Dynamic Capabilities and Organisational Performance

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Abstract

This paper presents a conceptual framework for the dynamic capabilities – organisational performance relationship. It implies that the organisational resource-base (e.g. marketing and research and development capabilities) mediates the relationship between dynamic capabilities and organisational performance. Furthermore, marketing strategic orientation plays an important role in the development and deployment of dynamic capabilities and consequently affects organisational performance indirectly. This research area is relevant to both marketing managers and academics alike as environmental turbulence calls for control and adjustment of the organisational resource base in order to maintain or increase organisational performance.

Introduction

In today's markets, marketers are faced with environmental turbulence stemming from technological advances, changes in consumer demand, and new regulations (Helfat et al., 2007). These developments can affect organisational performance and also cause competitive advantages to be less valuable or to even become redundant. Consequently marketers need to respond appropriately and rethink capabilities such as new product development and marketing (Dreyer and Gronhaug, 2004; Silverblatt and Korgaonkar, 1987). Zott (2003) argues that some firms deal better with environmental turbulence than others and that it is of interest to identify the factors that cause performance differentials when responding to environmental turbulence. In general, performance differentials have either been attributed to the industry (e.g. Schmalensee, 1985) or to the organisation itself (e.g. McGahan, 1999; McGahan and Porter, 1997; Rumelt, 1991). In particular, research on organisational factors has increasingly examined the role of dynamic capabilities. Teece, Pisano, and Shuen (1997, p. 515) state that the "term 'dynamic' refers to the capacity to renew resources so as to achieve congruence with the changing business environment […]." Dynamic capabilities are expected to be valuable for organisations when dealing with environmental turbulence.

Dynamic capabilities are part of the overall organisational resource-base. According to the resource-based view of the firm, resources (i.e. inputs for the production of goods and provision of services) and organisational capabilities (i.e. intangible assets that are based on skills, learning, and knowledge in deploying resources) can be sources of competitive advantage. To become so, they have to be valuable, rare, inimitable, and non-substitutable (Amit and Schoemaker, 1993; Barney, 1991; Combe and Greenley, 2004). Research on the resource-based perspective has incorporated dynamic processes into a conceptualization of a theory of the firm (Zott, 2003). This resulted in a stream of research, focusing on dynamic capabilities. Dynamic capabilities, which together with operational capabilities constitute organisational capabilities, do not directly aim at the creation of a product (Helfat and Peteraf, 2003; Teece, Pisano and Shuen, 1997); they build, integrate, or reconfigure operational capabilities and concern change (Helfat et al., 2007). Yung-Ching, and Tsui-Hsu (2006, p. 215) state that "dynamic capabilities are necessary for business transformation and for identifying practices that develop those capabilities." Capability possession, deployment, and upgrading are important for the success of organisations (Luo, 2000).

Furthermore, organisational response to environmental turbulence requires both sound corporate-level (product market scope) and business level strategies (sources of competitive advantage) (Dess, Lumpkin and McGee, 1999). Marketing strategic orientation influences the development and deployment of dynamic capabilities and therefore is conceptualised as affecting the dynamic capabilities – performance relationship.

As no prior research has conclusively dealt with the consequences that dynamic capabilities have on organisational performance and with the role that marketing strategic orientation plays in this relationship, this paper's contribution lies in explaining more explicitly the intricacies of the dynamic capabilities – performance relationship. This paper concludes with conceptualising the dynamic capabilities and organisational performance linkage and identifies a number of propositions that relate to the conceptual model.

Dynamic Capabilities and Organisational Performance So Far

The dynamic capabilities view of the firm is the evolutionary extension of the resource-based perspective as it explicitly looks at how capabilities evolve and how organisations deal with environmental turbulence (Helfat et al., 2007). The term 'dynamic' differentiates one capability (e.g. the operational ability to develop new products) from another form of ability (e.g. the ability to reform the way the organisation develops new products) (Zahra, Sapienza and Davidsson, 2006). In this example, the new routine for product development which is a new operational capability is distinguished from the ability to alter such capabilities which is labelled a dynamic capability. Dynamic capabilities do not directly concern the production of a good or the provision of a marketable service and therefore do not directly affect a firm's output (Helfat and Peteraf, 2003). They affect the productive process indirectly by integrating, reconfiguring, gaining, and releasing resources to respond to environmental turbulence or to create internal and external change (Eisenhardt and Martin, 2000; López, 2005).

