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## Innovation Management in Global Competition and Competitive Advantage

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### Abstract

Increasing competition due to the liberalization of world trade has led to the production of goods and services according to new needs arising in the global market. Obtaining an advantageous position in the global competitive environment depends on determining right strategies and creating different values. Dynamic market structure, differing market conditions and the existence of innovative competitors make competition even more intense. Nowadays, objectives such as increasing productivity and profitability, gaining new markets and improving existing market shares are reached through innovation activities. Therefore, companies exert themselves to develop innovative skills, gain sustainable abilities and upgrade their performances. In this context, innovation has been one of the essential elements of competitive advantage. New goods and services must be produced in new ways and by adapting the inside and outside applications to the new developed methods, the organizational processes must be restructured. Not only to produce new goods and services, it is also important to manage it as a process. For determination of innovation performance, it is very significant to address all the factors affecting the innovation management process with a holistic approach. While rightly determining needed technology and management stands out as an important element of innovation management, the human and structural adjustment of the organization is also gaining importance in innovation performance. In the global competitive environment, organizational and managerial innovations are the keys to success for companies. While technology and research and development activities significantly influenced the organizational structure and culture, right innovation management provides a competitive advantage. This study aims to evaluate the impact on the competitive advantage of innovation management by putting out the importance of innovation management.

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## 1. Introduction

In terms of surviving in global competition, maintaining competitiveness, improving economic performance and growth, contributing to national economic development, innovation is an important element for the companies. The economic growth achieved by competitive advantage increases employment and production and, in return, leads to economic development and a rise in social welfare. When a sustainable growth is achieved, companies are pushed to innovate and to increase their ability to meet the new requirements by new products, new services and new processes.

In a globalized world, private and public sector have been transformed in all dimensions. Due to changes in the market, the functioning of the companies and economies has also changed. Because of diversified demands and production patterns, new professions emerged and the production process and philosophy have evolved. Today, already existing scenarios on hand are of no help and companies need new ways and methods in global competition. While creativity and innovation become the main capital of companies, getting success at indefinite and flexible market conditions is only possible with innovations (Bozkurt, 2000).

The inability of major industrial policies to obtain the desired success forced countries to search for new skills. The sheltered areas for companies and countries are decreasing due to the competition. In addition, the market forces are insufficient to move companies and economies into an advantageous position. For these reasons, new ideas should be raised and implemented (Arnold, 2007).

To succeed in global competition, companies need to create new ideas, new products and innovative strategies and need to manage them correctly. Developing and managing innovative and creative abilities in a systematic way elevates the competitiveness of first the companies and then the countries. Innovation management becomes essential for economic growth and sustainability of the companies. Using resources effectively, meeting the changing market needs and ensuring competitive advantage is only possible by forming compatible strategies with organization structure, logic and culture in order to develop innovative skills and by managing the innovation process effectively.

## 2. Innovation

There are many different definitions of innovation which is a term derived from the Latin word 'innovatus'. According to Drucker, innovation is a unique tool of entrepreneurship and an action through which new resources for a rise in welfare are created. It is the conversion of a new idea to a new marketable, or an improved, product and service (Drucker, 1985).

It is important to distinguish invention and innovation. While invention can be expressed as creation of an idea about a new product or process, innovation is to carry out this new idea into practice. Because of the different requirements in creating new ideas and implementing them, a time lag occurs between invention and innovation. Different types of knowledge, skills and resources are needed in order to turn an invention into an innovation. Also many complementary inventions may be required to succeed at the innovation stage (Fagerbegg, Mowery, Nelson, 2005). One of the main differences between invention an innovation appears at the marketing level. Innovation occurs when an invention is transformed to a product and launched for trade. Otherwise without commercialization, innovation cannot be performed.

In general, innovation is defined as conversion of science and technology to economic and social utility and it expresses the transformation of an idea to a marketable product and service or a developed production or distribution method. It also includes the new or developed product, service or method, which emerge as a result of this transformation process (TUSIAD, 2003). In Oslo Manual, innovation is defined as the implementation of a new or improved product or process and of new marketing or organizational methods at intercompany operations,

workplace organizations and business relations. In order to speak of an innovation a new or highly improved product, process, marketing and managing method should be put forward (OECD, 2005).

There are basically four different categories for innovation as product innovations, process innovations, organizational innovations and marketing innovations. While product and process innovations are mainly related with technologic products and processes, organizational and marketing innovations have a wider content. Product innovation is creation of a new or significantly improved product or service at its existing properties and usage. Process innovation is the realization of a new or improved production or distribution method including significant changes at technique, equipment and software. Marketing innovation consists of changes in design, packaging, positioning, pricing and promotion of a product. The organizational innovation is the implementation of a new organizational method in commercial applications, workplace organizations or external relations (OECD, 2005).

