

INFLUENCE OF INFORMATION TECHNOLOGIES ON THE COMPANY'S COMPETITIVE ADVANTAGE ON THE MARKET IN CONDITIONS OF THE GLOBAL CRISIS

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Abstract: In the recent decades, there has been recorded a great expansion in the computing and communication field and all the predictions are pointing to the further technological progress when using information technologies (IT) in the companies' business. The appearance of IT in business offers certain advantages, has an influence on the business quality, cost control and also on achieving and maintaining competitive advantage of companies in conditions of the global crisis. The research was carried out on the territory of Republika Srpska, on the sample of 136 small and medium enterprises. The key goal of this research work was to analyze the existing effects of IT at the level of competitive advantage of companies on the market in the global crisis conditions. The research results confirmed a big importance of IT in the company business for the purpose of achieving and maintaining competitive advantage on the market in conditions of the global crisis.

Keywords: information technologies, competitive advantage, market, global crisis.

INTRODUCTION

Information technologies have a very important role in developing innovations in the company, both in big corporations and micro, small and medium enterprises, and therefore, they facilitate the growth and development of organizations of this century. Modern way of life demands from managers of business organizations to improve themselves constantly and to introduce innovations in the managing process. Nowadays, one of the key elements for achieving it is the application of IT.

In the last twenty years, information technologies have found their place in all segments of business life and therefore have become an inevitable part of the modern society. By development of IT and structural reform, small and medium enterprises have

been encouraged to introduce new technologies in their business.

Apart from the uncertainty in business, when the market is more and more globalized and highly competitive, the thing which is characteristic for this century, among other factors, is that organizations are making significant changes in business strategies, in order to harmonize them with demands of the new competitive environment [14].

Modern information technologies are constantly getting more and more important, while they are also causing changes in the way of managing companies, as well as in their competitive advantage in the global crisis conditions. The appearance of electronic business defines the role of certain companies on the market, but it also offers some advantages and benefits. The application of IT has an influence on

more efficient business, more successful information flow, cost control, as well as on the competitive advantage of companies on the market [15].

Improving old and introducing new information technologies in the company business represents a crucial role in achieving competitive advantage of companies on the market in conditions of the global crisis.

Market globalization, availability of access to competitive enterprises and great dynamism of the market created a space for introducing new technologies in the company.

One of the key elements of survival and competitive advantage of companies on the market in conditions of the global crisis is the application of IT. Modern business, in time of great expansions, would be almost unimaginable without using modern technologies. In order to increase the level of competitiveness and business quality and to make the operation more efficient, operative, successful and according to the global criteria and standards, the companies are resorting to using IT on a daily level [21].

COMPETITIVE ADVANTAGE OF THE COMPANY

The conditions in which the companies operate today are very different from the ones that were present some years ago. Nowadays, the business environment is uncertain and turbulent, so the companies are constantly exposed to sudden, unexpected and unpredictable changes. Only the most successful companies can survive these everyday changes, because it is necessary for an enterprise to permanently respond to the demands of the fastidious market in order to survive and this could only be achieved by constantly improving all business activities [11].

Successful companies are extremely innovative, technologically advanced and adaptable in every sense. In order to achieve that, it is necessary for them to possess valuable resources and their own abilities which enable them to perform business activities better than the competition. The competitive advantage of companies is at the heart of their business on competitive markets and it is the only guarantee of their future operation and survival in the global environment. In the time of quick changes, many companies are losing the race for a competi-

tive position on the market. That is why it is necessary to create and maintain (develop and apply) the appropriate strategies in companies and every one of them should be based on building and maintaining competitive advantage which is very important for the company, so managers are creating it by using different business strategies.

The goal of every company is to provide above-average profit, constant growth and development, as well as to achieve and maintain the advantage over competitors. The competitive environment has a direct influence on business results and on abilities for development, survival and growth of the company. It includes constant confrontation of companies with the situation on the market [1]. The environment challenges represent good opportunities for some activities, while for some they represent danger and only for the rare ones they are not influential at all.

In time when quality is becoming a general category and goods with the higher price are a constant mean of the competitive advantage, the question is how to produce and survive on the market. The turnovers in their own available means are being sought increasingly, through the optimal structure of the engaged funds and their consumption and all that in order to maximize the company's income.

Competitiveness is the base that defines success or failure of the company [18]. In the era of constant development, the term competitiveness has taken a very important place. Competition between business rivals has been significantly intensified lately, in order to achieve the goal of the company's existence on the market.

