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Original scientific paper

Vasil POPOVSKI*)
Sanja NIKOLIC**)

**THE SIGNIFICANCE OF THE ORGANIZATIONAL
KNOWLEDGE FOR ACQUIRING COMPETITIVE ADVANTAGE
ON THE TELECOMMUNICATION MARKET IN THE
REPUBLIC OF MACEDONIA**

Abstract

The era of knowledge brings new changes, evident in the rapid advance and development of science, engineering, and technology, which in turn entails changes in society, as well as on the market, creating new “rules of the game” to which organizations would have to respond. At a time of sharp competition and open markets, the success of a modern organization cannot be measured only by the acquired material property. The organizational knowledge represents a new economic category that comprises the overall knowledge of the employees and determines the competitive advantage of the organization. During the transition from industrial economy to knowledge economy, the effective use of knowledge becomes one of the decisive factors in the competitive battle among companies in the Republic of Macedonia. In conditions of changing and unpredictable modern business, and in the struggle for conquering competitive advantage, companies are intensely focusing on the knowledge they possess. Developing the necessary knowledge within the organization requires a focused combination of the knowledge and the abilities of all the participants in the management process – human resources, technologies and processes.

*) PhD, Institute of Economics – Skopje, E-mail: vasil@ek-inst.ukim.edu.mk

***) PhD, MIT University, Faculty of Management – Skopje,
E-mail: nik_sanja@hotmail.com

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1. Knowledge economy in context of increasing competition

The era of knowledge brings new changes that are seen in the rapid advance and development of science, engineering and technology, which in turn entails changes in society, as well as on the market, creating new “rules of the game” to which organizations would have to respond. These changes are especially visible in the last ten years, and the following can be distinguished in brief:¹

- Knowledge is crucial factor for the success of the organization. Competitive advantage is built through managing and connecting staff that possess specific knowledge and skills.
- The time for decision making is significantly shortened. The dynamic environment and the changes occurring in it do not leave space to the organization for long consideration. Timely, quick reactions that will follow current changes are needed.
- Relations among employees are becoming very complex. The new conditions of work emphasize the importance of independence, communication skills, and the ability to build and maintain good relations with the employees in the organization. Virtual organizations are a common occurrence, which reduces the need for physical contact of the employees.
- The information and communication technologies are increasingly being incorporated into the interactions among people, as well as into business transactions. People have become dependent on technology to such an extent that literacy is no longer reading and writing, but work on computers.

Under the influence of the technological and social changes, the era of knowledge also brings forward changes in the consumers’ buying

¹ Slavkovi , M. (2006), “Upravljanje znanjem i menadžerske kompetencije, *"Korporativno upravljanje u tranziciji – vlasništvo, kontrola, menadžerske kompetencije"* [Corporate Governance in Transition - ownership, control, managerial competence], Kragujevac: Faculty of Economy, pp.180-199

habits. Consumers are well-informed on the products, and the needs are complex and sophisticated. It no longer represents a challenge for the organization to satisfy the current consumers' needs, but to foresee future needs. This requires continuous investment in equipment – modern production technology, as well as education and training of employees so that they can meet the changing demands on the market. Consumers' needs, which are changing under the influence of the abovementioned conditions, have shortened the product life cycle, and have also imposed new higher quality standards which would have to be respected by the organizations in the process of production.

The competitive advantage of the organization can result in expertise in product design, product features, creative marketing, relations with clients, collaborators, suppliers, competitors. The organizations in the era of knowledge are forced to long life learning. Competitors on the market “never sleep”. Knowledge can be quickly taken over, copied. Therefore, the organization must learn faster and better than its competitors.²

2. The organizational knowledge as precondition for acquiring competitive advantage

In the era of knowledge, the focus of an organization's activities is placed upon the most appropriate use of resources. The resources and the skills, which are unique, rare, and create value, bring competitive advantage to the organization. It is thought that the production of competitive products and services requires appropriate resources. During that, knowledge is stated as a key resource in the organization. If the organization possesses knowledge, it will be able to produce and offer competitive products and services on the market. In this era, the traditional factors of production – capital, land and labor force lose their importance in relation to the importance that knowledge acquires as a crucial strategic resource. The optimal use of the traditional factors of production depends on the level of knowledge in the organization.