### **3. Innovation-Competition Relation**

The relationship between innovation and competition, is located in the center of many academic studies conducted on economic growth and development. While the need for differentiation in the environment of competition intensifies innovation efforts, each innovation differentiates the competition conditions and gaining competitive advantage becomes harder. In short, competition and innovation influence each other. Competition is a drive for innovation initiatives. On the other hand innovation supports competition while making it more intense.

To be able to survive in a competitive market, companies have to follow closely and adopt innovations or have to be innovative themselves. Only the companies offering innovation can achieve competitive advantage. Changing competitive conditions and dynamic market structure push to find new resources. According to Porter, obtaining advantage by cheap labour or scale economies remains in the past. Today the most important variable is innovation. Modern international trade theories are based on the countries' capacity to innovate and innovation investments. The ones who can develop new ways for production or distribution or who can bring new products becomes the winner. Companies reduce their costs, increase their productivity through innovation and differentiate in the market (Tekin, Güleş, Öğüt, 2003). In this context innovation is an important variable for productivity, cost reduction and growth. The competitive advantage obtained by innovation results in increase in employment and income and welfare gains.

Innovation delivers to achieve competitive advantage and to keep it in the long term. By increasing productivity and profit margin, growth is achieved in companies. It also mediates to increase the satisfaction of key elements within the business and also to increase the benefits to be provided (Güleş, Bülbül, 2004). The competitive environment promotes innovation. The expended markets cause pressure over companies to search for new sources. Creating the new has now become a necessity. Providing advantage over competitors in a dynamic market structure is only possible by creating new values.

According to Türkkan, the function of competition on promoting innovation can be evaluated in three categories (Özsağır, 2014);

- Competition forces firms to innovate and also to adopt the known innovations. However the innovation and its implementation process can bear huge costs whereas innovation is met with an interest less than expected. Besides, there is always a high possibility of carrying out a better innovation by competitors. Also the inability to protect the innovation and unfair competition by imitation hinders the fulfillment of the costs. Innovative companies are obliged to bear the costs to be born in case of obsolescence of the existing physical and human infrastructure. Competitive pressures created by the presence of competitors has to be added at this point.

- Another function of competition is to ensure the selection of innovation. Many strategic decisions should be taken, such as the decisions about the field of invention, the subject of invention, the time and cost of implementation, the time, place and dimensions of innovation. It can be recognized later and very lately that the decisions are mistaken and overcapacity risks are undertaken. There are high benefits at making decisions in a competitive environment. Competitive pressures may make it easier for companies to take high-risk decisions.

While enabling selection in innovation, competition also provides a faster way to make this selection. It also provides prevention of high opportunity costs in the long term by ensuring the elimination of wrong choices.

• By the protection of intellectual and industrial property rights, competition strengthen market position of innovative companies and increased public welfare. The innovative approaches and market positions of competitors, promote innovation in other companies. Thus, the prevention the welfare losses caused by intellectual and industrial property rights protection, the realization of the rapid spread of new technologies and technology transfers are possible.

Innovation is the driving force behind the most successful companies today, the key to success and the cornerstone of the global competition. Therefore, especially large companies devote large resources to new product development process. The potential benefits of product innovation has placed innovation at the center of the strategies. To sustain competition and to survive and to grow, companies are forced to take new products continuously. To compete in market conditions determined by innovative approaches some certain issues should be considered as (Ayhan, 2001);

- Innovation should be considered as a life style and the environment which encourages innovation must have a strategic priority. With the lack of larger organizational resources, managers of small companies should realize how important it is to explore new opportunities and to search for new sources in their own structure.
- Innovation can begin with a product, a process or a service idea.
- For the development of innovative strategies, scientific, technological and administrative changes in the world should be monitored closely.
- Creating innovation depends on research and development investments in research intensive industries. Research and development investments should be increased.
- Innovation process must be formulated and performed in a customer-oriented way.
- Innovative structure must be established within the organization to perform innovative activities
- Timing and application of innovation is important because of the shorter lifespan of commercial products.
- In addition to sales, information, accounting and financial systems, other systems as compensations and reward systems strengthen innovation.
- The obstacles in front of innovation such as bureaucracy, approval authority, lack of personal freedom should be well analyzed and appropriate solutions should be found.
- Innovation doesn't have to be expensive but have to be new to be effective.
- An innovative company must be able to maintain viability and provide better service to the customers.
- The establishment and management of cooperative networks between the companies which exchange know-how and ideas provide a basis for accumulation of common knowledge and facilitate achievement of innovation objectives for each of them.
- The probability of success for innovation is higher if the innovation has been produced by a teamwork.
- The competition inside the company causes innovative ideas.
- Domestic activities are not limiting but fostering innovation.
- Investigation of the place and the method of innovation is essential for the success of innovation at technology-based industries.
- Innovation carries a risk of technological failure. The countries with many innovative companies use trained human resources better.
- The main objective of the companies are to be successful in all areas. Nevertheless, companies can use their failures as an innovation tool, instead of hiding them.
- The creation of the atmosphere of innovation is difficult for small companies but it is not impossible.
- For most companies the critical element is the ability to understand and react to the changes in the market place not the technology. Technology is an important tool to react in market and technological developments should be monitored continuously.

