Competitive Advantage Through New Product Development Capabilities

Fahad Hamid
Muhammad Umair Abbasi

ABSTRACT

Why are some businesses exceptional in development of new products? In this study, we will discuss various factors which contribute the success of new product development. New product development is the backbone of an innovative organization, the process is built on the solid foundations of capabilities such as network, technology, innovation, and strategic orientation and social capability are the success drivers in the development of new product. The main purpose is to understand the customer need and develop the product by using these capabilities to innovate something which can give value to the customers and achieve competitive edge over competitors. This article discusses about how successful firms use these new product development process capabilities to achieve competitive advantage in the conduct of business.

Key Words: NPD, Networking, Technology, Competitive Advantage, capability

INTRODUCTION

In the present vibrant period, new product development has become a source of competitive advantage (Tu, Lin, Chen & Huang, 2013). It is the primary responsibility of the businesses to create new product ideas and determine which product should eventually be promoted as per conventional product model (Schreier & Fuchs 2011). How can businesses achieve creativity rapidly but reliably? In the 21st century, it’s the biggest issue facing innovative companies. For instance, one dimension of this multi-faced issue is the speed of pushing creative innovative products and services forth of the competition, while on the other hand the desire for such products and services is increasing in order to succeed (Kodama, 2005). There are different points of views of researchers regarding the success of new product development. New product development of the firm measure by the financial gains or sales (Griffin and Page, 1993; Hertenstein, et al., 2005, Lee, 2008). The success of new product development depend upon the increased customer loyalty and satisfaction rather than financial and by making better new product development internal process (e.g., Mendes and Ganga, 2013, Lin and Huang, 2013, Kandemir and Acur, 2012, Kahn, et al., 2012). There is increasing discussion among new product development scholars’ regarding new product development success measures. (e.g. Kandemir and Acur, 2012, Felekoglu, et al., 2013, Graner and Mißler-Behr, 2013, Lin and Huang, 2013). In fact, retaining consumers pleased is the main driver for the market launch of new goods. This core goal encourages managers to recognize important NPD success factors for customer satisfaction (Awwad & Akroush, 2016). Managers can treat NPD activities to perceive changes resulting from business environments as opportunities for growth and expansion of their business on the one side and satisfy their customers’ needs and demands on the other (Awwad & Akroush, 2016). New product development is a competitive tool for a company to compete, distinguish and exceed its rivals (Chan and Ip, 2011). In this competitive world companies need to focus on new product development for growth and survival (Chan and Ip, 2011) and important challenge for companies (Graner & Mißler-Behr 2013).
Networking Capability and NPD:
Networking teams in a network layered organization ensure cross functional operations. Networks offer traditional companies competitive facts processing, knowledge generation and flexible resources. Network organization is an interdependent association of task or skill-specialized economic organizations that function without centralized control but are anchored in a shared value system through complex lateral relationships, mutuality and cooperation that define “individual” roles and responsibilities (Kotler & Ravi, 1999). Mu et al., 2011 argued that networking skills display the insightful nature of social interactions between new product development team members and staff in other departments that lead to social knowledge, expertise and sharing of advice. (Ritter 1999) argued that network competence relates to the ability of a firm to establish, maintain, use and manipulate relationships between networks. It enables a business to strengthen its general position in a network, enabling a business to gain considerable resources from its network partners. (Newman, Deng and Hofman, 2012) suggested that access to external capital sources would have a positive impact on Chinese product innovation for medium-sized as well as small businesses. Entrepreneurial businesses require network expertise and relationships with customers to develop a new product because they are restricted in capital. Network competence measures the performance level of network management operations and the experience of people dealing with the relationships of an organization (Ritter, 1999; Ritter & Gemünden, 2004). Creating the ability to network requires a number of activities. Increased studies in product innovation, marketing collaborations, management, and policy and social network examines three key aspects of network management: defining and retaining network partners, sustaining network relationships, and maximizing network relationships (A. Capaldo 2007 & R.Gulati 1998). All three dimensions directly affect the performance and creativity of the network (Jifeng Mu and Anthony Di Benedetto 2012). Therefore, the relationships should be carefully managed by individual members of the partner companies and their respective organizations to fully utilize the capacity for competitive edge found in network relationships. Recent research has shown that networking capacity is positively linked to firm performance. There are two types of networks in general.
**Internal Networks:**
They are formed to promote interdepartmental coordination and open door policy for interaction between the hierarchies. That speeds up the NPD process and ensures smoothness. Cross functional teams which represent the functional departments of organization are the example of internal layered networks (Kotler and Achrol, 1999). The close interaction between all function groups and departments help the new product development team to come up with practical/innovative ideas and solutions.