At a time of sharp competition and open markets, the success of a modern organization cannot be measured only by the acquired material property. In these conditions, the organization's ability to create newly-

² Slavkovi , 2006

added value is increasingly gaining importance.³ Hence, it can be said that the success of the modern organization depends on its ability to manage material property and the organizational knowledge.

The interest in the organizational knowledge begins to surge at the very moment when managers realize that the accounting reports do not present the real image of the actual value of the organization, and that they cannot reflect the organization's ability for creating new value.

The organizational knowledge is a new and relatively complex economic category that includes all the subjects of operation within the organization, which cannot be explicitly expressed in the traditional accounting reports. These subjects are particularly important for the organization because they create new, added value, and thus, they also influence the long-term profitability and competitive ability of the organization.

The organizational knowledge represents the overall knowledge of the employees, a specific property of the organization, above all due to its intangibility, which is not the case with buildings, land, equipment, etc. It constitutes the knowledge of the employees – the human resources. The knowledge of the employees, their skills and abilities determine the way in which the organization operates.

A number of organizations today do not pay enough attention to this resource because they see it as a cost to the organization, instead of as an investment.⁴ As an addition to this is also the inability to measure or follow the organizational knowledge in the book of accounts.

The organizational knowledge is in fact creating value through practical application of knowledge – to turn knowledge into products, services or processes which will bring new value to the organization.

³ Sunda D., Švast N. (2009), "Intelektualni kapital - temeljni imbenik konkurentnosti poduzeća" [Intellectual capital - a fundamental factor in the competitiveness of enterprises], Zagreb: Ministry of Economy, Labour and Entrepreneurship, p.34

⁴ (Sunda and Švast, 2009: 34)

3. The organizational knowledge on the telecommunication market in the Republic of Macedonia

In the period of transition, Macedonian enterprises faced with the processes of restructuring, where changes of the capital ownership took place. The results from this process in the Republic of Macedonia were far from the expected. In the struggle for survival, only a part of the enterprises managed to position on the market. In this process, there were also newly-established enterprises trying to answer the current conditions through developing capacities for successful performance and persistence in the market. The primary objective of the enterprises was achieving competitive advantage within the frameworks of the national economy.

The processes of EU integration created a global competition. This meant a constant adaptation according to external factors and development of internal capabilities of the organizations.

In their efforts to accept the paradigms of the developed and successful companies, Macedonian enterprises should not disregard the fact that the modern knowledge-based economy sets the organizational knowledge as a key imperative and the factor of productivity and efficiency. If it is known that human capital is a source of organizational knowledge, then the great importance of the management of human resources will also be perceived and employees will be considered an investment instead of an expense of the enterprise.⁵

In order to examine the role and the importance of the organizational knowledge, a research survey was conducted in the Republic of Macedonia. The research refers to companies from the telecommunications sector. The telecommunication market is dynamic and the technological changes create a complex environment. The legal regulations aimed at opening of the market and stimulate the competition.

The research was conducted in 10 companies, to a sample of 100 respondents. The majority of respondents are between 26 and 36 years old, immediately followed by respondents who are between 36 and 45 years old with 25%. 7% of the respondents who answered the questionnaire are aged up to 25 years, and only 3% of the respondents are between 46 and 55 years old, which indicates a relatively young

