Innovations in e-enterprises on the Polish market

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Abstract

The aim of this paper is to indicate the increasing significance of innovations both in traditional and virtual enterprises. The growth in the number of e-enterprises reflects the increasing social awareness with relation to the role of the Internet. Activities that are undertaken by way of electronic means may reach a greater number of clients over a much faster time period and at reduced cost. Entrepreneurs aiming to sell their produce try to reach a multitude of potential clients, which in turn provides them with the possibility of acquiring greater profit.

Keywords: Innovation; enterprise; entrepreneurs, Internet, market

1. Introduction

Both the domestic and foreign activities of business entities entice entrepreneurs to undertake various actions with the aim of achieving the desired market position. Enterprises strive towards the achievement of a highly competitive position on the market and maintaining such a position.\textsuperscript{1} Each enterprise prepares a plan of action that is aimed at moving ahead of the competition operating on the same market.\textsuperscript{2} The market of Internet services is very large, thus e-entrepreneurs must display innovativeness in terms of their activities in order to gain a significant position on the said market. In defining the notion of innovativeness, it is acknowledged to be the constant readiness to implement change that has become the condition of existence and attribute of the modern-day enterprise.\textsuperscript{3} Likewise, it is also defined as an array of activities as follows: R&D, technical, organizational, financial and trading

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Peer-review under responsibility of Universal Society for Applied Research
doi:10.1016/j.procs.2015.09.054
based on the launching of new products and processes. Technical abilities and the ability of the organization to manage them have a significant impact on innovative success. The technical facilities are very important in Internet enterprises in which the ties between the seller and the purchaser are concluded by electronic means. The utilization of modern Internet technologies enables the execution of long-lasting change that in turn facilitates the development of the hitherto activities of the enterprise at hand. Speed and the good quality of services are the key factors in the success of such enterprises. Relations connecting the e-enterprises with clients or other entrepreneurs must be of the highest level. The factor increasing the competitiveness of enterprises is also the creativity of the employees. A multitude of problems that emerge in an enterprise requires both knowledge and creative thinking from the employees that is needed to solve them. Innovativeness in services and production is aimed at fulfilling the needs of both traditional and virtual clients, as well as getting ahead of the competition. Innovative solutions are perceived to be a significant factor in the success of enterprises.

2. Significance of innovations in an e-enterprise

The implementation of innovative solutions in enterprises is currently required in order to function on the market. Innovative solutions are applied in traditional type businesses and e-enterprises that are aimed at the modernization of enterprises and fulfillment of social requirements. Innovations cause a growth in the competitiveness of the business entities operating on the market. Enterprises operating on the Internet reach an unlimited number of potential clients that may purchase the necessary products by this means. In general terms, innovations may be defined as something new or significantly improved in a given area. Innovations are a complex phenomenon with a multitude of aspects that occur at a singular level of enterprises, as well as on the scale of the market as a whole. Innovations are the whole framework of activities that are necessary to emerge, as well as the practical utilization of new technical solutions that encompass the new or modernized products, services and processes. Radical innovations occur when completely new products or methods of production are launched on the market that were previously unknown in an enterprise, sector or given market. Each improvement or novelty implemented builds a positive image of the enterprises in the eyes of potential purchasers. It is possible to distinguish three levels of novelties with relation to innovations as follows: novelty for enterprises, for the market and for the world. The innovative process is characterized as that of the creativity and individuality of an entrepreneur who launches a new way of development and new inspirations. The factors determining the innovative processes and R&D activities are deemed to be external factors as follows: the state policies, system of education, potential, type of sector and the market, as well as market mechanisms. The second type of factors, namely internal ones, include the tangible resources, human resources and financial resources of enterprises. Enterprises need new solutions in order to increase their market attractiveness. Each successful innovation is an opportunity for an enterprise to enter new markets. In the case of e-enterprises, which are innovative solutions in themselves, their traditional forms of markets are unlimited. The possibilities of reaching a large number of clients are first and foremost provided by the Internet. The number of enterprises that have broadband access to the Internet indicates the growing need to avail of such solutions (Fig.1).

Fig. 1. Enterprises in possession of broadband access to the Internet
Source: www.parp.gov.pl/files/74/81/626/18355

In Fig.1, it is possible to observe the significant rise in the number of enterprises with broadband access to the Internet. In 2010, this number totalled 69%, whereas in 2012 their number exceeded 80%. In the subsequent years,
the number of these enterprises systematically increased, which certifies to the demand for Internet services.

A large number of enterprises possess mobile access to the Internet, which enables them to have faster and constant contact with clients. This trend is indicated on Fig. 2.

Fig. 2 Enterprises in possession of mobile access to the Internet
Source: www.parp.gov.pl/files/74/81/626/18355

In Fig. 2, enterprises are shown that have access to the mobile Internet by means of various types of equipment. In 2010, 30% of enterprises had mobile access, whereas in 2011 this figure was at 33%, while in 2012 this constituted over 40%. In the period of 2013-2014, the number of enterprises with mobile Internet had increased by 10% in comparison with the year 2012.