**External Networks:**
They create horizontal synergies between the industries to achieve competitive advantage through joint ventures and technology transfers. Intelligence organizations identify weak hierarchical structures, fluid lateral relationships, low departmental walls and world accessibility. Such features are well demonstrated in professional organizations such as, medical firms, consulting firms, hospitals, law companies consulting firms, biotechnology industries, research universities and innovative firms in the fast-paced computer (Kotler & Ravi, 1999). The center of organizational networking is a system of people-to-people relationships. It soon becomes clear that the essence of these relationships between the elements is quite new in the new organization (Hastings, 1995). Companies don’t rely on internal capabilities only they go beyond borders to pursue their NPD goals. They incorporate suppliers, Franchise, B2B partners and sometimes competitors also (Nambisan & Sawhney, 2011). To sustain innovation process companies shift from internal network organization to external network organizations as external networks are very helpful to innovate and facilitate the NPD process (Soh, 2003; Dyer & Singh, 1998).

**Technological Capability and NPD:**
Application and development of better use of technology effectively and efficiently to produce products better than its competitors relates to technological capacity therefore, we can say that its overall ability to firm to use and apply technology in new product project such as initial evaluation, pilot production, model creation and production startup (Yalcinkaya, Calantone, & Griffith, 2007). Successful innovation demands that customer information and technical skills be integrated effectively. An important issue in the NPD is the interplay between consumer and technical factors (Rubera et al. 2012). Conventional innovation framework in which the whole development process takes place within the company's boundaries without contact with the external environment until the product is placed on the market is no longer affordable due to the rise in technology and consumer expectations, the shortened innovation phases and the increase in research and development expenses (Chesbrough, 2003). This change in market dynamics has contributed to growing interest in the "open innovation" framework, namely the inflow and outflow of knowledge to encourage internal innovation and broaden opportunities for the external use of innovation. New product development process can be fasten by adopting latest technological capability which will also help in resolving disputes between different technical requirements (Brown & Eisenhardt, 1995). High technical capabilities, combined with a rigorous product design cycle, result in new products of high quality. Quick product development and solid product design are likely to boost the performance of new products (Eisenhardt & Tabrizi, 1995). Similarly, to get a competitive edge technology capability is very necessary because for a developing a new product companies need average to high level of testing process, conceptual design, product design and technological sound to introduce valued product faster than competitor (Clark, 1989). It is very likely that successful introduction of products depends upon technological capability of firms (Martin, Eisend, Heiner Evanschitzky, Roger J. Calantone, 2016). Good technology allows a company to understand better, integrate and apply the importance of new technologies for commercial purposes (Cohen & Levinthal)
It is proved by research that technological capability is very necessary for the success of product and its play a vital role in introduction of product globally (Hitt et al, 1997)

**Strategic Orientation Capability and NPD:**
Strategic orientation is described as "the strategic direction that a company has taken to undertake appropriate actions for continued superior results in business" (Gatignon & Xuereb, 1997) and values, procedures, practices and styles of decision-making which influence the activities of companies and generate the expected behaviors to ensure their viability and success (Hakala, 2011). They are also referred to as the way a company reacts to evolving external factors and engages with its societies to retain its competitive edge (Aloulou and Fayolle, 2005; Gao et al., 2007; Gatignon and Xuereb, 1997). It represents the company's business outlook; briefly, it reflects the business philosophy of the company. (Theodosiou et al., 2012; Mu & Di Benedetto, 2011; Covin & Slevin, 1989; Venkatraman, 1989). Strategic orientation is critical for knowledge management because it helps an organization to understand the emphasis on information development and how knowledge is exchanged and incorporated into a tool for developing and launching new products" (Kim et al.,2013). Customer orientation is a classic marketing concept that allows businesses to remain close to their consumers. This stresses the need for the entire company to generate, disseminate and respond to customer needs, wishes and competition information (Mu & Di Benedetto, 2011; Jaworski & Kohli, 1993). Entrepreneurial orientation is the company's response to current and future market needs. This reflects innovative, optimistic and risk-tolerant actions (e.g., Mu & Di Benedetto, 2011; Covin & Slevin, 1989).While some research suggests that consumer and business focus may have a positive impact on NPD results (e.g., Li et al., 2006; Hughes & Morgan, 2007). The direct link between marketing orientation and firm output is well known (Kirca et al., 2005). Costumer Orientation Company can also create a market differentiation-based competitive advantage for a business. Marketing mix, a customer-oriented company can make its business offerings more appealing (Miller, 1988; Porter, 1985). A customer oriented organization can anticipate and respond to changing needs of its customers through continuous innovation (Han et al., 1998).