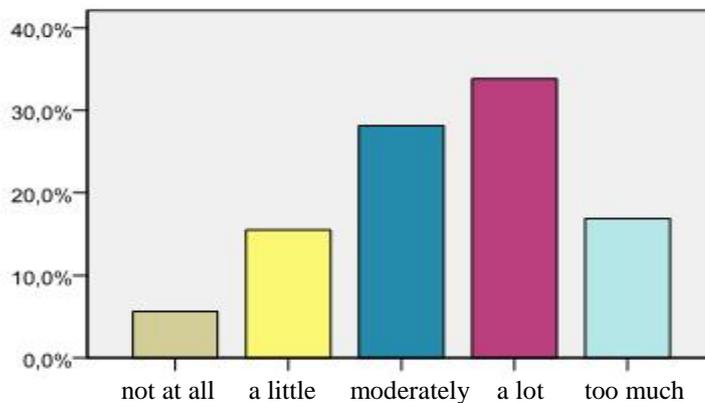
⁵ Catleska, Z., V. (2007), "Globalniot pazar i konkurentnosta: integriranje na biznis strategii i coveckite resursi" [Global market and competitiveness: integration of business strategies and human resources], Skopje: Politicka misla.

population working in the organizations that are the subject of this research.

Regarding the qualification of the workforce, the majority of the respondents are highly educated – 63%, and the percentage of those who have completed their master studies as well, is also high – 30% of the respondents. Only 7% of the respondents have completed their secondary school education.

The survey results indicate that the impact of the process of globalization has intensified the competition on the telecommunication market in the Republic of Macedonia. The majority of respondents or 51% answered that the globalization has greatly intensified the competition on the market, while 27% of the respondents answered that the globalization has moderately intensified the competition. Only 7% of the respondents believe that the competition on the market is not intensified at all. This indicates the fact that the majority employees are aware of the changes taking place on the market, as a result of the processes of globalization.

Chart 1: The impact of the process of globalization on the telecommunication market competition in the Republic of Macedonia

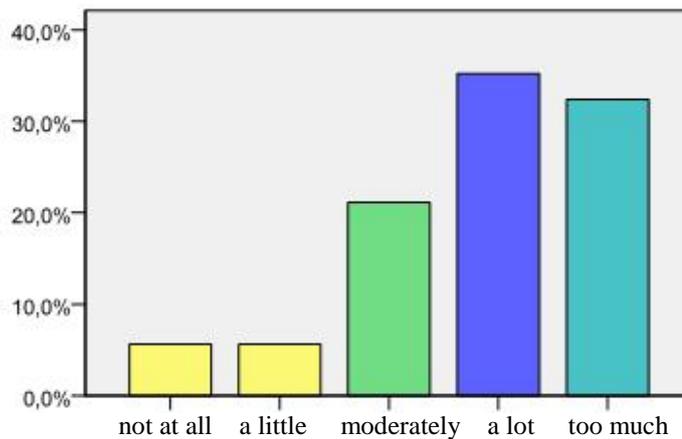


Source: research by the authors

Regarding the organizational knowledge, as an important factor for acquiring competitive advantage on the telecommunications market in the Republic of Macedonia, the two-thirds of the respondents answered that an adequate organizational knowledge is especially important for acquiring competitive advantage. 22% of the respondents

believe that the organizational knowledge has a moderate influences, while 6% of the respondents answered that the influence is insignificant. The results indicate the importance of organizational knowledge in order to acquire competitive advantage.

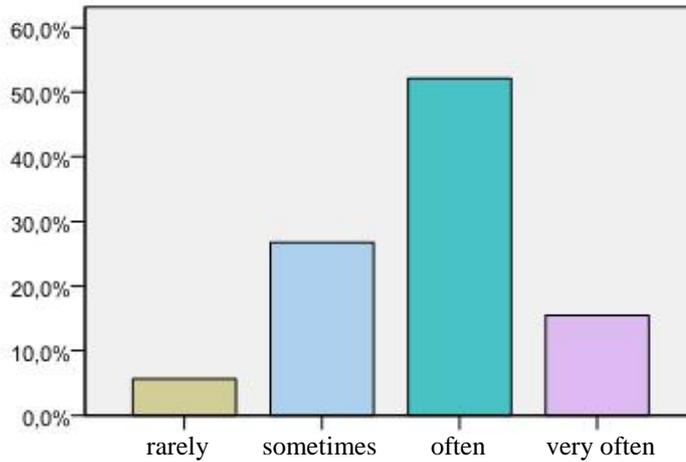
Chart 2: Organizational knowledge as an important factor for acquiring competitive advantage in the Republic of Macedonia



