

## **BUILDING DYNAMIC CAPABILITIES FOR STRATEGIC ENTREPRENEURSHIP IN SMEs**

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### **Abstract.**

This paper emphasizes the challenges of entrepreneurship within existing small and medium-sized enterprises. In turbulent markets small enterprises have to improve their business concept at a fast pace to meet changing market demands and avoid devastating competition from their larger counterparts. We build upon the resource-based view of the firm and the dynamic capability approach in our search for mechanisms that increase the capability for strategic entrepreneurship within SMEs. We discuss the routines and features facilitating the acquisition and linking of new and old resources and develop new strategic action paths. We elaborate on four different dynamic capabilities including entrepreneurial orientation, radical organizational learning capabilities, a virtual organizational form and an interactive strategic decision-making process.

Key words: strategic entrepreneurship, competitive advantage, resource-base, dynamic capabilities.

## **INTRODUCTION**

This paper takes as a starting point the challenges of developing competitive strength in small and medium-firms. Smaller firms in competitive markets have to build new strategic assets at a fast pace to avoid devastating competition and earn superior rents. Entrepreneurship is about identifying and exploiting new opportunities in the environment (Shane & Venkataraman, 2000). Established small and medium-sized enterprises (SMEs) firms have to develop organizational mechanisms increasing their corporate entrepreneurial activity towards new strategic action patterns without undermining the success of the present competitive platform ( Borch et al. 1997; Zahra et al., 1999a). Strategic entrepreneurship is the entrepreneurial action directed towards creating sustainable competitive advantage (Hitt et al., 2002). Smaller firms with a small strategic apex and few internal resources may face challenges in dedicating sufficient efforts towards innovation and new business development efforts. Also, the success of present products may lead to path dependency slowing down the change process (Teece et al. 1997, Eisenhardt & Martin, 2000).

The resource-based view of the firm highlights tools increasing the efficiency and effectiveness of the firm through intricate bundling of resources that also create barriers for competitors (Barney, 1991, 2001). Smaller firms may gain competitive advantage through resource combinations supporting their competitive positioning in the market (Borch et al, 1999). The dynamic capability emphasizes the resources that increase the pace of change towards new, original, strategic adaptation patterns in future (Teece et al., 1997). The dynamic capabilities may stimulate the strategic entrepreneurship process of smaller firms, but may also prove costly. Smaller firms may therefore face both benefits and pitfalls when trying to develop such capabilities. The development of advanced organizational resources as the dynamic capabilities may depend on both industry characteristics and the growth ambitions of the SME (Mauri & Michaels, 1998; Brush et al., 2001). We therefore are in need of a model of strategic entrepreneurship in SMEs facilitating change without generating too costly development of capabilities.

In this paper we first discuss the role of strategic entrepreneurship in smaller firms. Then we present the basic challenges of creating strategic advantage from a resource-based view. Finally, we elaborate on the dynamic capabilities of the firm that may improve the strategic adaptation of SMEs in future markets.

## **STRATEGIC ENTREPRENEURSHIP AND THE SMALL AND MEDIUM-SIZED ENTERPRISE**

Schumpeter (1934) describes entrepreneurship as the creation of new resource combinations through the act of innovation. Degree of firm entrepreneurship may be analyzed through dimensions like a the risk of its operation, its aggressiveness towards competitors, their proactive manner in launching new strategies, and the innovativeness of new products (Covin and Slevin, 1991:7; Stevenson & Jarillo, 1990) Corporate entrepreneurship may be defined as the creation of new action patterns and strategic renewal through transforming present organizational resources into new resource combinations in existing firms (Burgelman, 1984; Venkataraman et al., 1992; Dess et al., 1999).

Small firms are claimed to suffer from a simple structure, a limited strategic apex and emotional bonds with high family or founder-owner dominance (D'Amboise and Muldowney, 1988; Miller and Friesen, 1984). These characteristics may create path dependencies hampering radical change in business patterns. In a competitive market, firms have to strive to exploit product-market opportunities through dramatic change of business concepts and, experimental and proactive behavior (Dess, Lumpkin and McGee, 1999). Smaller firms with limited opportunities for influencing the market structure has to be creative in launching new business concepts (Zahra, Nielsen and Bogner (1999; Messeghem, 2003).

