sound and creative business models. This stems from a widely held assertion that creativity on its own does not guarantee the implementation of viable business models (Woodman, Sawyer, &

Griffin, 1993), which leads us to propose EC as an important mechanism to explore and exploit opportunities arising from individuals' creative expression.

An emphasis on the role of EC sheds light on how individual level skills could be leveraged to firm-wide capabilities. Our observations of various haute cuisine chefs show how EC is pivotal to the transformation of their creative ideas into feasible opportunities. Further, EC plays an important role in encoding individual experiments into higher-order organizational capabilities such as in the case of Spanish chef Ferran Adrià and Peruvian chef Gastón Acurio. Thus, we enhance understanding of how individually generated creative ideas eventually result in collective development of firm-level capabilities. This resonates with recent empirical evidence in the capability literature that highlights the importance of organizational micro processes in the evolution of capabilities (Salvato, 2009).

7.5.3 Practical Implications

Consistent with previous research on creative and culture industries, our observations show that creative ventures of haute cuisine chefs exhibit tension between art and markets logics (Lampel, Lant & Shamsie, 2000). However, our emphasize on the role of the individual talent and linking it to the concept of business models offers guidance towards reconciling this tension, through considering the dynamic interaction between the individual and firm-level. This provides useful insights that go beyond the context of the haute cuisine or creative industries; it addresses a predominant faction that is often associated with the generation and implementation of creative ideas in all types of organizations (Baer, 2012).

Thus, managers and entrepreneurs need to develop an intimate understanding of the various elements of their business models and how they are influenced by individuals' creativity.

Once these elements are clearly understood, managers need to pay considerable attention to the

development of their ventures' ECs. EC establishes a systematic ability at the firm-level to continuously explore and exploit opportunities emerging from creative efforts at the individual level. Although managers should employ business models to harness individual creativity at the collective level, a considerable care should be given to avoid the possibility of turning them into liabilities that hinder the generation of creative ideas.

Managers should understand that the generation and implementation of creative ideas into viable opportunities is a fragile process that involves delicate intricacies. These intricacies require exercising a balanced approach that blends freedom of creative expression with the utility of organizing for profit and growth. Therefore, managers and entrepreneurs should mindfully deploy EC for integrating individual creative skills to overall firm capabilities. This will help minimize conflict and realize desired integrative gains. Integration is often times associated with arising conflict; however, it should be noted that individual creators' willingness to clarify artistic dominance may exacerbate these conflicts. Thus, the role of EC becomes invaluable in surfacing these conflicts, cultivating systematic abilities to quickly resolve them, and improving the odds of transforming creative ideas into realized opportunities.

7.5.4 Limitations and Future Research

Like all studies, ours has its own limitations that suggest avenues for future research. Our observations and proposed conceptual framework are based solely on cases from the haute cuisine industry. Although we would expect our findings to translate well in other organizational settings, their broader applicability remains another question for future research. Studies that explore other industries where creative talent is a major driver will be important for understanding the generalizability of our findings. Furthermore, it opens avenues for future research to empirically examine the role of different domain-relevant skills on the design and

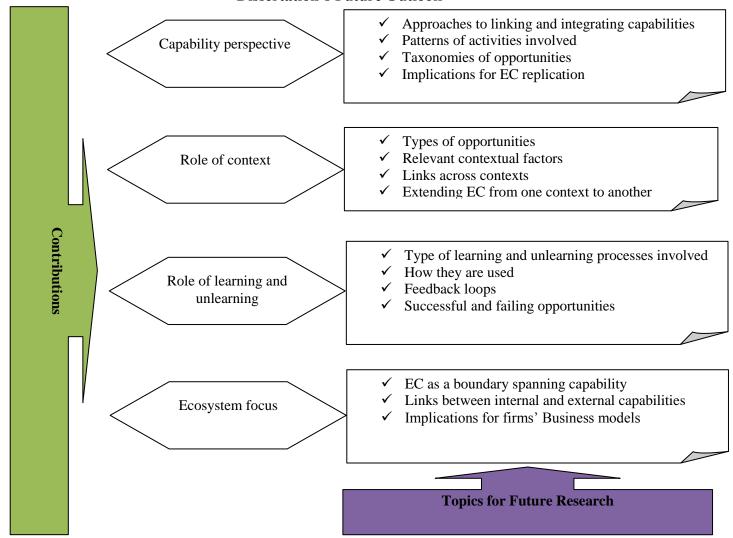
implementation of business models. It may be possible that certain contextual factors further enhance the possibility that founders' creative ideas ultimately make it to successful business models.

As mentioned above, our study relies on case evidence to allow close examination of the interaction of creators' individual skills and their ventures business models. However, although this choice increases the likelihood that our observations and proposed framework would be closely tied to the realities of the haute cuisine industry, it does so at the expense of external validity. Therefore, future research should submit our observations and proposed framework to rigorous empirical validation. One possibility is to empirically examine the relationship between business models and EC and their implications for sustaining individuals' creative ideas.

7.6 **Dissertation Future Outlook**

In this section, I highlight four common areas that represent the collective contributions of the previously discussed chapters. As seen in Figure 7.1, I link these contributions to potential research topics that may prove useful in shaping future research agenda.