Source: research by the authors

The application of the organizational knowledge depends on the activities undertaken by human resources managers in the organizations. In this respect, it is investigated whether the human resources management undertakes activities in the direction of improvement of the knowledge and the professional skills of the employees regarding the dynamic changes on the telecommunication market. The results show that 52% of the respondents believe that the human resources management in their organization “often” undertakes activities for improvement of their knowledge and professional skills, and 15% of the respondents answered “very often”. Only 5% of the respondents answered that the managers “rarely” undertake activities aimed at improvement of the knowledge and the skills of the employees. The majority of the respondents confirmed that the human resources management undertakes activities for the improvement of their knowledge.

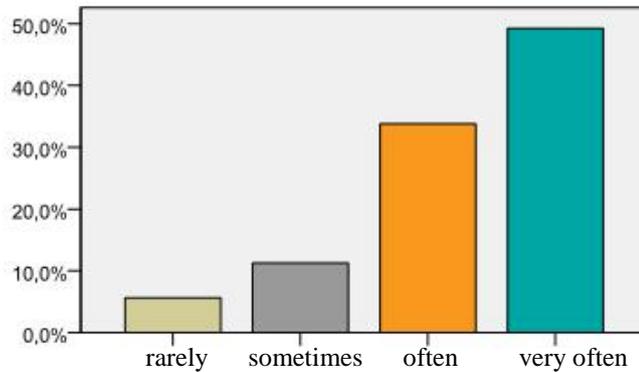
Chart 3: Human resources management and the application of the organizational knowledge



Source: research by the authors

Regarding the attitude of the employees and their need to constantly upgrade and improve their knowledge, as a result of the intensified competition on the telecommunication market, 49% of the respondents answered that “very often” they feel the need to improve the knowledge in their area of work and 34% of the respondents answered “often”. 12% answered “sometimes”, and only 5% of the respondents answered “rarely”. The results show that the majority of the employees are aware of the need to constantly improve and upgrade their personal knowledge, which positively adds to the activities undertaken by managers in this direction.

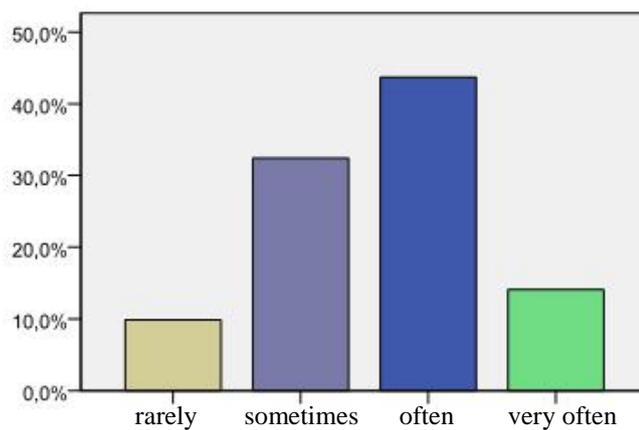
Chart 4: The intensified competition on the telecommunication market and the attitude of the employees



Source: research by the authors

In the purpose of knowledge improvement and upgrade, it was examined whether the employees attend trainings in the domain of their profession. The results show that the two-thirds of the respondents answered that they attend training in the domain of their profession (44% answered that they “often” attend training in the domain of their profession and 14% answered “very often”). 32% of the respondents answered “sometimes” and 10% - “rarely”. The results confirm the interest of the employees for improvement and upgrade of their personal knowledge.