Competitive advantage [18] is defined by several factors: production conditions, human, knowledge, capital and infrastructural resources. Countries that have the most dynamic process of interaction of all these factors achieve success in the competitive advantage [18].

In order to achieve competitive advantage efficiently, it is important to integrate information technologies, harmonize IT and business strategy, gain IT managing skills and to achieve IT competence. Managers can expect that the competitive advantage from their investments in IT will start to show when the its implementation is higher than average, regarding the competition.

MANAGEMENT STRATEGY AS COMPETITIVE ADVANTAGE IN THE COMPANY BUSINESS

The imperative for companies' survival and prosperity on the market in conditions of modern economy is the competitiveness. Competitive advantage is a decisive factor of the strategic operation of the company and its existence is the base for distinguishing a successful from an unsuccessful enterprise. Every strategy is based on building and maintaining it [7].

Competitive advantage is an organizational ability which enables the company to create significantly higher values for the customer, in regard to its competitors. In order to achieve and maintain competitive advantage on the market, the company needs to conduct constant changes which are manifested by the emergence of frequent innovations [10]. The company's survival on the market implies a successful battle with the competition, which demands from the company's managers to estimate realistically the situation in the environment, potential possibilities of the company, real possibilities of the competition, while reducing costs and ensuring positive business results. Nowadays, modern information technologies have a strategic importance for companies' functioning. The influence of IT on the company business is based on their introduction to the development of products and services, on the introduction of electronic business, on the contribution to cost reduction, etc. [8].

Greater focus of IT in the company can improve its competitive advantage on the market a lot. Introducing and applying IT can be successful only if the development of the information system is compliant with the development strategy of the business system [2].

The significant application of modern information technologies in all segments of company business brought new opportunities for competing on the market and it also forced companies to question their business strategies, so the competitive advantage would survive on the market in conditions of the global economic crisis [19]. Everyday development of the competition, as well as the current global crisis, demands from companies to carry out more frequent analysis of business processes.

Achieving company's competitive advantage on the market implies the analysis of business processes, as well as daily following of world business trends on the market. The competitive advantage

is not a permanent category, but it is sustainable [9]. The main goal of every company is to accomplish, but also maintain competitive advantage on the market, which is achieved by innovation of the product or service. Most companies became aware of the fact that customers' satisfaction is not enough for them to be competitive on the market, but they also need to surpass the expectations, as it is the only way to convince the customers that they are the best. In conditions of tougher competition, only the companies that are looking for solutions for the highest quality products with minimum costs in their strategic vision can survive, as well as the ones that are performing business processes in the shortest amount of time.

The most important thing for company's management regarding the strategic planning is to place the IT properly and recognize their influence on the companies' business on the market while achieving the competitive position [12]. Measuring performances became a main component in the development strategy of the company in conditions of the global crisis, together with sustainable growth and high position of the company on the market.

Managers can expect results of the investments in the information technologies, regarding the competitive advantage, when the application of IT in their company is higher than the average application of the competition [13].

The information technologies are defining the efforts dedicated to the improvement, including not only a dedication to the resources, such as the budget, equipment and staff, but also the managerial dedications, like introducing top management [6].

The companies in modern business conditions have to recognize the importance of harmonization of IT and business strategy, so they could adjust the whole business to it. If the company does not recognize all possibilities that the information technologies are offering, or they do not want to adjust its business to the new trends, it is certain that they will face a quick disappearance from the market.

The most well-known dimension of the competitiveness analysis is the model of competitive forces [17]. This model recognizes five main strategies which can lead company to danger, and they are:

- Entrance of new competitors,
- Threat of the appearance of alternative prod-

ucts/services,

- Negotiating power of the customer,
- Negotiating power of the supplier,
- Rivalry between existing competitors.

The Porter's model of competitive forces is one of the most common and most practical tools used for defining the company's business strategy. According to him, the choice of strategies is based on the competitive advantage and span. He defines two types of achieving competitive advantage: based on the low costs or on differentiation [21].

The size and duration of the company's competitive advantage are caused by the level of marketing dynamics and other activities on the market [4]. While defining the competitive strategies, companies have to pay attention to the market width, competition areas and to the way of gaining competitive advantage on the chosen market.

