

ORGANIZATIONAL AMBIDEXTERITY AND COMPETITIVE ADVANTAGE: TOWARD A RESEARCH MODEL

PhD Gheorghe PREDA

West University of Timisoara, Romania

Email: gigi.preda@gmail.com

Abstract:

Ambidextrous organizations have the ability to compete in mature markets and to develop new products and services for emerging markets simultaneously. Competing in mature markets involves cost reduction, increase of the efficiency and the adoption of incremental innovations that are exploitative in their nature. The development of radical new products and services for emerging markets can be achieved through exploratory innovation. The high levels of exploratory and exploitative innovation simultaneously within the same organization can lead to competitive advantage. In this paper, we present the hypotheses of research model to be tested in a future empirical study focused on the link between the capability of ambidextrous organization and their competitive advantage. Based on innovation and competitive advantage theories, we expect that exploratory innovation and exploitative innovation capabilities will sustain the competitive advantage of the organization.

Keywords: exploratory innovation, exploitative innovation, ambidextrous organization, competitive advantage.

1. Introduction

In an environment characterized by a high degree of uncertainty, the need to develop the ability to rapidly shift to new opportunities and a clear understanding of how value is created in the short term, and how the activities should be coordinated in order to achieve this value are a prerequisite to obtain success (Birkinshaw and Gibson, 2004). In the long term, managers must periodically destroy what has been created to rebuild a new company for to meet the new competition and technological progress.

The ability to innovate has always been a factor that contributed to the success of an organization. Organizations that have the resources, a strong motivation to innovate and an organizational climate that allows and encourages innovative ideas are the ones that quickly and successfully innovate. Ambidextrous organizations have the ability to generate a competitive advantage through the development of exploratory and exploitative innovation at

the same time (Benner and Tushman, 2003; Tushman and O'Reilly, 1996).

In this paper we developed research hypotheses based on the existing literature. In developing these hypotheses, we consider that high levels of exploratory and exploitative innovation simultaneously within the same organization can lead to competitive advantage. In the first section we will present a literature review of the innovation and competitive advantage. The next section will present the theoretical basis on which we found the research hypotheses and the conceptual model of the research. In the last section were highlighted the conclusions and future research directions.

2. Literature review

2.1 Innovation

The ability to develop new ideas for new products has become a priority for many organizations. Intense global competition and technological progress have made innovation to be a powerful

source of competitive advantage. Damanpour (1991) defines innovation as a process developed for the generation, development and adoption of new ideas by a firm. Innovation is the ability to discover new relationships, to look at things from new perspectives and to form new combinations from old concepts (Evans, 1991). The definition of innovation determines the degree and nature of the innovative activity within a company. Innovations, as a result of the innovation process, are strongly affected by how organizations define the concept of innovation. The innovation process is very complex and multidimensional due to the large number of factors that interact to make possible its appearance. A significant number of definitions of the concept of innovation suggests that the value generated by the innovation process is the contribution to profit or to economic value. This is both a hypothetical value (trying to get profit in the interest of all parties involved in the innovation process) and an error because innovation does not always bring value to an organization (Kimberly, 1981 cited in Damanpour, 1991).

Most definitions of innovation concept focus on the idea of novelty. Controversies arise when a firm adopts a new element that has already been used by another company and, therefore, is not such a novelty for that sector of activity.

A number of concepts have been introduced to assess innovation: radical vs. incremental (Dewar and Dutton, 1986; Damanpour, 1996), enhancer or destroyer of competence (Anderson and Tushman, 1990), architectural or general (Henderson and Clark, 1990). Previous research has shown that is necessary to differentiate the types of innovation to understand organizational behaviour in adopting innovations and to establish the determinants of innovation in the organization (Downs and Mohr, 1976). Regarding the typology of innovation, Damanpour (1991) highlights three pairs of types of innovation: administrative innovations – technical innovations, process innovations – product innovations

and radical innovations – incremental innovations.