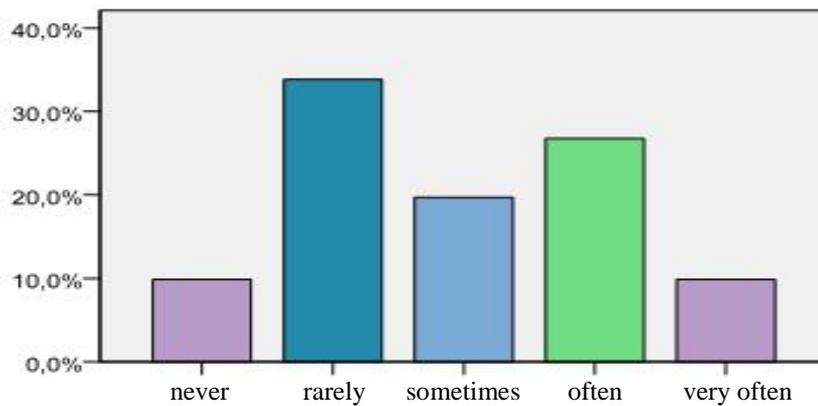
Chart 5: Trainings in the purpose of improvement the organizational knowledge



Source: research by the authors

Due to the conditions imposed by the open market, the interest of the employees to attend training outside the domain of their profession was examined. 26% of the respondents answered that they “often” attend such training and 10% answered “very often”. 20% of the respondents answered “sometimes”, 34% of the respondents answered that they “rarely” attend training outside the domain of their profession and 10% of the respondents answered “never”. This indicates that the employees do not recognize the need for personal improvement of skills and knowledge outside the domain of their profession.

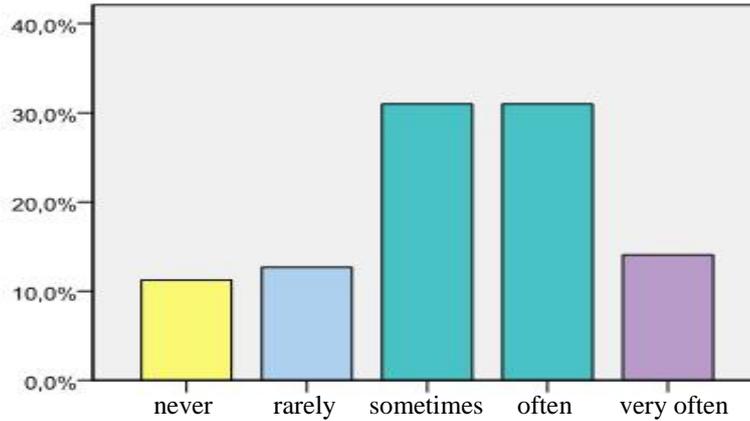
Chart 6: The interest of the employees to attend training outside the domain of their profession



Source: research by the authors

Regarding the activities undertaken by managers related to the organization of adequate employee training, 15% of the respondents answered that the managers organize training “very often” and 30% answered “often”. 30% answered that managers organize training “sometimes”. This indicates the initiative of the management towards development and improvement of the knowledge and the skills of the employees by sending them to training.

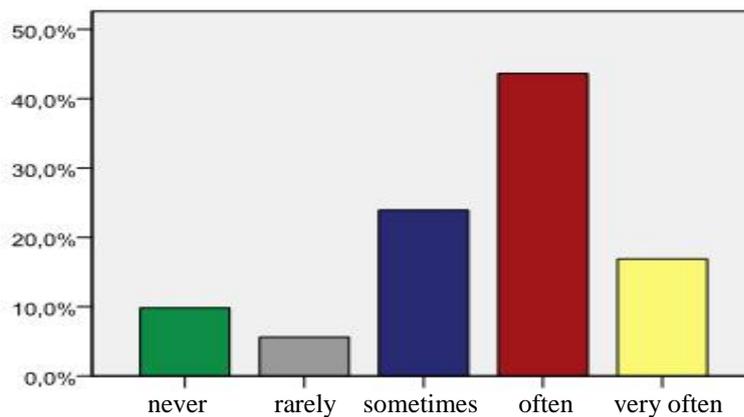
Chart 7: The activities undertaken by managers related to the organization of adequate employee training



