

Knowledge Management as an Integral Component of the SMEs' Organizational Development in the Republic of Macedonia

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Abstract

The strong progress and development of the information technology, especially the availability and massive use of the Internet, has led to that the 90-ies of the last century to be remembered as a period of quiet and spontaneous transition towards the new postindustrial age in which the soft values of the organizations defined in the terms organizational learning, knowledge management, intellectual capital, organizational intelligence etc., transformed the knowledge into a key resource for sustainable growth and innovative development of each company. Therefore, it is rightly pointed out that the central task of the modern managers is to learn how to manage the business knowledge, i.e., to understand the principles of knowledge networking and its effective use through the technological, human and business networks. This directs towards creation of appropriate strategies, including the strategy for development of the organizational knowledge as a planned and deliberated managing process in the new technology – productive and economic context. Although the inertia makes many organizations in the country to still act traditionally, the reality shows them the dysfunction and unsustainability of such way of operating. Emphasis on the so called "sharers of knowledge communities" which increasingly pose themselves as a real business context, should lead also in our country to a shift of the focus of interest towards the knowledge, the communities and relationships. This should be preceded by a period of change and development of awareness for the importance of the interpersonal dependence as an aspect of the appropriate organizational culture, which in many researches emerges as a central variable of the change. In this context, the processes of re-cultivation is necessary to lead toward values such as: free flow of knowledge, readiness for initiating, accepting, creating, sharing, etc., as a basis of the new culture of organizational learning and knowledge management. The basic assumption of this paper is to emphasize the importance of the knowledge for the SMEs i.e. their awareness of its place and role as a fundamental resource in the circumstances of modern business. Therefore, a simple methodological procedure is used - a survey conducted on a sample of 201 organizations from the SME sector in the cities of Skopje, Bitola, Ohrid, Prilep, Kumanovo, Kavadarci, Resen, Krushevo and Demir Hisar. Indicative results have been obtained that point to valid conclusions.

Keywords: knowledge management, change, organizational development

1. Introduction

The Republic of Macedonia as a small country with limited development opportunities is forced to use all resources that are available. Studies related to the medium and long term development of the Republic of Macedonia show that the national economy should be directed towards the use and support of the organizational development of the small and medium sized enterprises that should lead to an increase of the overall economic efficiency. The SME sector in the economy of the Republic of Macedonia has a very important place and role and it is getting importance increasingly as a key dynamic factor of the overall socio - economic development. Its strengthening depends on the creation of a favourable business environment, as well as of some other factors that determine the development, which are primarily related with the intellectual capital development policies i.e. stronger emphasis on the role of the human resource in the organizational context. This implies a well-planned and developed practice of mutual cooperation, trust, communication, commitment towards a common goal, stimulating the teamwork, as well as development, networking, sharing experiences, knowledge purchasing and managing, organizational learning etc.

The paper elaborates the area related to the human resources, which in the era of the knowledge economy, is the carrier of the innovation, competitiveness and growth. Thus, the basic dilemma that emerged was related to the level of awareness for the importance of the previously listed components that determine the development. This dilemma, through the survey questionnaire, was specified into three parts: a) Locating the key problems for development of the businesses; b) Locating the degree of personal engagement in the development of the businesses; c) Locating the readiness for change and development through investment in the area of acquisition, purchase and management of knowledge. Moreover, as a general assumption from which it was started were the results from various recent studies that were conducted in some of our neighbouring countries who state the following: "However, it seems that in the circles of the regional - local businessmen and entrepreneurs, is

prevailing the attitude that the things depend more on external factors (fiscal policy, banking system, legal uncertainties, corruption), rather than by subjective factors related with their personality" (Ivanic 2012:83). The research basically is a descriptive analysis whose objective is to determine the awareness, frequency and presence of organized forms of acquaintance, storage, networking and managing the organizational knowledge, as an important component of the organizational development in the modern economy.