Different opinions exist as to whether a dynamic capability itself can be the source of competitive advantage. Teece, Pisano, and Shuen (1997) share the view of the resource-based theory of the firm which requires resources to be valuable, rare, imperfectly imitable, and non-substitutable (VRIN-criteria) in order to generate competitive advantage (Barney, 1990, 1996). Slater, Olson, and Hult (2006) consider the so-called VRIN-criteria to be a necessary characteristic for dynamic capabilities. Eisenhardt and Martin (2000) express a contrasting opinion and argue that a best practice of dynamic capabilities exist and that dynamic capabilities show equifinality, homogeneity, and substitutability across firms. Though dynamic capabilities emerge from path-dependent histories of firms and are unique and idiosyncratic processes (Teece, Pisano and Shuen, 1997), they may share common features across firms; however, they differ in their effectiveness. Moreover, dynamic capabilities not necessarily result in competitive advantage, as they create value indirectly through e.g. the reconfiguration of a firm's resource base. Consequently, a dynamic capability may seem worthless in one scenario when the resulted reconfiguration did not generate the intended outcome, but may be valuable in another case (Zahra, Sapienza and Davidsson, 2006).

Helfat et al. (2007) state that traditional measures of performance (value creation, competitive advantage, sustainable competitive advantage, and rent generation) can be applied to dynamic capabilities. However, those measures do not include a time dimension (except of the concept of sustainable competitive advantage) and not explicitly incorporate the dynamic and process character of dynamic capabilities. To overcome this, Helfat et al. (2007, p. 7) add two measures to their concept named 'evolutionary fitness': firm survival and firm growth. They state that evolutionary fitness "refers to how well a dynamic capability enables an organization to make a living by creating, extending, or modifying its resource base."

Firm survival is a clear indication of whether an organisation is capable of adapting to environmental turbulence. If an organization can survive in the long-term, this implies that it is successful in maintaining evolutionary fitness. Survival is a necessary condition for organizational growth. This measure "incorporates the extent of evolutionary fitness in the form of increased organizational size over time, whether in terms of revenue, assets, or other measures of size (Helfat et al., 2007, p. 15)." However, it is important to note that the two constructs of firm survival and firm growth do not necessarily covary: survival does not guarantee growth and not all growth is automatically profitable (Markman and Gartner, 2002). The very possession of dynamic capabilities does not necessarily lead to superior organizational performance (Zahra, Sapienza and Davidsson, 2006).

In summary, a dynamic capability is defined as the organisational ability to create internal change and/or to respond to environmental turbulence. This is done through reconfiguring (creating, extending, and modifying) the organisational resource base (Eisenhardt and Martin, 2000; Penrose, 1959; Zahra, Sapienza and Davidsson, 2006). Accordingly, firms may differ in displaying dynamic capabilities that provide a basis for reconfiguring their e.g. marketing, sales, customer linking, and service capabilities. Dynamic capabilities, through reconfigurations of these operational capabilities, can support the creation of sustainable competitive advantage and are capable of indirect rent generation.

Conceptual Framework

The development and evolution of dynamic marketing capabilities is influenced by knowledge creation, codification, and integration, as well as investment processes. Knowledge creation is based on mechanisms of organisational learning. Knowledge creation can take place in various forms, e.g. through learning-by-doing and experimentation. It is essential for organisations to codify the generated knowledge to make it available for the entire firm. Codified knowledge is easier to apply and serves as an accelerator for the building of routines (Eisenhardt and Martin, 2000). Knowledge integration is an important step for the development of dynamic marketing capabilities as knowledge may need to be applied in a different context than it was once intended to be used in. Lastly, investment processes positively influence the development of dynamic capabilities (Helfat et al., 2007). Differences in the value of capabilities and consequently in performance are a function of firm-specific investments in developing them (Ethiraj et al., 2005; Kor and Mahoney, 2005).

The utilisation of dynamic capabilities is triggered by environmental turbulence. Environmental turbulence refers to external activities such as changes in consumer demand, the development of new technologies or new laws and regulations. This trigger mechanism is moderated by a firm's entrepreneurial orientation. Entrepreneurial orientation refers to the "methods, practices, and decision-making styles managers use to act entrepreneurially (Dess, Lumpkin and McGee, 1999, p. 95)" (Lumpkin and Dess, 1996). Environmental turbulence influences the development of dynamic capabilities indirectly by stimulating knowledge creation, codification, integration, and investment processes.

Dynamic capabilities affect organisational performance indirectly and directly. The indirect effect on performance is achieved through reconfiguring the resource base and can be accomplished through creating, extending, and modifying the resource base. (e.g. Eisenhardt and Martin, 2000; Helfat et al., 2007; Kale, Dyer and Singh, 2002). These reconfigurations aim to positively influence organisational performance. Dynamic capabilities have a direct effect on performance as the creation, maintenance, and utilization of dynamic capabilities create costs.