Technical innovations take the form of products, services and technologies in the production process. These innovations are related to the core activities of an organization and focus on product or process (Damanpour and Evan, 1984; Knight, 1967). Administrative innovations involve organizational structure and administrative processes. These innovations are directly related to the management of core activities (Damanpour and Evan, 1984; Kimberly and Evanisko, 1981; Knight, 1967).

Product innovations are the new products or services introduced in order to meet the customer needs. Process innovations are new elements introduced into the different processes carried out at the level of the organizations. The adoption rate of the product and process innovations is different in each stage of the organization development (Knight, 1967; Utterback and Abernathy, 1975).

Radical innovations are represented a fundamental reconceptualization of a business (Markides, 1998). This type of innovations can be addressed on three levels: product (new ideas or technologies), process (new ways of products and services distribution to customers) and the combination of the two previously mentioned levels (Tushman and Nadler, 1986). Incremental innovations refer to improving existing products, services and processes.

Architectural innovation (Henderson and Clark, 1990) is a kind of innovations that only change the product architecture without an impact on its components. The essence of architectural innovation is the reconfiguration of the existing system by integrating existing components in a new way so as to form a new coherent whole.

Another innovations classification is given by Jin, Hewitt-Dundas and Thompson (2004): creative innovation – adoptive innovation. Creative innovation refers to the ability of an organization to develop and implement innovations through its technological system. Adoptive

innovation refers to the ability to use new ideas from outside the organization.

Using the existing literature, Jansen, Van Den Bosch and Volberda (2006) classified innovations based on two criteria: (a) the proximity to existing technologies, products and services and (b) the proximity to existing customers or market segments (Abernathy and Clark, 1985; Benner and Tushman, 2003; Danneels, 2002). Exploratory innovations are the radical innovations, being designed to meet customer needs or emerging markets (Benner and Tushman, 2003; Danneels, 2002). These innovations provide new models, create new markets and develop new distribution channels (Abernathy and Clark, 1985). Exploitative innovations are incremental innovations, being designed to meet the needs of existing customers (Benner and Tushman, 2003; Danneels, 2002). These innovations extend existing knowledge and skills, improve existing models, extend existing products and services and increase the efficiency of existing distribution channels (Abernathy and Clark, 1985). Gibson and Birkinshaw (2004) and He and Wong (2004) have argued the need for ambidextrous organizations for development of exploratory and exploitative innovation at the same time. Raisch and Birkinshaw (2008) considers that two different approaches (i.e. structural and contextual) are needed to manage the tension between exploration and exploitation. O'Reilly and Tushman (2011) argues that organizational ambidexterity is successful when the following five conditions are met: a compelling strategic intent that justifies the importance of both exploration and exploitation; developing a common vision and values that provide for a common identity across the exploratory and exploitative units; a management team that explicitly owns the unit's strategy of exploration and exploitation; aligned organizational architecture for the exploitative and exploratory units and the ability of management team to tolerate and resolve

the tensions arising from separate alignments.

The concept of ambidexterity is also found in more recent conceptualization of dynamic capabilities (Eisenhard and Martin, 2000). These authors concluded that in these dynamic capabilities can be found a combination of two different strategic grounds: exploration and exploitation. Ancona, Goodman, Lawrence and Tushman (2001) argue that these dynamic capabilities are rooted in exploratory and exploitative innovation flows simultaneously. Katila and Ahuja (2002) claim that the operation of existing capabilities is necessary to explore new capabilities. Exploring new capabilities can improve the existing knowledge base of the firm.

2.2 Competitive advantage

Competitive advantage is in the center of firm performance in competitive markets. After several decades of expansion and prosperity, many companies have lost sight of competitive advantage in their struggle for economic growth and concern for diversification (Klein, 2002). Companies realize strategic actions in order to obtain a competitive advantage. Strategic actions and their results are influenced by the internal and external environment. The company is embedded in a macro-environment, micro-environment and has a specific internal environment.