2. Theoretical - methodological Framework

The knowledge management is a multidisciplinary field that requires long-term integration of the organizational culture, business strategies and processes, the performance of the organization and the information technology.¹ The knowledge management is the one that leads the movements from manually generating of information (such as creating documents on paper) to a fully electronic processing with ability to effectively use and application of information. The system of knowledge management is consistent and persistent behaviour of the employees and the management in order to achieve continuous production, support and enhancement of the organizational knowledge base. Through the knowledge management a redesigning of the organizational goals for achieving competitive advantage can be done. At the same time, the processes of cognitive, social and organizational learning are essential for the success of the knowledge management strategy. The knowledge management refers to a series of procedures and practices used within an organization in order to identify, create, distribute and enable adoption of experiences and knowledge. The knowledge management helps the individuals and groups to embrace and share the organizational values, to reduce the unnecessary work-related activities, to reduce the time for training of the new recruited employees, to retain the intellectual capital as a valuable organizational asset, to embrace change, as well as to adapt to the changing environment. The knowledge management treats the intellectual capital as an asset that can be managed and that is extremely important for a knowledge-based economy and that takes an increasing role in the everyday life. The ultimate goal of the knowledge management is transforming of the conventional, industrial enterprise into a modern "intelligent organization", i.e. into a knowledge-based organization.

When it comes to the relationship between the notions of organizational learning and the knowledge management it is often emphasized that it is about related, but not identical concepts. The following table reflects it the best.

Table 1. Relationship between the "organizational learning" and the "knowledge management" concepts

Criteria	Organizational learning	Knowledge management
Focus	Process of acquisition, distribution and use of the organizational knowledge	Process of acquisition, distribution and use of the organizational knowledge
Emphasize	On the behavior of actors, subjects	On the control over the knowledge
Approach	Detection, analysis and description of the process by which the knowledge was created and used - "descriptive approach"	Prescribing, modeling, creation, distribution, standardization of the process - "normative approach"
Scope	Spontaneous process	Planned and deliberately managed process

Both concepts are focused towards the organizational knowledge, i.e. towards the process of acquiring, exchange and use of the knowledge in the organization, but they have a different approach, character and place emphasis on different aspects of the process and elements of its structure. In any case it is about managerial concepts, designed to be practical intellectual tools in the management and development of the organizations nowadays. In this context it should be emphasized that the knowledge management in terms of a very dynamic development and penetration of the modern IT technologies, is especially actual in the information science, too. In any case, it is about similar processes that evaluate the organizational specifics recognized in the organizational routines, processes, interactions, habits, cultures, and that if not preserved there is a risk to be permanently lost with the departure of any member of the organization.² Of course, it is about so called soft elements of the organization – cognitive structures and behaviours of the members of the organization which are actually the two main components of the organizational learning, and specified through its disciplines fully elaborated by Senge (P. Senge, 1994).

Furthermore, when it comes to the approaches in studying and treatment of these concepts, it should be

¹ The Knowledge Management concept has started to develop systematically with the publication of the book "The Knowledge-Creating Company", written by the authors Ikujiro Nonaka and Hirotaka Takeuchi in 1991 based on their long lasting research of the practices in the Japanese companies.

² In this context, the following situation should be emphasized - if a company write off three forklifts before their full depreciation, it is recorded in the accounting reports as a loss. On the other hand, when an employee who has specific, relevant knowledge for the organization where he works - leave it (due to retirement, dismissal, death), it is not recorded in any accounting report. So, if an employee with many years of expertise and career, leaves the organization, not even one financial report will register it, regardless the fact that such employees are the most important part of the intellectual capital that the organization owns and through which it realizes competitive advantage.

emphasized their technical side i.e. the process of information processing in the established system. Here, the emphasis is placed primarily on the processes of collection, processing, storage, distribution and use of information. Some authors are interested in the social nature of the process of organizational learning because its essence always involves some form of social interaction of the members.

The organizational learning and the knowledge management can be observed as processes of development and implementation of the new rules and routines in the organization. If had in mind the fact that every organization operates under such system of internal regulation and that it is a long process of gaining experience to the stage when a work activity becomes a routine of the members of the organization, then the process of organizational learning and the knowledge management can be defined as process of creating organizational routines, that actually represent accumulated knowledge acquired in a given timeframe.

Referring the stages, it can be met the consideration that the process of organizational learning and knowledge management has three main stages: a) acquisition b) stabilization and expansion and c) applying of the knowledge (Janicijevic, N., 2009: 4).