Source: research by the authors

On the other hand, the employees themselves show initiative for attending training. The majority of the respondents (43% answered “often” and 15% answered “very often”) answered that they attend training at their own initiative. 26% of the respondents answered “sometimes” and only 6% of the respondents “rarely” attend training at their own initiative. 10% of the respondents do not attend training at their own initiative at all. The self-initiative of the employees in the direction of their personal professional improvement is especially positive.

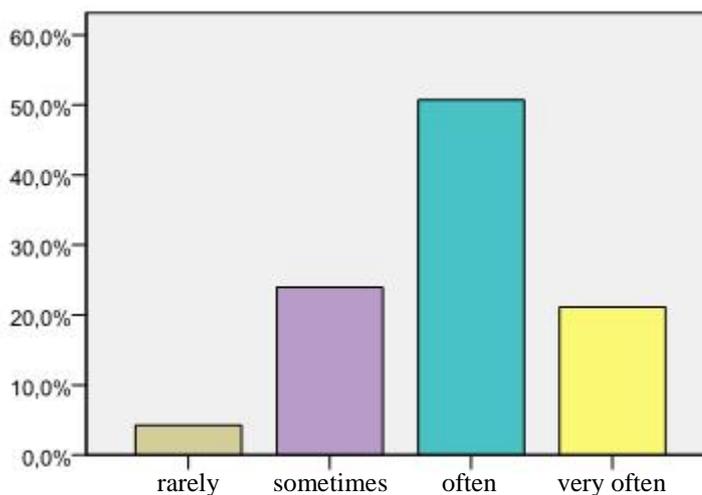
Chart 8: The self-initiative of the employees in the direction of their personal professional improvement



Source: research by the authors

The effects of the application of the organizational knowledge were examined through the use of the acquired knowledge from the training in the process of decision making in the everyday work. In this respect, even 50% of the respondents stated that the acquired knowledge “often” helps them in everyday decision making and 20% of the respondents answered that the knowledge acquired from the training “very often” helps them in decision making. 25% answered “sometimes” and only 5% of the respondents answered that the acquired knowledge is “rarely” applied in the decision making. The results show that the effect of the application of the organizational knowledge is positive, or that the knowledge acquired from training helps the employees in the process of decision making.

Chart 9: The effects of the application of the organizational knowledge in process of decision making

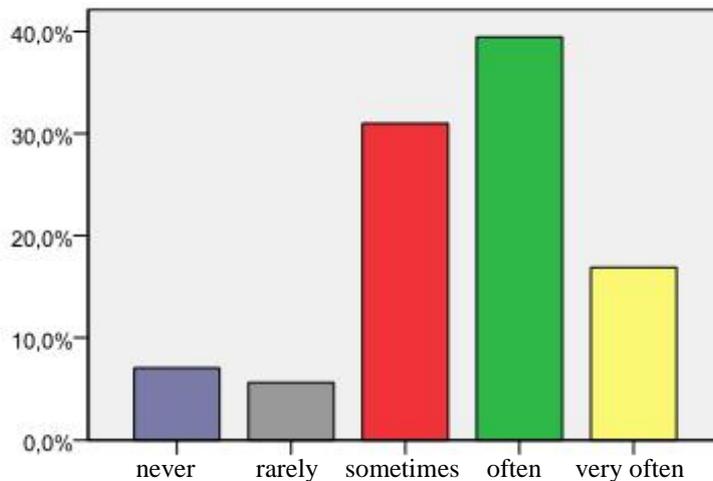


Source: research by the authors

Regarding the activities of the management in the direction of motivating the employees for continuous personal improvement through an adequate system of rewards in the organization, one half of the respondents answered that the system of rewards motivates them to upgrade their knowledge (38% answered “often” motivates them and 16% of the employees answered “very often”). 32% of the respondents answered that the system of rewards “sometimes” motivates them for personal improvement, 6% answered “rarely”, and 8% answered that

