International Journal of Knowledge Management and Practices
7 (1) 2019, 1-6
http://publishingindia.com/ijkmp/

INNOVATION CAPABILITIES AS A SOURCE OF INSPIRATION: TOWARDS A SUSTAINABLE COMPETITIVE ADVANTAGE IN YEMENI MANUFACTURING INDUSTRY

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Abstract *Theorists have described innovation as the ability to develop and reform the business idea and concept of a firm through changes in the market, firm, competencies and business system. The purpose of this conceptual study is to investigate innovation and competitive advantage, and its inter-relationships within the manufacturing industry sector in Yemen. The main conclusions from this particular study are that innovation is very important regardless of manufacturing industry; and that innovation has a greater effect on how a business should be structured in firms. However, scholars are now paying growing attention to the possibility that the collective capability of innovation plays a key role in determining a firm's competitive advantage. The purpose of this paper is therefore to fill gaps in the manufacturing innovation and competitive advantage literature, especially by providing insights into the relationship between innovation and competitive advantage in manufacturing enterprises, in Yemen and the Middle East, and the economic development of developing countries worldwide.*

Keywords: *Innovation, Competitive Advantage, Yemeni Manufacturing Industry*

Introduction

Competitive advantage is at the core of a firm's performance in competitive markets. Specifically, competitive advantage involves reduced business and operational costs, differentiation advantage or a focused strategy (Pereira-Moliner, Font, Tari, Molina-Azorin, Lopez-Gamero & Pertusa-Ortega, 2015). To Munguia, Vargas-Betancourt, Esquer, Giannetti, Liu and Velazquez (2018), competitive advantage is seen as returns that are sustained above normal. Coyne (1986) suggested that competitive advantage is self-evident and there is no need to further explain its exact meaning (Coyne, 1986).

In line with the above, such a complex situation has pushed organizations to create efficient and effective competitive advantage (Czarniewski, 2015). By having a competitive edge, organizations can achieve a unique position in the global market (Kapferer, 2012). Moreover, firms with a competitive edge in the market can sustain and maintain their position in the market for a long time (Kapferer, 2012). For example, Nestle, which yields substantial returns for its investors, does this by capitalizing on its competitive advantage (Dyer & Singh, 1998).

To gain a competitive advantage, a firm must have low production unit costs, differentiation of products/services over rivals and the capability to meet time requirements (Coyne, 1986; Porter, 2008). Nevertheless, despite the several theoretical frameworks and perspectives that have been proposed to date to shed light on competitive advantage, a universal definition of the term has yet to be reached (Davcik & Sharma, 2016).

In addition, management and resource-based views have not been combined in a sophisticated approach to attaining competitive advantage (Albrecht, Bakker, Gruman, Macey & Saks, 2015). Thus, although the academic community has acknowledged the importance of competitive advantage, it is still characterized by ambiguities. If the competitive advantage of firms is described in terms of the outcome generated, there will arise some ontological differences in instances where competitive advantage is ex-ante or wherein the causality chain could be contestable (Barney, 1991). Nevertheless, by employing the term 'competitive advantage' as discussed above, the understanding of competition as a specific strategy will be confined to the search for sustainable competitive advantage as the core of business practice and strategic management theory (Porter, 2008).

Against this background, the role of achieving competitive advantage has been extensively examined in the literature

(Albrecht et al., 2015; Asmussen & Foss, 2014). Herrera (2015), for example, contended that firms should have transitioned from a technology-focused view to a more innovative one.

In another scenario, innovation deals principally with an organization's growth through the development of new products, services, processes or business models. Innovation is converted into a plan about how to use the development of new products, services, processes or business models to attain certain objectives (Bason, 2018). Most notably, it is a significant way for innovation to create growth and sustain and develop performance in a dynamic and changing environment (Porter & Kramer, 2011). Innovation is a foremost strategic tool to gain competitive advantage in such complex environments (Yip & McKern, 2016).

Therefore, firms must create a distinction between themselves and their rivals through unique strategies. Most commonly, leading organizations implement innovation to create a competitive edge. These organizations even follow through with innovation in warehouse management to reduce inventory. Making innovative and strategic changes in the organization helps them to respond to market changes in a timely manner.