THE ROLE OF INFORMATION TECHNOLOGIES IN THE PROCESS OF CREATING COMPETITIVE ADVANTAGE IN GLOBAL FRAMEWORKS

In modern life, different interests appear every day, as well as different expertise in people who are managing business systems and organizations, then the levels of organizational complexity and therefore, different system types. One system can never provide all the information that is necessary to some organization or business system [5]. Company's business activities take place by sectors which have an appropriate information system in their business scope. All those systems need to be bound in one unique system which unifies the information about the company's business. Information systems are created as application packages which, depending on the sector they are used in, possess formed functions [3]. They should be strategic, i.e. they should fulfill the main goals of the company's business.

The influence of modern information technologies on the competitive position of the company on the market is reflected in the sense that they change the activity structure and nature of the competition, shape the competitive advantage and start completely new business processes and operations within the existing ones [18].

Company managers are aware of the fact that the company's competitive ability nowadays depends greatly on how much the observed company's activity and product or business activity realization is covered by modern IT and special databases [3].

New tendencies in the IT development are keeping up with the development of new business activities of the company, new production and information technologies, which demand a continuous adaptation to the whole of the company's management instruments, on the line of the set goal realization [7].

Using information technologies has an increasing role in forming new products and services [3]. Its main role in companies is re-engineering business relations, improving business activities and also achieving competitive advantage on the market.

New forms of using information services inside companies are enabling the implementation of qualitative business policy of the company. By using electronic trade, distance shopping and other information services, the customer constantly takes on a more important role in communication, and in that way, »classic« producers are becoming multimedia information representatives, by using the Internet on their own [20].

The influence of IT on companies in Republika Srpska in conditions of the global crisis has also a lot of other advantages, which are reflected in modernizing business activities with a decrease in the number of employees, better financial business of the company, more rational use of resource capacities, as well as with more qualitative distribution of materials and goods.

The research about the influence of IT on the company's competitive advantage on the market has been carried out on a representative sample of 136 business entities on the territory of Republika Srpska.

The goal of this research is getting data in order to define the influence of IT on the company's competitive advantage on the market in conditions of the global crisis. In Republika Srpska, 93% of the surveyed business entities confirmed that they are using modern information technologies in their business.

In addition to the above-mentioned, other research goals were defined, regarding the influence of IT on reducing costs in the company, reducing work force and increasing work productivity of servicemen.

According to the results received from the respondents, regarding the jobs they do, it can be concluded that the sample structure is satisfactory, because of the level of deviation from the ideal values and the conditions within which the mentioned research has been carried out. The research is directed to defining the role of IT in the process of achieving and maintaining company's competitive advantage on the market in conditions of the global crisis.

The set scientific goal of this work, relevance of assumptions and foundation of hypothesis, with the support of methods applied within this research, confirms a dominant influence of IT on the pace of achieving and maintaining competitive advantage of the company on the market. The research also ensured an appropriate theoretical framework and basis for studying and defining the adequate development strategy of information systems in the company.

Apart from the above-mentioned, other research goals were defined and they refer to the influence of IT on decrease of needs for employing accounting officers, automatization and faster recording of business events, improving and developing accounting analysis, increasing work productivity of accounting officers, developing accounting business in the near future, preparing accounting information for management needs and so on.

Individual results of the empiric research confirmed an extremely important influence of IT on the company's competitive advantage on the market in conditions of the global crisis. Out of 136 examinees, more than half (55%) confirmed that information technologies affect the competitive advantage of the company significantly.

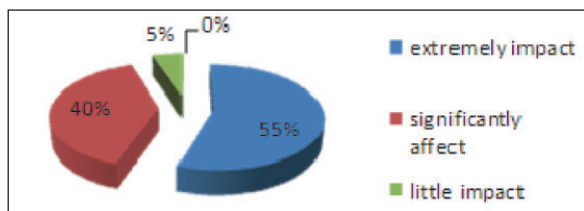


Figure 1. Influence of information technologies on the competitive advantage of the company (Đalić, 2017)

Modern information technologies tend to improve all business activities in the company really fast. Modernization of the company's business activities with the goal of increasing its competitiveness on the market is achieved by decreasing the number

of employees and, at the same time, decreasing the costs related to them. A part of the research carried out for that purpose confirmed that the application of IT has a significant influence on the number of employees, as well as on the labor saving, so the employees' work standard is becoming more complex in the process of achieving competitive position on the market. On the basis of very fast development of information technologies, the collected research results, regarding the contribution of IT to the decrease in the number of the company's employees, confirmed their significant influence on the decrease in the manpower needs – almost 75,55% of the respondents confirmed that the introduction of IT causes a need for decreasing the number of employees in the company.

