

Innovation and Competitiveness Lead to Industrial Trade

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Abstract

In the contemporary business world, the competition among firms is different from the past as this is understated which is little but very crucial. The firms are attempting for competitiveness that help them to hold more stable place in the market. The ideal route for firms to attain it is with the innovation. This paper explores the innovative and competitive strategies of firms and particularly discusses the significance of innovative products, services and procedures for them to attain competitiveness.

Keywords: Innovation; Strategy; Competitiveness

Introduction

Undoubtedly the ability to innovate and to carry innovation successfully to market will be a pivotal determinant of the worldwide intensity of countries over the nearing decade. There is developing awareness around policymakers that innovative action is the principle driver of economic development and well-being [1].

Nowadays, there is general belief that innovation is regarded as blood for the life of the firms regardless of their size, composition and structure. Organizational growth, achievements and existence depends on the potentiality of firms to innovate, and knowledge is considered the main component of innovation. It can occur with the creation of new knowledge or by combining the current knowledge in “entrepreneurial” means [2].

Innovation can be helpful for the organizations to achieve competitive advantage. Competitive advantage usually defines as the ability of a firm to sell its goods and services in a certain market. The firms are confronting with the global economy, facing unpredictable challenges and threats along with so many opportunities too. This paper examines how firms are different from each other in various domains like IBM in IT, BMW in automobile and DuPont in chemical industry are more successful in their respective industry due to innovative ideas. It represents an attempt to create unique resource configurations which will lead to competitive advantage [3,4].

Rapid technological changes and increasing globalization of firms have increased competition among countries for exports, research and development and for skilled people. The global competition also builds pressure on the exports of Pakistan. Most of the exported products are in raw form or with no value addition (innovation) resultantly losing their international markets. This paper discusses the importance of innovation for the firms to compete globally.

Research Question

- Does innovation help the organizations to attain competitiveness?

Research Objectives

Following are the objectives of this paper which will be achieved through past research on innovation and its adaptation by different leading firms in their respective sectors:-

- To explore the importance of innovation for competitiveness in the current business world.

- To discuss the role of innovation to retain existing customers and increasing the market share.

- To investigate the value of introducing new procedures, products and services through innovation and availing first mover advantage by firms.

- To examine the impact of innovation during the period of economic recession.

Literature Review

Innovation

Innovation is the foundation of economic growth and success. The companies that encourage it, can gain the competitive push that gives the company an offensive positioning over another in the changing environment in which they operate. As an outcome, economies that have constantly higher levels of innovation also be able to have higher levels of development [5]. Henry Ford gives the example of what make innovative companies prominent when he said, “If I had asked my customers what they wanted, they would have said a faster horse”. They are not just creating what product development fulfills the customer requirements (which is important but not the ultimate requirement), but they’re setting future course for the organization and gives an overview about the future requirements of the firm which it may not realized at that moment. We can take innovation as the introduction of new or better product, method, tool and promotional strategy introduce by a firm in its internal operations or in the market [6].

Usually, people talk about terms like innovation, invention and creativity. But, for academics, invention called for major incidence of an idea for a new product or process, whereas innovation is the first endeavor to put invention into reality [7]. The creativity is an individual or groups capability to make new idea of tackling issues and giving solutions, whereas innovation is the capacity to perform innovative results keeping in view the enhancements of individual’s life [8]. While

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creativity is thought for newness, innovation is about making new things. The creativity represents a way to create a new appearance, content by joining the available factors of processing. On the other hand, inventiveness is the methodology of introducing something new, which contribute towards the knowledge among the individuals and innovation is connected to the explicit commercialization of the new product, service or technologic procedure, which is a result of creativity [9] (Table 1).

There is no universally accepted or shared definition of innovation exists [10]. Therefore we can understand the concept of innovation through its possible attributes attached with it. The major characteristic of an innovation is, "newness". But the question arises who will affect by this newness and in what way? [11]. It means that there is no exact way of distinguishing innovation from non-innovation as because scope of innovation varies with product to product, from individual to individual and from community to community. We have the classifications through which we can distinguish between different kinds of innovation as an object of change, like new product, new process, new market, new sources of supply of raw material and new organization [2].