The skills utilized by innovative entrepreneurs are first and foremost reactions to the emerging changes and their utilization as an opportunity to create the increased competitive position for their enterprises. Modern approaches of organizations strive towards the satisfaction of the needs of clients, both the current ones and future ones.

Having access to mobile and stationary electronic sources facilitates the shortening of time between submitting orders and receiving them by the medium of the Internet (Fig. 3).

Fig. 3. Enterprises receiving orders via computer networks
Source: www.parp.gov.pl/files/74/81/626/18355

Enterprises and clients see new possibilities in submitting orders by electronic means. In 2010, a mere 10% of enterprises submitted orders via computer networks. This number rose in the subsequent years and in 2014, this amounted to 11.5%, which in turn indicates the desire to avail of new solutions.

The barriers hindering e-enterprises from launching new innovative solutions are among other things, the costs of preparing and implementing innovations, difficulty with the acquisition of external sources of financing, the high risk of investments in technological novelties, low level of cooperation between research institutes and the market etc. A multitude of enterprises avail of external sources of financing. The innovation launched is only beneficial when it generates change in the e-enterprise at hand. These changes may include increasing profit, the personal development of employees, improvement of the image of the enterprises and improvement of the process of production. E-enterprises that launch innovations have greater opportunities of development and maintenance of their position on the market than their competitors whose activities in terms of their business units operate on the
hitherto assumptions. The skill of creating and launching innovations in an entrepreneurial way is the main element in the process of implementing change. The implementation of new changes requires the readiness of employees who participate in the process of launching innovations. In practice, it is possible to note that the application of innovative methods is preceded by an analysis of their costliness by comparison with other techniques. Innovative solutions help in the adjustment of e-enterprises to social and technological requirements.

3. Innovative activity in Polish e-enterprises

The innovative activities of e-enterprises in every country should be tied with R&D activity. In Poland, innovative enterprises are divided into groups: service, industrial or both.

![Fig. 4](source.png)

Fig. 4. Innovative enterprises in the period 2011-2013 according to types of innovations
Source: www.stat.gov.pl

Fig. 4 illustrates the changes occurring in percentage form in industrial and service enterprises that launch product and process innovations. Among industrial enterprises, products were most frequently launched in 2012. However in service enterprises, the most innovations were also launched in 2012. Innovative enterprises are presented in Fig. 5 with relation to the level of techniques.

![Fig. 5](source.png)

Fig. 5. Participation of innovatively active enterprises in the sector of industrial processing according to the levels of techniques in the number of enterprises as a whole in the period 2011-2013.
Source: www.stat.gov.pl

Of the enterprises that are active in an innovative sense in the period of 2011-2013, enterprises of high levels of techniques were noted at the level of 43.8%. Nevertheless, enterprises of low levels of techniques were rated at 13%. In the time period under analysis, enterprises of medium to low levels of techniques were rated at 18.4%, while those of medium to high levels of techniques at 34.7%. From the data presented, it is possible to note that enterprises of high levels of techniques launch the most innovations in order to maintain their position in the market sector.

It would be most beneficial for entrepreneurs to utilize their own sources of innovations that are profitable and
bring multi-sided benefits. Many e-enterprises with foreign capital have their own research centers that provide them with new solutions. There is also a problem with the insufficient amount of financial resources for self research or purchase of technologies from research institutes. Outlays on R&D should be treated as a factor in economic growth. Large enterprises are in the best situation as they possess their own well-equipped research laboratories and allocate the appropriate financial outlays for the necessary research, as well as launching activities.

4. Summary

In sum, it is necessary to note that the competitiveness of e-enterprises on the market is very important for the market situation. Each organization that pursues the maintenance of its position on the market should launch innovations. This has a significant impact on the strengthening of its competitive position on the market. In modern times, no economic unit can acknowledge its current market position as constant as activities on a competitive market do not allow this. Competitiveness by means of launching technical, organizational, process and product innovations requires the possession of the appropriate knowledge, as well as tangible and intangible resources. The innovative solutions of e-enterprises facilitate the sale of products to clients all over the world. By means of the Internet, the distance between the client and the producer is reduced, which has a favourable impact on the speed of running transactions. Employees play a substantial role in the innovative process as they are the creators of the innovations. This has a significant impact on the strengthening of its competitive position on the market. In modern times, no economic unit can acknowledge its current market position as constant as activities on a competitive market do not allow this. Competitiveness by means of launching technical, organizational, process and product innovations requires the possession of the appropriate knowledge, as well as tangible and intangible resources. The innovative solutions of e-enterprises facilitate the sale of products to clients all over the world. By means of the Internet, the distance between the client and the producer is reduced, which has a favourable impact on the speed of running transactions. Employees play a substantial role in the innovative process as they are the creators of the modern solutions. Hence, it is essential to select a qualified and honest team that shall be the principal element in the development of the enterprise at hand, both traditional and online in type.

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