Specifically, in the manufacturing sector, the competitive advantage of firms is an important driver of economies worldwide and is recognized as the economic backbone of most countries (Hamad, Elbeltagi, Jones & El-Gohary, 2015). Barney (1991) added that organizations can achieve high value and better performance by having a competitive edge. A definition of competitive advantage is provided by Porter (2008) as the distinctive activities of the firm whereby it does better than its competitors. Firms can gain a competitive advantage by building products that are desired by the targeted customers and by creating value through consultation with them.

In the context of Arab economies, there is an increasing challenge to bring about accelerated growth, mitigate poverty and solve unemployment through strategies based on the market economy, transitioning from inward to outward policies in order to attract greater foreign direct investment; this will encourage firms to meet national requirements through increased export revenue (Bontis, 2004).

More specifically, in the case of Yemen, the World Bank reports that Yemen suffers from issues concerning the manufacturing sector (World Bank, 2015). This indicates the inability of products of Yemeni firms to compete with those of its foreign counterparts. In this regard, local Yemeni products are not even able to meet the needs of local consumers (Sky News, 2012).

This means competitive advantage has to be developed through innovative productivity, and it is important for developing countries to create comparative advantage in the initial development stage with natural resources; as they improve their economic growth, with sophisticated economic systems, the role of competitive advantage lessens and countries develop from factor-driven economies to innovation-driven ones (Porter & Kramer, 2011).

However, the manufacturing industry in Yemen is still engaged in very few innovation activities compared to other countries (Aljazeera, 2012). Many manufacturers are also facing a number of typical problems with regards to their innovation processes. In other words, manufacturing industries in Yemen suffer from lack of innovation and the implementation of new ideas in their attempts to create value products. Therefore, they need to address customers' expectations of new standards (Aljazeera, 2012; Ministry of Industry & Trade, 2016). Innovation is something that all companies should focus on, regardless of their size and sector.

In addition, firms with less appropriate innovation capabilities may find difficulty in practicing and sustaining targeted innovative projects in order to improve their competitive advantage, performance and business operations (Aljazeera, 2012; Ministry of Industry & Trade, 2017). Thus, the firms that can use their innovation to develop differentiation of products are likely to contribute positively to competitive advantage. In fact, a firm can have a sustained competitive advantage in the marketplace when it has implemented a strategy that competitors are not capable of immediately copying, and when other firms find difficulties in acquiring the resources needed to implement this strategy (Barney, 1991).

The above discussion has revealed both theoretical gaps and practical issues which are pertinent to this study. The domestic manufacturing firms of Yemen are still having trouble in acquiring a strong competitive advantage in the marketplace. In addition, there has been limited inspection of the relationship between innovation and competitive advantage in the Yemeni manufacturing industry. This reveals the need to examine the level to which innovation power influences the competitive advantage of manufacturing firms. This study therefore addresses this knowledge gap in the literature, concerning the relationship between innovation and competitive advantage in Arab countries, particularly in Yemen.

Literature Review

Competitive Advantage

In the literature of organizational studies, much attention has been given to examining the determinants of competitive advantage, because of its important role in organizational development. According to Ansoff, Kipley, Lewis, Helm-Stevens and Ansoff, (2019), the present environment is dynamically evolving, and organizations have to embrace inventive techniques to guarantee their continued existence as viable commercial enterprises; hence, the focus of entrepreneurial organizations on the adoption of innovation practices.

Research on competitive advantage was pioneered by Porter and & Strategy in their book *Competitive Strategy*, published in 1980 (Porter & Strategy, 1980). He later expanded on this in his 1985 Theory of Competitive Advantage, widely referred to by other researchers (Porter, 1985). The basic premise of competitive advantage is the service or product an organization can offer its customers that exceeds the organization's cost of making or delivering it (Hill, 2017). The three main strategies to accomplish competitive advantage are leadership, differentiation and focus (Dustin, Bharat, & Jitendra, 2014).

The literature on competitive advantage has progressed in the context of business companies. Competitive advantage is characterized as the capacity of a business to offer extraordinary benefits within a competitive industry, never at any time offered by competitors (Hickman & Silva, 2018). Competitive advantage is maintained when other competitors cannot imitate the strategies (Barney, 1991). Companies will almost always need to integrate their key resources and processes in a unique way to perform perfectly for a set of customers; when they succeed, they almost always create an enduring competitive advantage (Womack & Jones, 2015).