Figure 7.1 Dissertation's Future Outlook



7.6.1 Capability Perspective

This dissertation aims at laying the foundation for expanding the conversation on firm-level entrepreneurship, by shifting from a sole focus on "disposition" to include "capabilities and actions" that firms use when they realize opportunities. Focusing on EC integrating and linking capabilities could open the doors for studying a range of important questions. For instance, how does the process of integrating capabilities look like? Is it linear or iterative? Does it depend on the types of opportunities pursued? Could we create taxonomies for opportunities that correspond to each process? Or the two processes are inseparable and need to be manifested

across opportunities? Even if this is the case, when is an emphasis on either one more conducive to the realization of particular types of opportunities?

Hence, developing these taxonomies should be based on the patterns of activities that firms use to integrate their capabilities while building EC. This will allow noticing recurring patterns across opportunities, which would prove useful to inform us whether successful EC could be replicated across different opportunities and settings. Replication may be of extreme importance when considering the application of EC to urgent needs such as societal ills or even firms facing survival threats. Qualitative research employing inductive theory building techniques, as well as panel designs will be valuable to gain deeper understanding of these questions. These techniques would enable teasing out interdependencies when capabilities are integrated as well as the temporal dynamics involved.

7.6.2 Role of Context

Throughout the chapters of this dissertation I focused on particular contextual factors that were seen as most relevant to the development of EC in these settings. However, contexts include a variety of contextual parameters such as cultural, industry, sector and economic wide characteristics. Future research should assess and empirically validate the relevance of these contextual factors across different contexts. It would be interesting to see how these factors affect the type of opportunity pursued through EC? What is the effect of these types of opportunities on the development of EC? How EC and the corresponding opportunities affect the contexts that gave rise to them in the first place? For instance, how they affect the convergence and divergence of particular industries, how they relate to the emergence of new sectors, and even the rise and fall of whole economies? Attending to these questions holds considerable promise to move the entrepreneurship field from a focus on the origin of opportunities (whether

created or discovered) to a focus on the type of opportunities and the contexts they are embedded in.

Also, this directs attention to the value of linking different contexts, what could we learn from extending EC developed in one context in pursue of particular types of opportunities to a different one. For instance, in Chapter 3, I examined EC in Swedish SMEs, however, the Scandinavian context is known for its surpassed ability to implement social innovation and its associated opportunities. The question becomes how EC of these SMEs could be extended to other types of opportunities within the same context or even in completely different ones. For example, applying lessons learnt from the development of EC for social innovation in Scandinavia to the pressing social needs in emerging markets. Addressing these questions requires collaborative efforts between researchers across multiple countries to make use of different databases and data sources that enable comparisons across contexts.

7.6.3 Role of Learning and Unlearning

One important contribution of this dissertation is directing attention to the role of learning and unlearning in the development of capabilities in general and EC in particular. Thus, questions that would prove useful for future research are what type of learning and unlearning processes are conducive to the development of EC? How are these processes used? Are they used simultaneously or sequentially? What type of feedback loops exist between these processes? What is the effect of the type of opportunities pursued through EC on activating particular processes?

Learning and unlearning also implies success and failure, which would be natural to expect as firms develop EC. Therefore, avoiding the tendency to infer the occurrence of entrepreneurship when opportunities are successful would open fruitful research avenues. For

example, asking how successful opportunities correlate with failing ones? Could we identify patterns of learning and unlearning processes that distinguish them? How could firms make best use of failing opportunities as experiences for future learning and references for future unlearning? Failing is a sensitive issue when it comes to firms sharing experience about it, which calls for vigilance when sampling organizations and opportunities to avoid potential sampling bias.

7.6.4 Ecosystem Focus

Unlike other types of dynamic capabilities, EC does not solely focus on firms' internal capabilities; it rather stresses the importance of capabilities residing within and outside firms' boundaries. Hence, the discussion presented across the preceding chapters of the dissertation notes the importance of considering firms' ecosystems. A focus on firms' ecosystems comprises interesting topics for future research: how does EC develop as a boundary spanning capability? What are the capabilities involved? How are internal and external capabilities linked? What spurs these links? What are the implications of these links for the emergence of firms' business models? Thus, an interesting empirical issue would be how to operationalize the business model concept and relate it to firm's EC and performance outcomes? This would require future research designs to combine multiple data sources, specifically interviews, surveys, and archival data. This would permit drawing statistical robust conclusions because one data source would make up for the biases inherent in another.

In conclusion, throughout the chapters of this dissertation, I have expended considerable effort to explicate the concept of EC and clarify its role across multiple contexts. In large part, this effort attempts to offer an understanding of firm-level entrepreneurship as a collective ability through which firms integrate their capabilities, existing within and outside their boundaries. The

focus on EC within diverse contexts gives rise to positive observation; despite the contextual variety, the robustness of EC conceptualization still holds. This leads to an exciting conclusion; although seemingly challenging, being attentive to the role of context enriches our conceptualizations and promises new and useful insights into the phenomenon under investigation.

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