Strategic entrepreneurship is the integration of entrepreneurial, opportunity-seeking actions and strategic advantage-seeking actions towards business concepts that gives superior value creation and at the same time reduction of competitive threats (Hitt et al., 2001; Venkataraman & Sarasvathy, 2001). A business concept or model is a framework for identifying how your business creates, delivers, and extracts value. Strategic entrepreneurship implies not minor adjustments to established business concepts, but the creation of entirely new business models that give superior rents in the long run (Hitt et al., 2002). This

perspective adds the competition dimension to the traditional entrepreneurial research (Hitt & Ireland, 2000; McGrath & McMillan, 2000). It provides guidelines for the interaction between competitive strategies and the allocation of resources, where acquisition and bundling of resources into unique, cost-efficient and valuable patterns is highlighted (Cooper, et al., 2000; Meyer & Heppard, 2000). The entrepreneurial action in established firms has to be strategic in keeping competitors away from its successful business concept.

### **THE RESOURCE-BASED VIEW OF THE FIRM AND THE DYNAMIC CAPABILITY APPROACH**

The resource-based view of the firm (RBV) is concerned with how business organizations develop and employ superior resources creating heterogeneity-based rent (Barney, 1991; Collis & Montgomery, 1995). This is achieved through higher efficiency and/or effectiveness, ex ante limits to competition in the form of first mover advantage, imperfect mobility, and ex post limits to competition (Barney, 1991; Peteraf, 1993). The RBV provides a starting point for understanding how resource base and organizational context influence on corporate entrepreneurship through its focus on resource accumulation, conversion, leverage and the creation of new resources (Floyd and Wooldridge, 1999; Green, Brush and Hart, 1999).

However, exploiting existing strategic assets will not create long-term competitive advantage. In a dynamic world, only firms who are able to continually build new strategic assets faster and cheaper than their competitors will earn superior returns in the long run (Markides and Williamson, 1994). The RBV research has been criticized for encouraging a strategy content focus and not emphasizing how the superior strategic assets are achieved (Hamel, 2000; McGuiness & Morgan, 2000; Priem & Butler, 2001). The resource-based view of the firm only tells why firms have success in the present context. It gives no clear understanding about how a firm got their present fit, and have only limited focus on the processes that leads to exploration of new opportunities. We are inn need of explicit guidance about how to facilitate change that may create match between firm resources and the future market opportunities. One reason for this lack of focus is that such mechanisms are not easily tracked or managed, they are often individualized, based on tacit knowledge, and social and emotional embedded (McGuiness & Morgan, 2000).

The dynamic capability approach (DC) has been developed partly as a response to the critique of the resource-based view. This approach is concerned with how the management of the firm creates mechanisms and processes that create fit between a changing and at times turbulent external environment and the firm's market-product portfolio (Grant, 1996; Pisano, 1994; Eisenhardt and Martin, 2000). It is more oriented towards "the why and where" questions, more than what the firm is at present (Priem & Butler, 2001) A dynamic capability is a subset of the total set of resources allowing the firm to create new products and processes. It represents learned patterns of collective activity through which the organization systematically generates and modifies its resources and operating routines in pursuit of improved effectiveness to meet changing market circumstances (Teece et al., 1997; Zollo & Winter, 2002). The DC literature is concerned with preparing the firm for the exploitation of new opportunities in future markets. In particular, there is a focus on the latent rules and mechanisms that facilitates the creation of new distinctive and difficult to imitate advantages. The dynamic capabilities also have to balance the present and future. This includes managing both the creation of new products and the operational management of present production, improvements of present competence and routines and the removal of competences and traces of earlier paths that may hamper the renewal processes of the firm. Teece et al. (1997) define the concept of dynamic capability as the firms's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments.

We are here talking about the capacity of the firm to renew competences and physical resources so as to increase the speed of change and achieve congruence with the changing business environment (Collis, 1994, Winter 2003). The dynamic capability approach in particular highlights the manipulation of the knowledge resources of the future (Grant, 1996; Kogut, 1996).

The dynamic capability view is not only concerned with resources inside the firm's borders. It also includes processes towards achieving the necessary control over resources owned by others (Greene et al., 1999; Barney, 2001; Hitt et al., 2001). The dynamic capabilities do not only affect the output for the firm in which they reside, but also indirectly through influencing the operational capabilities and the borders of the firm (Helfat and Peteraf, 2003).

