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INFLUENCE OF ELECTRONIC BUSINESS FOR ACHIEVING COMPETITIVE ADVANTAGES

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Apstract: *This document deals with the topic of competitive advantage and information technologies that influence the ways organizations do business to acquire competitive advantage. Three generic strategies are described along with uniqueness and expenses generators. Then value chain is introduced as a tool that will be used to describe the influence that information technologies have on competitiveness. Following that technological aspect of competition was introduced and general technological influence was shown. After that information technologies that exert the biggest change in the way that organizations acquire competitive advantage were described. Then the influence of information technologies was elaborated through the use of the value chain describing how each segment of the value chain was changed with the use of information technologies. In the end conclusion was drawn about the way that information technologies exert influence on competitive advantage of organizations.*

Key words: *competitive advantage, e-business, organization*

1. INTRODUCTION

Internet technologies have opened the door to the concept of a fully digital economy in that it enabled the creation of innovative business approaches in the field of sales, buying and creating internal business processes. The focus of modern business organizations to the global market involves integration of information and communication technology, which ensures the flow of spatial data with no restrictions. Changing the concept of business, new technologies and integrated set of changes in relation to the environment but at the same time and within the organization itself. In the structure of the market place of information obtained unavoidable element, in addition to products, services and money.

The acquisition of market advantages, application and use of electronic means as virtual channels, and in business has proven to be a cost-effective and efficient way of exchanging goods and services. The success of the organization is based on the ability to define strategies and objectives, which will provide an adjustment to market requirements and the application of new technology and software solution, with the use of appropriate tools for measuring the results achieved in all the phases of the individual activities.

2. E-BUSINESS

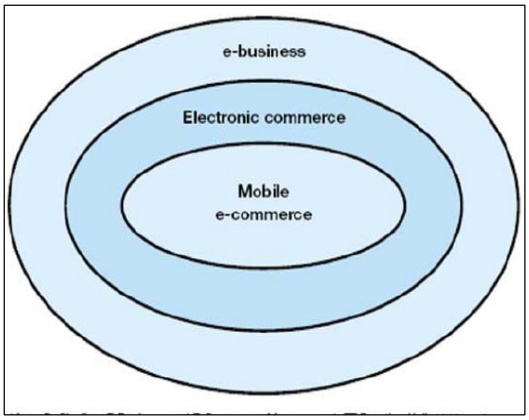
Electronic business in the broadest sense may be defined as any process that organizations realized by means of computer networks, assuming both internal and external communication flows. Electronic business is defined by comprehensive e-commerce, because it involves the buying and selling of products and services and also, providing service to customers, cooperation with business partners, the use of e-learning (e-learning) and transactions within the organization. In accordance with this definition, electronic commerce is, therefore, based on the use of all forms of information and communication technologies (ICT). The main processes of the organization, which is being realized within the framework of e-business, including manufacturing (services), customers and internal, management focused business processes. Examples of electronic business processes are: [5]

Production - oriented production processes including procurement, ordered meal, conduct automated replenishment, process payments and other electronic communication with suppliers, but also to control the production and all the processes that are directly attributable to the production process; Customers - processes that are focused on customers include marketing, e-selling, processing and payment of the ordered meal and support the

customer relationship; Internal or control focused jobs - including automated services to employees, training, information portal, video conferences and recruiting staff.

Under electronic commerce means buying and selling of goods and services, customer care, collaboration with business partners, electronic transactions within an organization where cases of transfers may be: documents, money, resources, etc. People often equate the concepts of electronic business (e-business) and electronic commerce (e-commerce). Electronic commerce is only a part of e-business. Electronic commerce can be defined from two aspects. The first aspect relates to communication (delivery of goods, services, information and payments through a computer network), while the second relates to trade (buying and selling of goods, services, information over the Internet).

Electronic commerce or e-business is one of the areas of information technology which have greatly changed the value chain. Electronic business can be considered such a business in which the use of electronic means to conduct business internally or externally. Internal activities include intranet linking employees, exchange of information and knowledge and support management reporting. E-business also includes services after purchase, and cooperation with business partners, for example, joint development of new products and general cooperation on a project.



Picture 1: E-Business and areas containing [2]

The term e-commerce or electronic commerce is a subset of electronic commerce and consists of conducting transactions and sales over the Internet or other telecommunications networks.

The term mobile e-commerce or as it is called m-commerce is a subset of electronic commerce that deals with all of the above, but with one difference consisting in the fact that this type of trade is limited to mobile networks and mobile devices such as mobile phones handheld computers and PDA device.