Characteristically, for companies to have and sustain this competitive advantage, stakeholders play an imperative part (Bryson, 2018). However, it is posited that competitive advantage is invariably short-lived since competitors have a tendency to imitate the strengths of a company with a view to undermining its competitive advantage (Weerawardena, Mort, Salunke, Knight & Liesch, 2015). Porter (1985) believed that competitive advantage must be sustained for the organization's continued survival.

Further, according to Porter (1998), the competitive advantage of a business comprises: (a) low cost per unit; (b) differentiation of an item or advantage over competitors; and (c) ability to meet demand on time. It also entails a good business structure and sound marketing arrangements. Business rivalry comprises: (a) the threat of new hopefuls; (b) competition among existing firms; (c) threat of substitutions; (d) buyers' bargaining power; and (e) suppliers' bargaining power (Porter, 1998). These five components are associated with creating a system for achieving success as time goes on (Shields & Bredemeier, 2018).

Chen (2018) developed and empirically tested a framework to explore how supply chain agility and innovation are achieved through IT integration and trust in members of the supply chain and how these, in turn, can improve competitive advantage. The results indicate that IT integration and trust are antecedents and that combined partnership resources enhance supply chain agility and innovation. Hakan, Kilic, Senol and Isin (2010) determined which objective strategic factors have significant impacts on competitive advantage of private label manufacturers in Turkey, and identified production efficiency, market embeddedness and product sales control.

Lin, Ma and Zhou (2012) investigated the manufacturing strategies and practices of bus manufacturers in China, and proposed a framework of manufacturing strategies for time-based competitive advantages. They found that prosperity is no longer specified by low price or high productivity; a quick response to customers' tailored demands is fundamental in a climate of fierce competition. The proposed best practices for time-based competitive advantages include building technical centres and post-doctoral research stations, applying modularity logic, adopting radio frequency identification (RFID), and optimizing processes, for instance by including customers and outbound logistics and integrating inbound logistics.

Innovation and Competitive Advantage

Innovation refers to the process undertaken by firms that totally changes the nature of competition within an industry and gaining advantage by employing a different strategy from rivals. There is a strong correlation between innovation and success, not only in the R&D undertaken for next-generation products, but also in challenging the conventional wisdom in particular areas (Dodgson, 2018). This involves rethinking objective markets, consumer wants and the whole value delivery method. ReVelle, (2016) also redesigned methods used by business, ultimately focusing on bringing consumer value to the marketplace. The successes experienced show that to win in fiercely competitive environments, breaking rules and applying good innovation might secure a sustainable competitive advantage and affect core competitiveness (Hanson, Hitt, Ireland & Hoskisson, 2016).

Brem, Maier and Wimschneider (2016) studied how Nespresso achieved competitive advantage through innovation by changing the rules of the game and identifying under which circumstances innovation can serve as a source for competitive advantage. Anning-Dorson (2018) studied how firms in emerging markets create competitive advantage through innovation, using upper echelon theory and the power distance cultural perspective to examine the mediating role of organizational leadership on the relationships between innovation and competitive advantage. The results show that in both India and Ghana innovation is largely related positively with competitive advantage.

Ren, Xie and Krabbendam (2009) described an approach for Chinese firms to use as a springboard to identify sources of sensibility competitive advantage through marketing innovation, based on previous sources of competitive advantage. In this process, different types of competitive advantage are viewed in a holistic framework, which provides the basis for improving performance.

According to Macdonald, Burke & Stewart, (2017), in the organizational setting there might be a link between advancement and the capacity for business development through the proficient improvement, profitability, quality, competitive edge, association ability and key basic leadership. Each association encourages development by applying innovation or new thinking and using it to the advantage of the association (Baregheh, Rowley & Sambrook, 2009). However, in the same situation, attention must be paid to excessively dubious structures; once the structure is bolstered, the workforce becomes accountable for different directions and undertakings within the advancement procedure. All participants from the proprietor to supporters and colleagues must concentrate on the collaboration rather than individual achievement.