The acquisition can be from internal and external sources. Internal sources are the employees themselves with their existing or new knowledge. It is therefore important to emphasize that in order such knowledge to become organizational potential for upgrade, it needs to be identified, recognized, articulated, codified and formalized in order to be expanded in the organization. Conversely, there can be active / passive or direct / indirect barriers (leadership style, reduced motivation of the employees, bad remuneration system, inadequate organizational culture), which together point to an existing organizational inability to manage the knowledge. The external sources of knowledge typically include all available sources that offer an opportunity for knowledge (formal - informal education system, information from customers and the market, competition, media, internet, etc.). But, what will be used and from which sources the new information and knowledge will be absorbed, it depends mainly on the organizational capacity for discovering, acceptance, application and update of the external knowledge.

The stabilization and dissemination of knowledge is the second phase, which includes processes of systematization, formalization, integration and storage. During this process, and through certain comparisons, combinations and integrations of existing knowledge, a new knowledge can be obtained. On the other hand, in the process of dissemination of knowledge it can be seen the relevance, as well as the functionality of the established system. In other words, the organizational knowledge needs to be managed to the extent that they can be made available to the members of the organization, which makes them exploitable potential resource that could be appropriately used. This is actually the last stage in the process that gives its full meaning. The application and use of the new knowledge is expected to improve the organizational competitiveness in order to meet the set requirements and to build a sustainable competitive advantage.

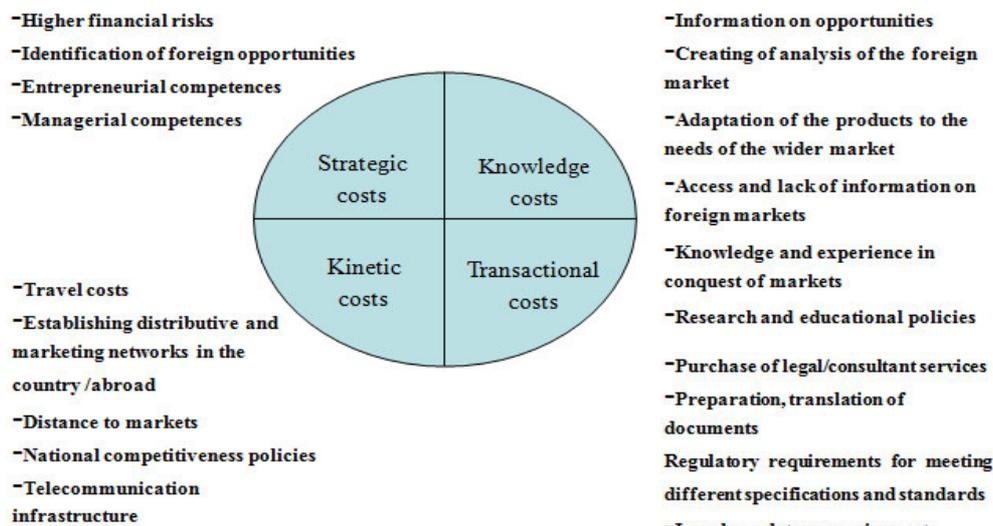


Figure 1. Factors/Barriers that hinder the SMEs' development, Harvie,C; Le Conga, L.V; Sanidasa,E., 2008

Source: Ivanic, V. (2012), "Oragnizaciona kultura kao determinanta konkurentnosti preduzeca u AP Vojvodini u recesionim uslovima", pg. 86.

Finally, the attempt to raise the awareness for practical revival of these theoretical managerial concepts in our country, derives from the visible fluctuations in the number of opened and closed private companies in Macedonia. But, even more from the presence of the phenomenon called "missing middle" or "no-bridge" problem. This problem is already emerging in countries like ours. The insufficient number of medium-sized enterprises that are more focused towards the accumulation and reinvestment of capital stands out as a critical

and crucial and problem and challenge to be solved. These phenomena are classified as “factors / barriers for growth of the small and medium business” (Harvie, C; Le Conga, LV; Sanidasa, E., 2008), according to (Ivanic, V., 2012:86). In this context the figure 1 is given from which it is clear that the costs of knowledge are distinguished as one of the four key barriers to the organizational development and change. The implementation and use of the existing systems for knowledge management, as well as the enhanced awareness for the superiority of the learning organizations, can improve the situation and to foster the development of the micro, small and medium enterprises.