they are “never” motivated to improve. Since the majority of the respondents believe that the system of rewards is adequate, or it motivates them for personal improvement, it can be concluded that the system of rewards is an important factor in the application of the organizational knowledge.

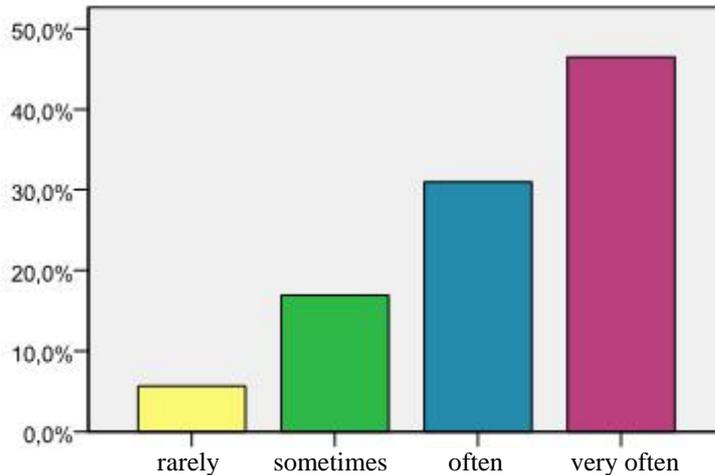
Chart 10: The activities of the management in the direction of motivating the employees for continuous personal improvement



Source: research by the authors

Regarding the attitude of the employees about their contribution to acquiring competitive advantage in the organizations where they work, the majority of the respondents – even 78%, answered that with their knowledge they can contribute to acquiring competitive advantage. 17% answered “sometimes”, and only 5% answered that they can “rarely” contribute to acquiring competitive advantage with their knowledge. These results indicate the awareness of the employees of the importance of their knowledge and the contribution they can make for acquiring competitive advantage in the organizations where they are employed.

Chart 11: The attitude of the employees about their contribution to acquiring competitive advantage in the organizations



Source: research by the authors

The results obtained from the survey show the significance of the organizational knowledge in the organizations on the telecommunication market in the Republic of Macedonia. Managers undertake a number of activities in this direction such as, organizing training for the improvement of the knowledge and the skills of the employees, creating an adequate system of rewards that should motivate the employees for professional improvement, and on the other hand, the employees show interest and awareness for the need of constant improvement of their personal knowledge and skills, which is imposed by the open market. Such need of continuous investment in the professional improvement is especially emphasized on the telecommunications market due to the connection of telecommunication with high technology, as well as the legal regulations in this area.

Conclusion

The process of globalization imposed the need of modification of the management processes. Namely, because of the free market and the dynamic market factors, which are in constant development – change, organizational knowledge is new tool for achieving goals and successful work of the organization. This resulted from the fact that the value and

the resources are no longer perceived in the same way as in the “traditional” economy, not only from the aspect of organizations, but also from the aspect of countries, regions, industries. The way of creating value for the consumers, which is the fundamental criterion for successful functioning of the organization, significantly differs from how it was in the past – from the way of creating value in the “traditional” economy. The new way of creating value requires a new management approach, or a new way of work.

The technological changes and a complex environment are extremely notable at the telecommunication market. Also the legal regulations opened the market and stimulate the competition. The process of globalization has intensified the competition on the telecommunication market in the Republic of Macedonia.

Regarding the dynamic changes on the telecommunication market, organizational knowledge becomes important factor for acquiring competitive advantage. The use of the organizational knowledge depends on the activities undertaken by human resources managers in the organizations. Managers have to take activities in order to improve the organizational knowledge and professional skills of the employees.