This quite young field can be traced chronologically or through its forms and types of e-business.

3. THE BENEFITS OF E-BUSINESS

As the basic advantages of the electronic business are: the reduction of transaction costs - if well designed e-commerce, such an approach and concept allows a deduction of costs to the end user, and the entire process significantly automated.

Big purchases per transaction - as an example often cited Amazon (book store on the Internet) in relation to the traditional supply Bookshops (book stores). It is possible to see a short explanation / description of the book, and details related to its publication as well as the opinions of other customers on the occasion of its contents.

The embodiment of the entire economic / sales process - if the web presentation through which the business is carried on the Internet well consolidated in the economic process - the consumer may offer additional information. For example, Dell (computer manufacturer) for each computer offers next switching / configuring the computer and adequate supply, where the customer has access to your transaction, i.e. the stage of realized buying.

The market offers a different way of shopping - in addition to traditional purchasing companies complement its product range and through the concept of "buying of houses-where e-commerce represents a more comfortable way of shopping. Newspapers offer via web presentations are sure: the possibility of defining the scope of purchases over several days, the choice of products with insight into current prices, the possibility of a simple comparison of the prices of products offered and different vendors the ability to search large catalogs of products.

Extensive catalogs of products - companies have the option of presenting a very wide range of products, which has been hampered in the traditional ways of selling, as an example in this regard is often cited Amazon where it offers 3,000,000 books. [6]

Improving inter-relationships with customers - web presentation provides the possibility of creating an interactive relationship with customers who do not require additional costs, thereby increasing customer satisfaction, which is most often positively reflects on purchases.

Electronic commerce provides the ability to create entirely new business models. A significant advantage of electronic commerce is certainly offers flexibility in line with the real situation on the market, i.e. changes to the products offered, price and similar elements can be implemented relatively quickly which achieves flexibility. In this sense general characteristics electronic business that companies recognize as their chance are: innovative products and business models, continuous and virtually unlimited access to the world global market, orientation towards customers,

individualization, and flexibility to the customer, more efficient operations and lower costs.

Difficulties in electronic business include: monitoring visits web presentations within which realized sales, tracking re-visit the web presentation - the percentage of repeated transactions within the web presentation, differentiation against the competition, tracking and analyzing purchases realized within the web presentation - in Within this work is necessary to ensure proper processing of credit cards, the integration of electronic commerce with traditional business. [1]

4. E-BUSINESS IN SERBIA

The introduction of e-business involves many organizational changes. It is based on: a more efficient and more modern work organization adapted use of modern information technology, Internet usage in the performance of most business transactions, organization and implementation of modern information systems, the use of standardized documents, the application of electronic signature, digitalization Affairs and using cryptographic protection mechanisms. Almost all developed countries have adopted legislation on e-commerce and electronic signatures, to establish the certification bodies and bodies for the accreditation of certification bodies, beginning with the release of citizens –intelligent card to safely engage in e-government, etc. The European Union has adopted a program of Europe in which the planned activities to ensure that Europe 2010 becomes economically fully competitive and dynamic knowledge-based society. Of e-business is in the midst of a little less present in relation to the existing knowledge and needs. Our society has lagged behind in the past decades to follow modern technological trends, and because e-commerce should be used as one of the opportunities for rapid growth. In our country we have at the expert level monitor trends in e-business. Research was conducted by euro stat methodology, the territory of the republic of Serbia. based on the research of the Republic Institute for Statistics, the following results on the use of the Internet and the use of E - government services (E-Government): Domestic: When research used a sample of 2000 households. The use of the Internet: the Internet in Serbia is 26.3% of households; most households have a modem connection to the Internet (73.4%), WAP and GPRS us 16.1% and 12.1% of ADSL households; Broadband (broadband) Internet connection uses 7.3% of households in Serbia. Apart from allowing quicker access to the Internet, a broadband Internet connection is also one of the basic indicators of development of the use of information and communication technologies in the European Union since 2005 (the percentage of households owning this type of connection); Number of Internet users has increased compared to 2006 by 3%; Over 1 700 000 persons used the Internet in the last three months; Over 850 000 persons use the Internet every day. [7]

5 THE IMPACT OF E-BUSINESS ON THE ACHIEVE COMPETITIVE ADVANTAGE

Regarding the primary activities such as inbound and outbound logistic, e-business solutions enable companies to atomize processes and effectively monitor and control inventory, which improves planning and the effectiveness of those processes. Atomization of the processes enables to save time and thus increase effectiveness. In another primary activity – operations, applied e-business solutions improves flexibility and the production of goods, which meet demand more accurately. Marketing and sales through e-business solutions provides new marketing and sales channels, enables to receive clearer picture of the market. In the primary activity such as service, e-business enables enterprises to spread information to their clients much faster.