3. Discussion of Findings

Besides the theoretical analysis presented, an empirical research within this paper has been conducted as well. The conclusions based on the analysis of the results of this research represent a good basis to learn about a tendency of behaviour of the organizations in the Republic of Macedonia and a good base for making appropriate recommendations for implementation of certain contemporary managerial practices, as well as for greater use of the concepts of knowledge management and organizational learning, all that aimed at achieving greater competitiveness of the organizations in general. The research was aimed at selecting relevant information about the components and determinants of the knowledge management, as well as about its specificity, importance and actuality. A questionnaire that has been developed especially for the needs of this research was used consisting of three sections: I, II and III.¹

I) As to the location of the key problems in the development of their own business, where with the numbers from 1 to 10 had to be indicated the range of the problems listed (with 1 being the most important problem and 10 the least important), the following results were obtained:

1) As the most important problem “the lack of business climate – working ambient in the country (rank 3.61)” has been indicated by the respondents.

2) As second ranked problem was listed “the lack of financial resources (rank 3.66)”.

3) As third ranked problem were listed “the difficulties in promoting of their products / services in the country and abroad (rank 4.72)”.

4) As fourth ranked problem was listed “the lack of trained personnel (rank 4.77)”.

5) As fifth ranked problem was listed “the unavailable professional support through trainings, consulting and mentoring by professionals and experts (rank 4.98)”.

6) As sixth ranked problem was listed “the inability of doing business at the international market (rank 6.05)”.

7) As seventh ranked problem was listed “the lack of information regarding the market trends (rank 6.38)”.

8) As eighth ranked problem was listed “the inadequate legislation (rank 6.58)”.

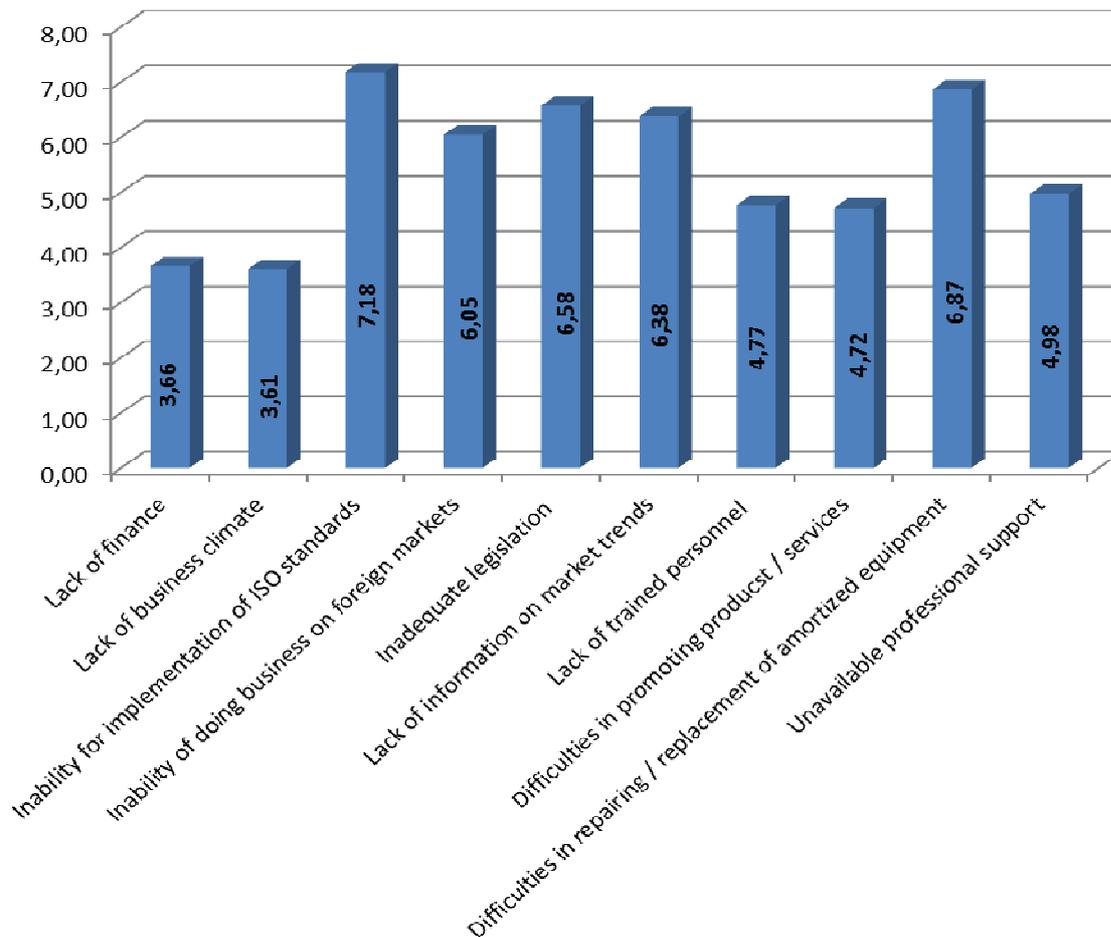
9) As ninth ranked problem were listed “the difficulties of repairing the amortized equipment or its replacement (rank 6.87)”.