#### **4. Innovation Management and Competitive Advantage**

Innovation management are managerial activities which the organizations carry out innovation under a controlled process of irregular and complex structures in order to adapt to the changes in internal and external environment. The concept of innovation means “process” when used alone but it means the control and management of innovation in implementation when the concept is used as innovation management (Drucker, 2003).

Competitive advantage on the other hand describes the advantage taking of an organization among its competitors by creating better value for its customers. There are several ways of creating competitive advantage such as reaching price and quality advantages against competitors, quickly responding to the changing customer demands and obtaining new market opportunities having customer value before competitors (Şimşek, Akin, 2003). The way of creating new market opportunities and producing new goods and services lies in fact of creating and implementing innovation. However, to reach this objective, the process from emergence of innovation as an idea to commercialization and marketing need to be managed correctly and efficiently. The strategies for this purpose has to be implemented according to a plan and they need to be updated according to the changing circumstances.

According to the Porter, there are principles for organizations for obtaining competitive advantage in global competition. First of all, all the value system of organizations have to be handled. Besides that, the resources need to be constantly developed and research, innovation and change need to be sustainable. In order to sustain the competitive advantage, global strategies should be formulated and implemented (Tekin, Çiçek, 2005). Also, innovative companies have to adopt the rules known as Seven Innovation Rules in order to gain benefits from the innovation process: form a strong leadership on innovation strategy and portfolio decisions, integrate innovation to companies business mentality, decide the amount and type of innovation compatible with companies business, manage the relation between creativity and value capture, neutralize organizational antibodies, recognize knowledge and people network as the basic unit for inside and outside the organization, create the metrics and rewards (Davila, Epstein, Shelton, 2006).

For innovation management there must be integrity and coherence among many areas. Factors such as organization culture, existing technology, human factor, team management, productivity and research and development should be considered synchronously. Technology is the main drive for change and innovation. Theoretical and empirical studies reveal that technology plays a key role in the production of new product and process and it redefines the rules of competition by changing foundations of industrial structure. With the help of research and development, firms forge new strategies about innovation and raise their market share. The human factor on the hand, forge the foundation of organizational success in innovation and thus the orientation and interest of people to the innovation should be encouraged. It is possible to create innovation by generating environmental circumstances. However, successful innovation requires the support and attachment of high level management. Especially, in the cases that innovation leads to radical changes, leadership requires a destructive, risky and costly learning and change level. Another, basic variable in the innovation performance is culture. The management should maintain a high quality business environment, which satisfies employees’ needs, develops their talents and supports their careers. By empowerment and involvement practices innovative behaviors should be supported. Also by cross-functional teamwork, which is one of the most important channels of communication, different perspectives can be combined and creativity can be stimulated. Recognizing the value of new information and knowledge, assimilating and applying them shows the ability of organization at determining innovative output. (Prajogo, Ahmed, 2006)

#### **5. Conclusion**

The role of companies acting in global markets is highly important for achieving competitive advantage for their own and for their nations. To achieve competitive advantage in global markets today, companies need innovative skills in creating, producing, marketing and managing. Companies should develop and implement strategies to develop and maintain innovative skills. This can be only possible with implementation of innovation management

properly. Innovation, one of the most important tools of competitive advantage, brings success only if it is managed effectively. Creating new values and managing the creativity process effectively opens new markets and brings competitive advantage.

Innovation management refers to creating a new product, a new process, a new organizational or marketing method by starting from an idea. It is a multidimensional concept that includes knowledge, technology, people, vision, leadership and the organizational structure. To succeed, all dimensions should be managed by proper strategies. Companies should be open to innovative ideas and should create a mechanism that starts with promoting human sources. In this way, innovative initiatives and the competitiveness of companies will increase rapidly. Therefore an administrative structure should be built which supports new ideas and innovative tendencies. Furthermore working conditions should be regulated accordingly.

Technological developments should be followed and maximum benefits from technology should be taken to innovate. At this point R&D activities and investments should be continued. Using technologies compatible with existing systems is also important in ensuring success. Especially in organizational innovations, the participation of workers to the decision making process and innovation, enable easier adoption of innovation within the organization. Restructuring and improvement of business processes, implementation of new methods, maintaining internal and external relations will become easier in this way. For realization of innovations in marketing, strategies should be focused on creating customer loyalty and satisfaction.

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