Further, for the procurement processes e-business may be beneficial by enabling companies to minimize the number of transactions and reaching the suppliers much faster. In the area of human resources management, e-business through e-learning enables companies to develop new capabilities faster. To sum up, e-business value may be created by e-business application through several broad areas: knowledge management, information management, atomization, coordination and faster processes. By applying e-business into usual business processes, companies may improve various business processes by shorter shipping time, faster response to demand, much faster exchange of information in the whole value system, which is very important because the communication between the suppliers or manufacturers abroad might be very complicated and very time-consuming process.

Further, Christensen conducted a survey in Norwegian enterprises seeking to find out if e-business had a significant positive impact on sales, profits, return on investments and return on equity. 330 companies actively engaging in e-business participated in the survey. Survey results were analyzed using descriptive statistics, cross tabulations and exploratory factor analysis. The results showed that 21,4 % of companies reported increase in sales, 14,8 % reported increase in profits, 13,1 % - return on investment, 10,8 % - return on equity [3]. Based on the results, authors argued that usage of e-business in most cases had no significant impact on firm's financial and economic indicators. The study also revealed that e-business in Norwegian enterprises is in its infancy and that the companies "put all their efforts into relatively simple and primitive e-business solutions". Based on the findings authors stressed the role of management in the development and implementation of appropriate e-business model in order to create competitive advantage.

Based on the literature review it may be concluded that integration of e-business solutions in the usual business processes may improve all activities throughout the value chain however e-business impact on the improvement of firm's financial performance of the company is debatable. In many studies when analyzing e-business impact on business process from the benefits perspective, the benefits created by e-business are very often associated with the value creation and competitive advantage of the firm. Relating the benefits created by e-business with the competitive advantage in a way suggest that investments in e-business solutions may generate better performance and thus lead to better financial performance. However, there is also lack of empirical studies analyzing whether positive e-business impact (benefits) really lead to the competitive advantage, what is usually claimed in various studies.

6. CONCEPTUALIZATION OF E-BUSINESS BENEFITS AND COMPETITIVE ADVANTAGE

The benefits induced by e-business solutions are often associated with the competitive advantage in various studies, but the concept of competitive advantage is usually applied as a self-evident. Though the approaches of competitive advantage doesn't provide with the clear definition of the concept, they are useful in developing the indicators for the competitive advantage. Based on the literature review on competitive advantage, the term is interchangeably related with the company's financial performance, however the financial indicators differs across various studies. It's known that the ultimate goal of any company is to generate profits, by which the success of company is usually measured. Thus, following this logic, profitably working company in any industry has a competitive advantage, which defines company's good performance.

The analysis of competitive advantage is possible only when comparing different companies on the certain dimension, which might be different in each case. Seeking to find out whether one company has a competitive advantage over the other there is necessary to define the reference point or put in other words, to answer the questions on what several rivals are being compared. Though it seems promising conceptualization of the term, it raises the problem when there is a need to identify competitive advantage upon one dimension in a big sample. Different authors approach to competitive advantage differs from the developed approach to competitive advantage in a sense that it is a relative position oriented and not the result oriented. However, the relative better position or resource possessed by one company is also an important stimulus for the improvement of financial results. Thus, the logic of linking certain resources with the improved financial performance and claiming that certain resource is important in gaining competitive advantage seems to be appropriate when analyzing whole industry. [4]

The increase in sales due to the usage of e-business solutions was included in the measurement of competitive advantage with the assumption that the assessment of profitability takes more time than the assessment of increase in sales, which is also important indicator of improved firm's position in the market, which is an important aspect of competitive advantage. Thus the two indicators for competitive advantage used in this research were increase in profits and increase in sales.

7. CONCLUSION

E-business solutions such as supply chain management, resource planning system, e-commerce and others create diverse benefits for the business. Although the integration of e-business solutions in the usual business processes may improve all activities throughout the value chain, e-business impact on the improvement of firm's financial performance of the company is debatable. Most of the studies analyzing e-business impact on the usual business processes emphasize e-business benefits understood as the improvement of those processes and relate them with the competitive advantage. Put in other word, studies on the e-business benefits regard e-business solutions as an important source of competitive advantage; however, the empirical research exploring the relationship between e-business benefits and competitive advantage is limited.

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