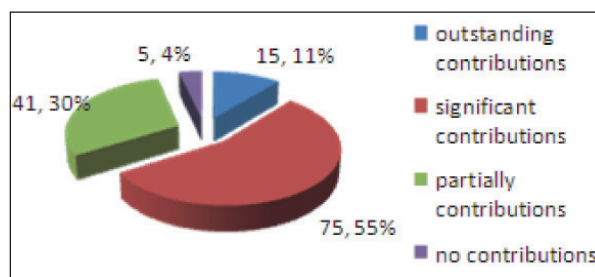


Figure 2. Influence of information technologies on the decrease in needs for manpower (Đalić, 2017)

The empirical research which refers to the influence of IT on the company's competitive advantage on the market in conditions of the global crisis confirmed their significant impact on the maintenance of competitive position on the market. The conducted research is shown in the Figure 3, where it can clearly be seen that the majority of respondents, almost 66%, agrees that information technologies contribute exceptionally to the achievement and maintenance of the company's competitive position on the market.

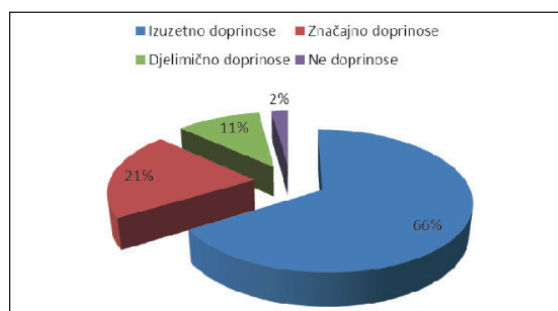


Figure 3. Influence of information technologies on achieving and maintaining company's competitive advantage (Đalić, 2017)

The research showed that over 70% of respondents in Republika Srpska have access to the Internet and they also confirmed an exceptional awareness that IT could have a significant role in their training to connect to the international business chains.

The conducted research showed that the companies' management in Republika Srpska is aware of the role and importance of IT in improving business results and achieving competitive position on the market. At the same time, introducing IT to the company is considered as a long-term investment.

Important segment of the research are the attitudes of the information systems' users, who think that the application of IT is extremely important and necessary in the everyday work of the company. The users also believe that their application would help overcoming business issues, meeting habits, needs and expectations of customers, as well as achieving company's competitive position on the market in conditions of crisis.

Using information technologies in every segment of the modern company business accelerates the cost-effectiveness of the organization significantly. Intensive application of IT enables collecting up-to-date information and their analysis, quick and easy spreading of business on new markets, while reducing distance between business entities, which has an indirect influence on the companies' competitiveness forcing them to be more adaptable.

The competitiveness of these companies depends on the value of used technology, while their sustainability on the market is connected to the speed and applicability of innovations, where the human factor, i.e. knowledge, has a decisive role.

CONCLUSION

Everyday competitive conditions and state of the market demand a fast and continuous change of organizational behaviour inside the company, in order to satisfy the needs for successful companies' business on the market, as well as to maintain competitive position. According to the conducted research, it can be concluded that all stated activities should be directed to creating a more favorable economic

environment for companies' operation on the world market, while providing companies with conditions for daily modernization by using information technologies.

Compared to the traditional way of doing business, companies that are using IT in their strategies, in order to achieve a competitive advantage, are accomplishing an increased volume of work, higher profit, they are more dedicated to the consumers, and all this results in increasing their competitive ability on the market in conditions of the global crisis.

In order to maintain its competitive advantage, the company has to outperform its business rivals all the time. The conducted researches show that more and more small and medium enterprises are recognizing the value of using new technologies, as well as the advantage over the competition, which they could therefore acquire. The most important thing is that managers ought to place IT in the company properly and recognize their influence on the business and structure of the company.

According to the research carried out in this work, it is obvious that managers of the companies in Republika Srpska are aware of the role and significance of IT in improving business results, in order to achieve a competitive position on the market, but at the same time, they believe that introducing IT to companies represents a long-term investment.

An important segment of the conducted research are attitudes of the surveyed users of information systems, who believe that the application of information technologies is very important and necessary in everyday work of the company. They said that the application of IT would help in overcoming some business problems, but also answering to the habits, needs and expectations of customers in a right way, which leads to the accomplishment of the company's competitive position on the market in conditions of crisis. Companies in Republika Srpska, which have chosen the application of IT as their strategy, in order to achieve competitive advantage, are gaining higher profits and are more focused on the consumers and their needs, in comparison with the traditional way of doing business.

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