The system of rewards is a crucial factor of motivation to upgrade employees’ professional knowledge. Also the activities undertaken by managers are related to the organization of adequate employee training which indicates the initiative of the management towards development and improvement of the knowledge and the skills of the employees by sending them to training.

The effects of the application of the organizational knowledge were examined through the use of the acquired knowledge from the training in the process of decision making in the everyday work and the results show that the effect is positive, so the knowledge acquired from training helps the employees in the process of decision making.

The employees as well are aware of the need to constantly improve an upgrade their knowledge. They are interested in attending trainings in purpose of improving their knowledge. The results show that the employees are interested in improving their knowledge in the domain of their profession, but they don’t recognize the need to upgrade knowledge outside the domain of their profession. Having in mind that, managers should motivate the employees to improve their knowledge and skills outside of their professional specializations.

Both the managers and the employees show interest and awareness for the need of improvement of personal knowledge which is imposed by the open market. The employees are aware of the importance of their knowledge and the contribution they can make for acquiring competitive advantage in the organization.

Managerial revolution points out the need and the importance of organizational knowledge as a condition for successful work and for achieving the competitive advantage of the organization. The traditional means of production have lost the decisive role in acquiring competitive advantage. If the success of an organization in the traditional economy was measured by the quantity of produced and sold products, today the success of an organization is measured by the knowledge, skills and abilities that an organization owns. In conditions of changing and unpredictable modern business, and in the struggle for conquering competitive advantage, companies are intensely focusing on the knowledge they possess. Developing the necessary knowledge within the organization, requires a focused combination of the knowledge and the abilities of all the participants in the management process – people, technologies and processes.

Organizational knowledge became a key resource for the success of the organization. Today, world economy is facing a new challenge. The production and the technological revolution are already in the past. The stage is entered by the managerial revolution – the era of knowledge. In knowledge economy, which is on the horizon, organizations will compete at which one owns better organizational knowledge and at finding a better way to develop the human resources in the organization. Implementing systematic and continuous learning in the entire organization becomes one of the most important forms of human resources development.

References:

1. Argote, L., B. McEvily, R. Reagans. (2003), “Managing Knowledge in Organizations: An Integrative Framework and Review of Emerging Themes”, *Management Science, Special Issue on Managing Knowledge in Organizations: Creating, Retaining and Transferring Knowledge*, 49(4).

2. Catleska, Z., V. (2007), "Globalniot pazar i konkurentnosta: integriranje na biznis strategiite I coveckite resursi" [Global market and competitiveness: integration of business strategies and human resources], Skopje: Politicka misla.
3. Hansen, M.T., N. Nohria., T.Tierney. (1999), "What s Your Strategy for Managing Knowledge", *Harvard Business Review*, March/April.
4. Jennex, M.E. (2005), "What is KM?", *International Journal of Knowledge Management*, 1(4), I-IV.
5. Malhotra, Y. (1997), "Knowledge Management in Inquiring Organizations", Proceeding of 2RD Americas Conference of Information System (Philosophy or Information Systems – in Track), Indianapolis.
6. Skyrme, D.J. (1999), "*Knowledge Networking: creating the Collaborative Enterprise*", Butterworth Neinemann.
7. Slavkovi , M. (2006), "Upravljanje znanjem i menadžerske kompetencije, "*Korporativno upravljanje u tranziciji – vlasništvo, kontrola, menadžerske kompetencije*" [Corporate Governance in Transition - ownership, control, managerial competence], Kragujevac: Faculty of Economy.
8. Sunda D., Švast N. (2009), "Intelektualni kapital - temeljni imbenik konkurentnosti poduze a" [Intellectual capital - a fundamental factor in the competitiveness of enterprises], Zagreb: Ministry of Economy, Labour and Entrepreneurship.