**Social media capability and NPD:**
Social media is a web based technology that allows the people to share and exchange the information (Kaplan and Haenlein, 2010, 61).Therefore, social media have a lot of interacting tools like face book, twitter, blogs and you tube which act as a vehicle for the firms to communicate with customers (Choudhury and Harrigan, 2014).By getting the information from the customers company use it as a competitive tool it enables to know what customer want what are their preferences and so that they can develop the product to which create value to customer (García-Murillo and Annabi, 2002); Secondly, this would be hard for rivals to mimic the risk of customer information becoming elusive (Salojärvi and Sainio,2006). Increase in the use of social media has helped the companies to get a feedback from the customers in large number (Choudhury and Harrigan, 2014). Due, to increase usage of social media a customer have developed a strong voice now they suppose to communicate with the companies same way as they like to purchase from (Greenberg, 2010). Due to massive rivalry within modern competitive corporate environment, companies have adopted social media apps so that they can communicate one to one with their buyers and integrate their new ideas into their NPD processes. This practice was use by Unilever who has involves their customers in the process of new product development (Mc Eleny, 2010). Similar practice has been used by Kraft food they have used social media tool to interact with the customers and ask to them to provide valuable suggestions in new product development. They think that by allowing potential customers to participate, it will increase the customer approval about the product as well as it will reduce the problems which they may face (Holay, 2011). Another example is of
Pepsi who use the same practice for their brand Mountain Dew. They have asked customers to give insights about advertisement, flavors etc (Kumar and Bhagwat, 2011). Social media plays an important role in increasing firm performance and to gain a competitive edge because it helps in providing information about useful understanding e advantage (Choudhury and Harrigan, 2014; Hillebrand et al., 2011). By involving the potential customers into a new product development process helps the organization to develop valuable products as well as it reduces risk and cost (Herstatt & von Hippel, 1992). Companies communicate with their potential customers to create value to their existing products and their valuable ideas and views help them in developing new products (Orange, 2011).

**Competitive advantage and NPD:**
Competitive advantage relates to the competitive positional superiority of the marketplace, which leads a company to surpass its competitors (Porter, 1985). A market competitiveness advantage occurs when a company produces a distinctive brand identity and generates customer loyalty by fulfilling customers’ specific needs (Miller, 1987); Innovation competitive advantage occurs if a company produces the most updated as well as appealing products by prominent rivals in price, performance, design and style innovation"(Miller, 1988: 283). Company competitive advantage is not only depending upon value creation which they achieve by spending capital during innovation therefore the investment in value appropriation is also required(Arrow, 1962). The companies who strategies are focusing on technical capabilities and new product development will gain competitive advantage for longer period of time (Utterback and Abernathy, 1975). Product competitive advantage refers to the anticipated superiority of a product compared to competitive products in the light of new product development ventures (Song and Parry, 1999). The aim of product innovation is to build rents and competitive edge (McGrath, 1996). According to (Buganza and Verganti 2005) competitive advantage of the firm is not only depending on the firm capability to develop new product but also its ability to reinvent and readjust according to situation changes and technological possibilities after it was first launched in the market. The ability of a company to build capabilities that allow it to give consumers more value than its rivals creates competitive advantage (Hunt, 2000). When the firm has the ability to develop product and services and they regularly perform better than what their competitors are offering regarding as capability (Wittmann, Hunt, & Arnett, 2009)

**CONCLUSION**
After discussing the role of new product development capabilities, we conclude that new product development is not only a process but it leads to competitive advantage through the implication of capabilities such as networking, it’s the most essential capability which enables the firm’s interdepartmental and external coordination to develop a new product. Technology creates the unique preposition which in turn helps an organization to differentiate its product offering form those of the competition. Social media helps the firm to develop a platform using a media to transfer and receive communication with all stake holders to facilitate the overall new product development process. Strategic orientation is a phenomenon to create a knowledge pool for the firm to utilize in the new product development process. A firm’s ability to knock out competition depends very much upon the implication of these capabilities which enable a firm to stay one step ahead of its competition by introduction of new products with the right capabilities. Limitations to the study are the gap of discussion on coordination and absorption capacity among the firm’s departments. The Phenomena of Competitive advantage lies on the basis of new product development process which in turn is based on the solid foundations of discussed capabilities.
References


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