One of the inherent characteristics in most industries is the change in competitors' profitability. Firm superior performance compared to the average profitability of firms in the sector is due to competitive advantage (Varadarajan and Jayachandran, 1999).

Although the interest for discussion and empirical research on the competitive advantage concept has increased in recent years (Ray, Barney and Muhanna, 2004; Newbert, 2008), understanding the concept and its distinction from the organization's performance remain a challenge for the theory (Powell, 2001).

Porter (1980) was the first author who introduced the term of competitive

advantage in the strategy theory. This term has created confusion among researchers, managers and consultants (Markides and Wang, 2000). They tend to use the term of competitive advantage in the same way as other terms used in the literature on strategy such as strategic thinking, strategic innovation with different meanings in different contexts. This includes various uses of these terms in different countries (Varadarajan and Jayachandran, 1999).

In many definitions, the competitive advantage is associated with success (Klein, 2002). Hay and Williamson (1991 cited in Klein, 2002) defines this term as a deceptively simple idea for evaluation of the organization's capabilities, market position and the manner in which they provide an advantage over competitors. The competitive advantage is ephemeral. Competitive advantage comes from leveraging resources and unique skills of the firm in order to implement a value creation strategy more effectively than its competitors (Barney, 1991). When this advantage is not affected by actions taken by competitors is considered a sustainable competitive advantage (Porter, 1980).

Understanding the sources of sustainable competitive advantage represented a major area of research in strategic management literature (Porter, 1985). Since the 1960's, it was used a unique framework to structure a large part of the research (Andrews, 1971). This framework highlights that firms obtain sustainable competitive advantage by applying strategies that exploit their strengths, respond to opportunities, neutralize threats and avoid weaknesses (Barney, 1991). Many researchers have generated lists of attributes that may allow firms to develop and to implement strategies for creating value (Hitt and Ireland, 1986).

Sustainable competitive advantage is achieved by holding resources characterized by four attributes: it must be valuable, it must be rare, it must be imperfectly imitable and there cannot be

strategically equivalent substitutes for this resource (Barney, 1991).

3. Research hypothesis and conceptual model

Ability to develop new ideas and innovations has become a priority for many organizations. Intense global competition and technological progress have made innovation to be a powerful source of competitive advantage.

Lengnick-Hall (1992) highlights four factors that support the link between innovation and competitive advantage. Innovations that are difficult to imitate and that accurately reflect market realities are more likely to lead to sustainable competitive advantage (Porter, 1985). The timing is the third element of the link between innovation and competitive advantage. Being first can enable a firm to gain valuable experience before their competitors. This valuable experience is a source of uniqueness for the firm. The fourth element that supports the relationship between innovation and competitive advantage is specific organizational capabilities required to exploit and to sustain innovation.

In supporting the view that innovation leads to competitive advantage, Kleinschmidt and Cooper (1990) highlight that successful innovation can play a critical role in small manufacturing firm's export performance. Lawson and Samson (2001) points out that innovation can help firms play a dominant role in shaping the future within our industry. High-performing innovators are able to bring new high quality products to the market faster and a lower cost than competitors. Jansen, Van Den Bosch and Volberda (2006) demonstrate that exploratory innovation has a positive effect on the firm's financial performance when the level of environmental dynamism is high. Weerawardena (2003) demonstrates the existence of a strong positive relationship between organizational innovation and competitive advantage.

Ambidextrous firms have the ability to generate a competitive advantage by

revolutionary and evolutionary changes (Tushman and O'Reilly, 1996), exploration and exploitation (Benner and Tushman, 2003) or adaptability and alignment (Birkinshaw and Gibson, 2004). Tushman and O'Reilly (1996) describe ambidextrous organization as having the ability to develop new products and services for emerging markets and to compete in mature markets simultaneously.