From the description of the dynamic capability one may deduct that this represents specialized competence resources, managerial capacity and often long term commitment of key personnel in the firm. This implies that it is a costly tool especially for smaller firms. As an example, a R&D section may demand highly skilled engineering personnel with PhD background, costly lab facilities, and research assistants. Much time spent on thinking about new visions and new tools takes focus away from running the present business. As such, dynamic capabilities are tools for changing environments and entrepreneurial adventures. Effective patterns of dynamic capabilities are expected to vary with environment dynamism. In environments with moderate change in industry structure, dynamic capabilities are more likely to be simple routines of incremental adjustment to changes. In turbulent environments with dramatic changes in industry structure, technology and competition, the dynamic capabilities are experimental, relying on new knowledge and efforts to couple and decouple the firm into constantly new resource patterns with more unpredictable outcomes (Eisenhardt & Martin, 2000).

In nascent entrepreneurial firms, the dynamic capabilities may be the dominant resources (Lei et al., 1996; Teece et al., 1997). In established firms, the DC may be resources not activated or ignored. The resources providing dynamic capabilities are as such highly context-specific and difficult to track. The resource-based view may here benefit from an integration of theories of entrepreneurship to open the road towards creative new strategic patterns (Barney, 2001). The RBV is in search of capabilities that create new paths, reconfigure present resources, add new ones and integrate old and new capabilities into valuable and not easily copied or substituted adaptation patterns (Eisenhardt & Martin, 2000; Teece et al, 1997). We have to develop parameters that make it possible to trace and generate empirical testable hypotheses and empirical studies (Mosakovski and McKelvey, 1997; Williamson, 1999; Priem and Butler, 2001; Barney, 2001). It is therefore important to discuss the basic characteristics of the dynamic capabilities compared to other resources of the firm. In this study, we search for a platform for analysing dynamic capability development within empirical research in other management fields such as organizational theory, learning theory, and entrepreneurship research (Teece et al., 1997; Eisenhardt & Martin, 2000).

## **DYNAMIC CAPABILITIES AND THE SME**

In this study we focus on the dynamic capabilities of small firms in competitive environments. We are in particular looking for capabilities that may reduce the path dependency of earlier strategic adaptation and resource bundling, capabilities that add new valuable resources both through internal learning processes and external acquisition, and finally, capabilities that balance the present and the future paths of the firm making it possible to exploit successful strategies of the present and at the same time prepare for the future. The main links in the model are presented in figure 1.

### **Dynamic capabilities that create new paths of action.**

The present position of a firm, its repertoire of routines, physical resources may create a history that severely constrain future strategic action ( Teece et al., 1997). In smaller firms where the owner-manager often has a strong position, mental bindings and social embeddedness may hamper the processes towards new radical new business concepts. Radical innovation comes from generating a new sense of destiny, from unleashing the imagination of people across the organization and look for unconventional opportunities (Hamel, 2003). An entrepreneurial mindset is required for firms to compete successfully in the new competitive landscape (Hitt et al., 2002). Entrepreneurial alertness and judgement are important strategic assets of a small firm. The closeness between manager and employees of small firms may represent a beneficial feature if the entrepreneurial mindset is inspired throughout the firm (Fu-Lai Yu, 2001). Messagem (2003) claims that small firms with a strong entrepreneurial orientation develop a specific managerial activity pattern suitable for corporate entrepreneurship. The entrepreneurial orientation concept here provides a platform for viewing these capabilities of the firm. We are here talking about the combined capability of a firm's innovation process, proactiveness, and risk-seeking. Entrepreneurial orientation suggests that some firms are more willing than others to continually search for opportunities and solutions outside the realm of their current activities and look out for risky adventures Lumpkin and Dess 1996). Proactiveness reflects the firm's propensity to undertake a continuous search for opportunities, especially opportunities that do not pertain to the firm's current activities. One may expect that this type of dynamic capability is in particular, present in growth-oriented firms.

We therefore present the following postulate:

*Postulate 1a: In SMEs, there is a positive relation between DC in the meaning of entrepreneurial orientation of the manager and strategic entrepreneurship*

*Postulate 1b: DC in the meaning of entrepreneurial orientation is positive related to SMEs growth ambitions*

**Dynamic capabilities that create new resources.** Superior capabilities in learning play a very important role in creating sustained competitive advantage. Increasing skills in all parts of the organization creates a not easily located and intangible contribution to strategy (Teece et al., 1997). It serves as a source for continuous renewal of all the resources in the firm, and not the least the basic operational competence needed for efficient implementation of the strategy in action (Zollo & Winter 2002). Organizational learning effort is about activities aimed at building on exploitation of existing knowledge involving the incremental improvement of existing knowledge, skills and processes. Secondly, it about exploration, developing new knowledge skills and processes (Cohen and Levinthal; 1990; Levinthal and March 1993).