The research academics usually rely on scientific proofs, while for entrepreneurs the innovation is anything that makes money. These varying views are established from common observations and responses in social sciences. Most of the innovative firms already are working at national and global level [12]. Innovations are required to be treated differently depending upon the degree of newness, because currently increasing number of firms marked themselves as innovative firms [10]. As "innovation" can be referred to different kinds of "newness" like product creation, production process and technology application, gains from market imperfections, and organizational etc., It is important to look at the sources of information that may vary among different types of innovation [13].

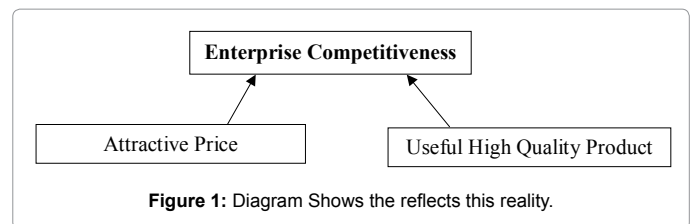
Competitiveness

It is being hard again to exactly define competitiveness. Yet through responses of most of the writers, we define competitiveness as a comparative - the absolute quality of firm, industrial sector or nation to trade goods in a certain market. As the general rule, market does not bear uncompetitive goods and price will be charged in the market according to the quality or we can say competitive ability of the product of a firm. The innovation strategy supporting competitive advantage should be continuous, ensuring that disequilibrium among competing firms is the norm [2], enabling the innovating firm to profit from this instability [14]. The major attributes representing competitiveness of an enterprise are return on equity (ROE), market share, increase in market share, increase in turnover, and return on assets (ROA). As the value additions and cost reduction are the things for which most of the companies struggle for Goyal [15].

Innovation vs Invention	Invention is the creation of a new concept. Innovation is reducing that concept to practice and making it a commercial success
Innovation vs Creativity	Creativity is coming up with ideas. Innovation is bringing ideas to life.
Innovation vs Science	Science is the conversion of money into knowledge. Innovation is the conversion of knowledge into money.

Source: Feldman [7].

Table 1: shows the differences between innovation, creativity, invention and science.



A very prominent place in the future competitiveness of an enterprise is played by market development and the strategy of conquering it. This competitiveness achieved through innovation and application of knowledge leads to attractive demand with attractive prices and improving the quality of the product (Figure 1).

The competition environment among the firms is changed in the current era. Now the focus of the firms is on product distinction which is most of the times very little but still significant. In this way, they are attempting to gain competitive advantage that enables them to get a comparatively better and sustainable place in the market. The innovation is regarded as the best way to achieve comparative advantage because it is vital for adaptation and adjustment according to the changing technology, market and to align with competitor's strategies [16]. It is more important for entrepreneurs and firms to understand and take the innovation as a main ingredient due to its critical role in the knowledge based and competitive economy [11].

To compete in the market, it is vital for the companies to launch new products. Prof Stefan says that there are only two ways for firms to rise. First, they should acquire the competitor and second rise organically. To rise organically there are two options. They keep their trust on more turnovers with existing products and/or services. But with the passage of time the products will become older and the competitors introduce newer products. The firm will be unable to retain its existing market share for a long. The second option is to grow organically so you have to innovate for new products and services [17].

The changing world of business is also changing the innovative strategies of the companies. A research carried out by Booze [18] in the Annual Global Innovation 1000 reveals that top leading brands of current business world are using different approaches for innovation. It categorized as need seeker, market reader and technology driver. For example, the need seeker companies are Apple and Proctor and Gamble which develop their products as per the requirements of their end-user by taking ideas from them. The companies of market readers are Hyundai and Caterpillar that closely monitor their markets, customers, competitors and strongly focus on creating value increase innovation to their products. The technology driver companies are Google and Bosch which most of the time rely on their internal technological abilities for product development.