The development of new products and services for emerging markets can be achieved through experimentation, speed and flexibility (He and Wong, 2004). This development of new products and services for emerging markets can lead to competitive advantage. We formulated the following hypothesis:

H1: Exploratory innovation positively influences competitive advantage.

Competing in mature markets involves highlighting certain critical elements such as cost, efficiency and incremental innovation. Jansen, Van Den Bosch and Volberda (2006) demonstrate that that exploitative innovation leads to increased financial performance in an environment characterized by high level of competitive intensity. The high level of

exploitative innovation can lead to competitive advantage. Based on this idea we formulated the following hypothesis:

H2: Exploitative innovation positively influences competitive advantage.

Tushman and O'Reilly (1996) argued that an ambidextrous firm can achieve a high level of performance. Based on the literature, we consider that high levels of exploratory and exploitative innovation simultaneously within the same organization can lead to competitive advantage. The ability to develop new products and services for emerging markets and to compete in mature markets simultaneously can lead to competitive advantage. Thus, we proposed the third research hypothesis:

H3: The interaction effect of exploratory and exploitative innovation positively influences competitive advantage.

Based on these hypothesis we proposed the following research model that integrates the relationships between innovation capabilities, organizational ambidexterity and competitive advantage to be empirical tested in future researches.

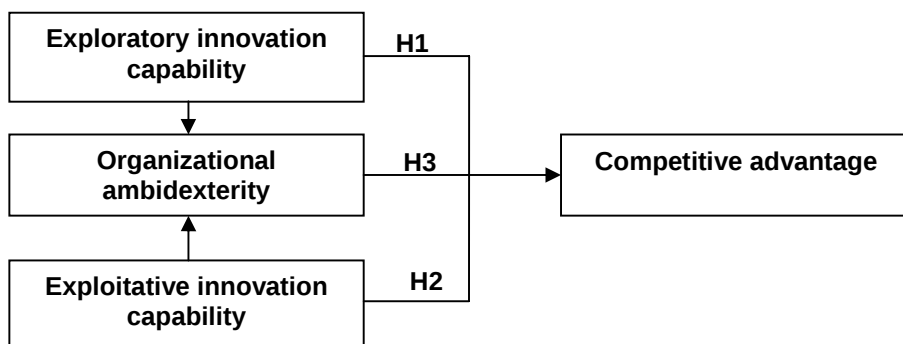


Figure1. The proposed research model

4. Conclusions and future research directions

The literature has shown that innovation is a powerful source of competitive advantage. Lengnick-Hall (1992) identified four factors that support

the link between innovation and competitive advantage.

Previous research has shown that organizational innovation or different types of innovation have led to obtaining the competitive advantage. Successful

innovation play a critical role in small manufacturing firm's export performance (Kleinschmidt and Cooper, 1990) or play a dominant role in shaping the future within our industry (Lawson and Samson, 2001). Organizational innovation has a strong positive effect on the competitive advantage (Weerawardena, 2003). Exploratory innovation has a positive effect on the firm's financial performance when the level of environmental dynamism is high and that exploitative innovation leads to increased financial performance in an environment characterized by high level of competitive intensity (Jansen, Van Den Bosch and Volberda, 2006).

In this paper we identify, in the literature, a link between ambidextrous organization and competitive advantage. Based on the literature, we have argued hypotheses of the conceptual model.

Because ambidextrous organization have the ability to compete in mature markets and to develop new products and services for emerging markets simultaneously, we assume that a high levels of exploratory and exploitative innovation simultaneously within the same organization can lead to the competitive advantage.

A major challenge for future research is to develop scales for measure these constructs and to empirical testing the relationships between exploratory innovation, exploitative innovation, and competitive advantage. The interaction effect of these innovation capabilities on competitive advantage also could be investigated. In operationalizing exploratory innovation, exploitative innovation and competitive advantage, a starting point would be the literature on innovation and competitive advantage.

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