Radical learning demands that the firm challenges the dogmas and the orthodoxies of the incumbents. It includes bringing in new perspectives, diversity in views and critical confrontation of present knowledge perspectives and power structures, routines and rules (Hamel, 1997). The advanced learning process demands improvisation based on a platform of practiced performance (Miner et al, 2001) routines for articulation, codification and accumulation of experiences (Dyer et al., 2001; Zollo & Winter, 2002) together with more systematic experimentation as in R&D processes.

Learning mechanisms guide the evolution of dynamic capabilities (Eisenhardt & Martin, 2000). Radical change often comes from long term and diverse experimentation within the firm and in cooperation with external actors. This demands broad channels of information exchange, cross-functional teams that bring together different sources of expertise. The learning process includes routines that provide exchange of joint experiences among team and functions, extensive communication links out of the firm to increase the amount of new impulses. In a smaller firms, the manager(s) play a more significant role in shaping the firms future. Therefore we postulate that:

*Postulate 2a: In SMEs there is a positive relation between DC in the meaning of systematic learning routines and strategic entrepreneurship.*

*Postulate 2b: DC in the meaning of systematic learning routines and strategic entrepreneurship is positively related to degree of knowledge intensity of industry.*

### **Dynamic capabilities that reconfigure and integrate resources**

Capabilities to patch or realign business concepts where resources are added, combined, or split are important strategic features (Eisenhardt and Brown, 1999). Green, Brush and Hart (1999) argue that small firms to achieve strategic entrepreneurship has to map the broad set of resource bases and competencies both existent and emergent within the firm. The competitive strategy and the value chain needed for serving this strategy serves as the basis of this thinking ((Argyres & McGahan, 2002). The combination of resources is the driver for the new business concept development. One has to identify new combinations of productive resources in the firm and to extend the frontiers of capabilities by discussion of synergies between resource combinations within and outside the firm (Venkataraman et al, 1992).

Connecting several ventures with different resources also enhances the organization's ongoing adaptation, since the linkage improves overall innovation management, enables the firm to reconfigure its resources, and provides ways to experiment with new ideas (Dougherty, 1995). SMEs may here benefit from a simple organizational structure with few internal borders increasing flexibility, with direct ownership involvement and low formalization increasing the speed of decision-making, and few organizational boundaries increasing opportunities for linking resources in different parts of the organization (D'Amboise and Muldowney, 1988; Miller and Toulouse, 1986). This also includes reducing borders towards resources in the environment. The small firm may not serve as a direct threat to other firms. It may therefore more easily link up and draw on the skills of partners, and develop complicated webs of relationships with business partners that include customers, suppliers, competitors, research institutes and financial resources. Through networks founded in personal trust the small firm may more easily than their larger counterparts achieve valuable resources not easily attained in the market without the partners feeling the risk of disturbing power play (Borch, 1994; Das & Teng, 2000; Dyer & Singh, 1998; Williamson,

1999) Such relational resources may be seen as a significant capability for strategic advantage (Gulati, 1999; Lee et al., 2001; Lorenzoni & Lipparini, 1999; Barney, 2001).

Firms with these characteristics have been given different names. Here we use the term, virtual organization as an organization that achieves strategic value through continuous re-design of its business processes through expansion and contraction of external resource link, forming time-limited value chains, and trust-based governance mechanisms (Dess et al., 1995; Lipnack & Stamps, 1997; Davidow & Malone, 1992; Nohria & Berkley, 1994). Firms with a large and fluctuating span of partners, loosely structured for example through advanced ICT, find new opportunities through transaction-efficient cooperation within loosely coupled networks.

Therefore we postulate that:

*Postulate 3a: In SMEs, there is a positive relation between DC in the meaning of a virtual organizational form and strategic entrepreneurship*

*Postulate 3b: DC in the meaning of a virtual organizational form in SMEs is positively related to growth ambitions and degree of knowledge-intensity of industry*

### **Dynamic capabilities that balance past and future paths**

Smaller firms have to be careful about not destroying the success of present strategies in their search for future alternatives. Strategic decision making is the dynamic capability where managers pool their vision, present business activities, opportunities, decides upon functional links, and invest in resources. This is the process where the choices that shape the major strategic moves of the firm are made (Eisenhardt, 1989; Fredrickson, 1984; Judge and Miller, 1991). Within the strategic decision-making process the vision of the future are created to give a picture of what the firm will look like in the years to come (Hambrick & Fredrickson, 2001; Wickham, 2001; Helfat & Peteraf, 2003). As such this process sets the frame work for the whole strategic change activity of the firm. Among others, this process decides upon the paths of change within the firm, not the least the bindings to earlier solutions and action patters, the degree of experimentation and the range of external search and integration. The notion of path dependencies recognises that history matters because previous dispositions constrain future behaviour. Paths are referred to as the strategic alternatives available to the organization (Teece et al., 1977). Within the strategic decision-making process, a central

capability is to balance continuity and change and create the necessary platform of stability (Pettigrew, 1998).