Distinctive case studies of global market and its impact on industrial trade

This study discusses the strategy adopted by the leading firms like BMW, IBM and DuPont to find out how these firms avail the opportunity of innovation, come up with new ideas and gained competitive advantage over their competitors in the business world.

Case of BMW: From the auto industry, BMW is the case. The sharing of information and technology is limited in the automobile industry due to heavy research and development expenditure, time consumption on product development and intense competition. The rising oil prices force the car manufacturers to change the way they

business. BMW was not interested to share its hydrogen engine expertise but went for open innovation. In 2008, it announced for partnership for the development of a software application “info-tainment” which would have the features like, information and entertainment available for its customers using the vehicle. In a year time, the company brought out GENIVI, a Linux based software. General Motors, Wind River, Intel and Delphi were also the partners in this project. With the help of this software, it became possible for BMW to work on fuel-efficient engineering. GENVI became the reason to introduce the state-of-the-art dashboard information system in its vehicles. By going for open innovation and working in partnership once, it is not a big issue for BMW to go further for partnership in its slightly weakened areas and deliver more valuable products to its customer [17].

Case of IBM: In 1969 IBM adopted open innovation by introducing software package to its hardware. In a year time, it went for Linux based software and developed alpha works. This enables IBM to develop and refine different ideas by the programmers online from anywhere. The idea of ‘Innovation Jam’ was introduced in 2006. “Jam” refers to IBM’s huge online system which enable IBM to communicate among long distance workers. A brainstorming session was conducted in which inside and outside participants shared the view on selected topics in different discussion groups. In Innovation Jam 2006, about 46,000 participants focused to help IBM to bring its new products to market. The products like smart healthcare payment systems and real-time language translation were the result of this session.

IBM spent \$100 million for 10 mega projects based on the ideas of these sessions. The other initiative taken by IBM since Jam 2006 was Big Green. A new department for businesses related to environment. In the view of Edward, IBM’s Vice President for this program, idea generation is less complicated as compared to its refinement and implementation for the development of new product. It took a long way to become with innovative product in the market. Innovation Jam of IBM is the example how new ideas are generated and transformed into final product in changing business world [17].

Case of DuPont: Another example is from 1930s downturn. Most of the firms during the recession period of 1930s held their ongoing project or research and development work. The company naming DuPont, from chemical industry continued research and development for new innovations. DuPont researchers discovered the neoprene (synthetic rubber). Although there was a downturn but DuPont increased its research and development spending to develop the new technology commercially. Low prices of raw material became the advantage for the company to work on in the development of new product. Due to these bold initiatives, DuPont was able to launch the product in the market in 1937. Synthetic rubber is one of the biggest innovations of twentieth century. History shows that the companies that cash new ideas and innovative products can survive and attain growth even in downturns [19-24].

Conclusion and Recommendations

Due to increasingly interconnected and competitive global economy, without innovation it is quite difficult to survive in the market for the companies. Innovation is considered as primary success factor for the survival of firms. Because of this, firms all over the world spending considerable budget on research and development activities that enables them to survive in the market. History reflects that firm neglected the innovation were unable to compete with the changing needs of the market and failed to retain their market share. It is also evident that firm having innovative products can survive even in the

recession period. In global competition, the main segment for success will be to create and introduce new products, services and processes [25-27]. This can lead to the growth of overall economy and beneficial for all segments of the society. From customers’ point of view, innovation means more valuable products and/or services, while firms consider it as the growth and development of the business and more profits.

The study reveals that innovation and value addition are playing vital role in the growth of business and overall economic development. It is suggested that domestic firms in Pakistan should spend considerable resources for research and development, so these can be able to compete in domestic as well as international market. Currently domestic firms are not focusing on research and development and innovation, so it is difficult for them to cope with international standards. Role of government is also very importance [28]. Research and development activities can be promoted at government level. The government should also provide necessary support to enhance the capabilities of domestic firms. This ultimately allows the local firms to compete internationally which increase the volume of exports and sustainable growth of domestic economy.

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