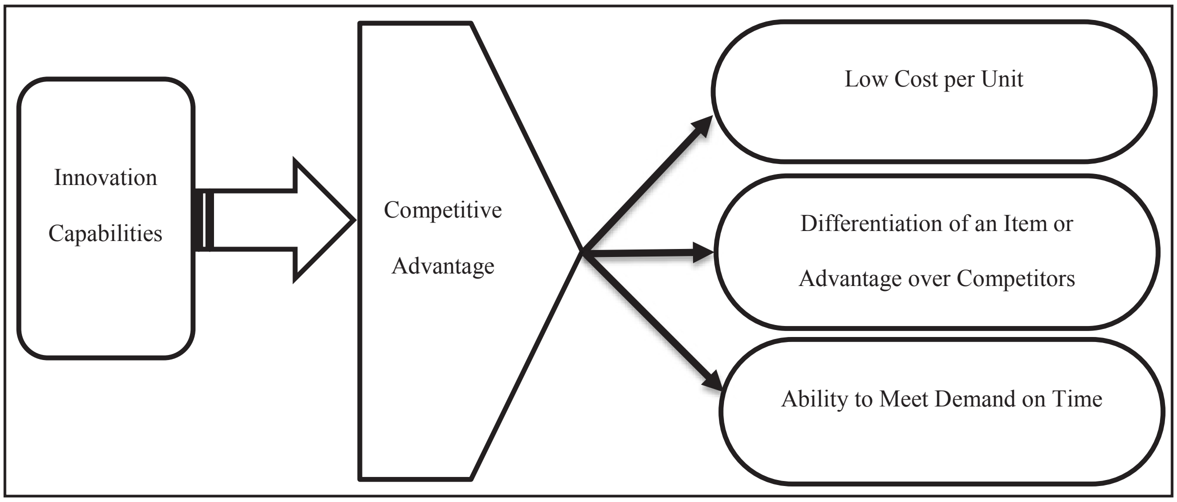

Fig. 1

Recommendations and Future Researches

Despite its contributions, this paper has various limitations that indicate directions for future studies. First, it examines innovation from the perspective of manufacturing firms. Future research might consider other perspectives, such as service industry. Second, while managers have knowledge and authority in planning and in making decisions, future studies could consider involving multiple respondents such as the CEO, general managers and marketing managers. Third, as potential variations in industry characteristics might affect the outcome, researchers should explore this issue in a wider variety of manufacturing industries or in different countries. Future studies need to increase the scope of the present research in order to justify the generalizability of the findings. Furthermore, in-depth research comparing developed and developing countries is needed, forming the backbone of future investigations.

Nevertheless, owners and managers can use the framework proposed in the current paper as guidance in adopting convenient and suitable techniques, processes and methods, to develop their manufacturing capabilities.

Conclusion

This study has shown how innovation can improve competitive advantage in manufacturing industry in emerging economies, especially in the Arab, Middle East and Yemeni contexts. Organizations in developing countries are suffering from slow growth, leading to reduced competition, and demanding that organizations create competitive advantages. Innovation has been identified as the key strategic choice, necessary to deal with the growing demands from the market.

Rapid change to a fully-fledged market-oriented system is necessary for Yemeni organizations, requiring their acceptance of the procedures for change per se and becoming a robust force to develop new sources of competitive advantage. Implementing effective and innovative strategies is an important part of this development. Moreover, new approaches to administration and technologically advanced management systems add to the intricacy of the process of change, encouraging Yemeni firms to proceed from classical ideas about management practices to adopting new developments (Ministry of Industry & Trade, 2017). The main challenge for Yemeni organizations is therefore to stimulate the process of managing change and adopt marketing strategies that will deliver new sources of competitive advantage.

Conservative approaches indeed reduce the ability of organizations to compete effectively in the difficult market place. Therefore, Yemeni firms should together proactively support the process of change as partners. This move will enable them to adapt quickly to new market situations, which is a prerequisite for gaining a competitive advantage. Finally, the process described in this study should concentrate the thinking of Yemeni organizations to focus on how innovation is implemented in various stages. Innovation could be accomplished by analyzing different marketing operators and their interrelations in order to explore new competitive advantages according to set standards. In this way, various competitive advantages are linked in a continuum, and therefore have the potential to deliver favourable outcomes through innovation.

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