For smaller firms, the lack of financial resources makes it necessary to re-circulate present resources, with fewer degrees of freedom as to radical change of business patterns. At the other side, there will be close ties between the different dynamic capabilities and between the dynamic resources and the basic operational resources providing a smoother decision-process and creative links between them.

Therefore we postulate that:

*Postulate 4a: In SMEs, there is a positive relation between DC in the meaning of a an interactive strategic decision-making process and strategic entrepreneurship*

*Postulate 4b: In SMEs, the DC in the meaning of a an interactive strategic decision-making process is positively related to firm growth ambitions and knowledgde-intensity*

## **CONCLUSION**

This paper highlights the managerial mechanisms facilitating strategic entrepreneurship in small firms. Four different dynamic capabilities were presented providing the processes for radical new business concepts in existing SMEs. The small firm has to be careful so that historical success does not create limitations in the thinking towards exploiting new entrepreneurial opportunities. They therefore have to keep an entrepreneurial orientation within the firm. Secondly, the firm has to engage in radical learning processes to provide new competence resources. To facilitate flexible bundling of old and new resources both from internal and external resources the small firm may benefit from a simple structure facilitating a virtual organizational form. Finally, of special importance to smaller firms is to limit the costs of the dynamic activities on the present strategy implementation. This implies an interactive strategic decision-making process. The small firm may here benefit from a compact strategic apex with several of the dynamic capabilities embedded in a few persons, with links to all the dynamic processes and the strategy implementation process.

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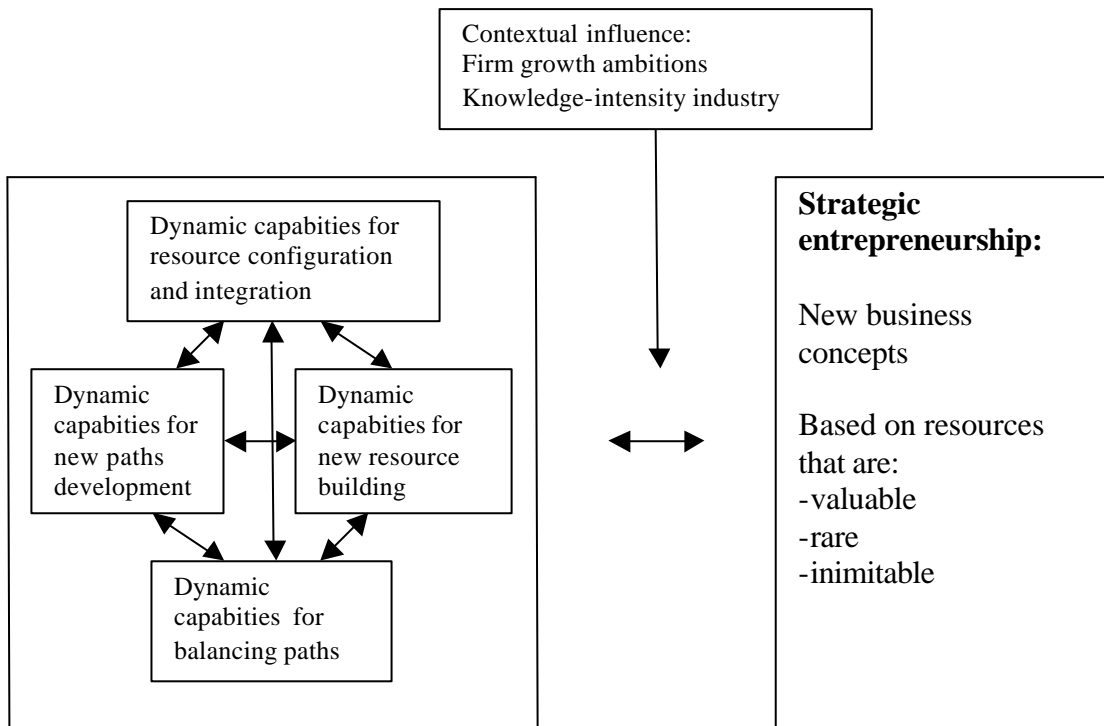


Figure 1. The relation between dynamic capability and strategic entrepreneurship.