Strategic orientation moderates the relationship between dynamic capabilities and organisational performance (Slater, Olson and Hult, 2006). The role of strategic orientation is multifaceted. Strategic orientation influences the development of dynamic capabilities as it creates the path for knowledge-related processes and investment processes. Strategic orientation impacts which learning mechanisms take place. Furthermore, a firm's strategic orientation moderates the trigger-relationship between environmental turbulence & internal change and dynamic capabilities utilisation as it will decide which internal and external changes the organisation will react to and consequently which dynamic capabilities are required. Finally, strategic orientation moderates the reconfiguration activities of dynamic capabilities on the resource base. This is e.g. done through differential timing of dynamic capability utilisation and which parts of the resource-base are reconfigured.

The development and evolution of dynamic capabilities is an important topic that has been dealt with in previous literature (e.g. Fuhl, 2006). However, our central interest in this paper is to explore the cost effect dynamic capabilities have on organisational performance as well as the effects that marketing strategic orientation has on the dynamic capabilities – performance relationship. The following section will present a few hypotheses and further clarify the interrelationships of the constructs. Propositions about the relationship between dynamic capabilities and the organisational resource base will not be presented in detail as it has been dealt with in the literature (e.g. Helfat et al., 2007).

Propositions

The acquisition, creation, and maintenance of the organisational resource base create costs (Barney, 1986; Dierickx, Cool and Barney, 1989; Zott, 2003). Costs include reconfiguration costs which occur through the creation, existence, and utilisation of dynamic capabilities as well as time and management attention (Zollo and Winter, 2002).

Two main kinds of costs within the dynamic capability logic are dynamic capability governance and transaction costs. Organisations control resources and capabilities that may have become valuable sources of competitive advantage; however, once organisations face environmental turbulence, the need for reconfiguration of the resource base arises. According to Langlois (1997), even the most integrated firm cannot possess all resources and capabilities necessary for all activities. Therefore, organizations need to link up with other firms; especially when innovation is involved, links among organisations get very complex. By governance costs we mean expenses that are associated with the internal governance of capabilities (through internal reconfiguration). Transaction costs refer to the acquisition of capabilities and resources on external markets and arise when organisations need to consult the external market or other business units through the use of e.g. technology transfer, alliancing or merger & acquisition (Bowman and Ambrosini, 2003; Langlois, 1997).

If a firm controls many complimentary capabilities and consequently does not have to consult external sources during the reconfiguration process in situations of environmental turbulence, the organisation will have to bear less dynamic capability transaction costs. On the other hand, this will increase the need for internal reconfiguration of existing resources and capabilities and this leads to increased governance costs.

P1a: The more complementary capabilities are controlled by an organisation, the lower the transaction costs for dynamic capabilities when facing environmental turbulence.

P1b: The more complementary capabilities are controlled by an organisation, the higher the governance costs for dynamic capabilities when facing environmental turbulence.

Strategic orientation "defines the broad outlines for the firm's strategy while leaving the details of strategy content and strategy implementation to be completed (Slater, Olson and Hult, 2006, p. 1224)." Slater, Olson, and Hult (2006) showed that a firm's strategic orientation moderates the relationship between dynamic capabilities and organisational performance as different orientations entail different sets of dynamic capabilities which in turn have different effects on performance (Conant, Mokwa and Varadarajan, 1990).

Strategic orientations that focus on differentiation (Porter, 1980) and innovation seem to be more supportive for the development and deployment of dynamic capabilities. Frequent deployment of dynamic capabilities increases their value and leads to improved performance (Zahra, Sapienza and Davidsson, 2006). Differentiation orientation also increase the likelihood of early dynamic capability utilisation and quicker reaction to e.g. changes in customer demand positively influences firm growth (Dess, Lumpkin and McGee, 1999; Helfat et al., 2007; Zahra, Sapienza and Davidsson, 2006). The differentiation strategy is found to be associated with higher costs. In the case of new product development, the development, production, and marketing of new products and services are expensive and can be summarized as 'liability of newness' (Stinchcombe, 1965). This leads to a negative impact of dynamic capabilities on financial measures of firm performance like return on investment and cash flow on investment (Hambrick, 1983). Summing up, different strategic orientations are expected to lead to different dynamic capability costs as well as different timing of dynamic capability utilisation.

P2a: Strategies stressing differentiation lead to early dynamic capabilities utilisation.

P2b: Strategies stressing cost leadership lead to late dynamic capability utilisation.

P2b: Differentiation orientation increase dynamic capability costs.

Conclusion and Further Research

This paper presents a conceptual framework of the dynamic capabilities – organisational performance relationship. It has been shown that dynamic capabilities have both direct and indirect effects on organisational performance: directly via dynamic capability costs and indirectly via the organisational resource base. Furthermore, the marketing strategic orientation has several impacts on the dynamic capabilities – performance relationship. It influences the development of dynamic capabilities. Furthermore, it decides on the timing of dynamic capability utilisation.

Empirical research is required to test the proposed conceptual model. This will assist in identifying the types of costs that are created by dynamic capabilities in more detail. Also, empirical findings will clarify which marketing strategic orientation proves more effective in the dynamic capability – organisational performance context.

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