10) At the end, as the tenth ranked problem was listed “the inability for implementation of ISO standard certificates (rank 7.18)”.

The results for the first part of the questionnaire are resumed in the graph below:

¹ The three sections from the questionnaire are already listed in the introduction of this paper.

Graph 1. Key problems for development of the business

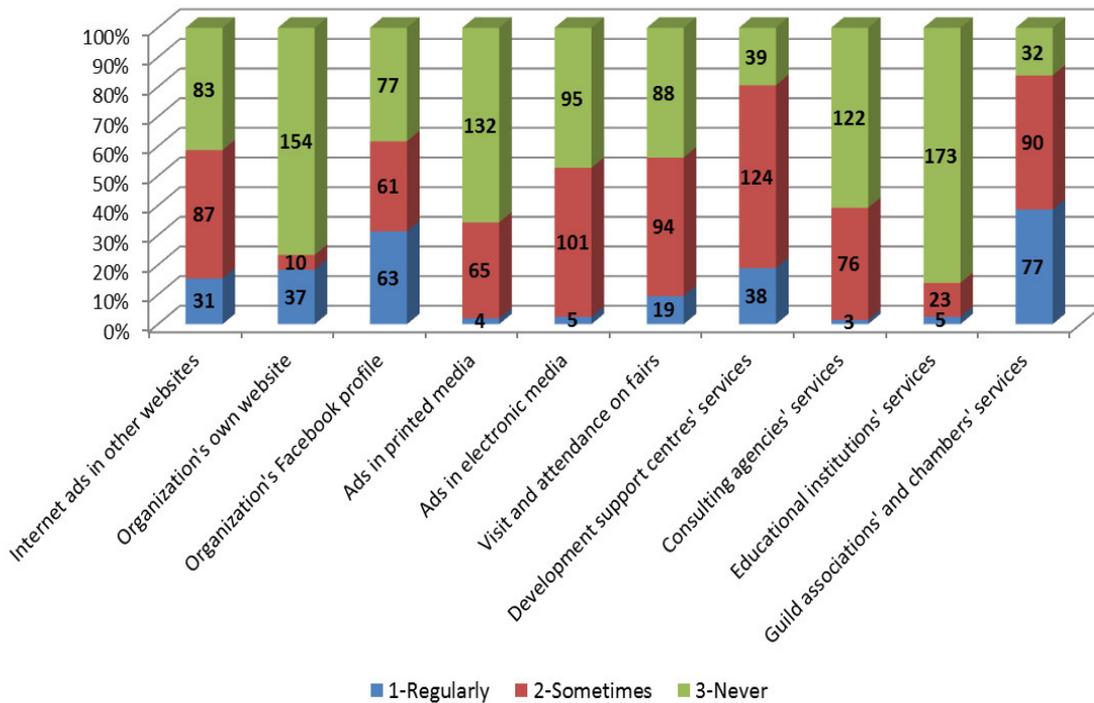


II) As to the location of the level of personal commitment to the development of their own business, regarding the way of obtaining / sending the necessary information, the following results were obtained:

- 1) "The information is obtained through the Internet advertisements on different web sites" – 15.42% of the respondents answered "regularly", 43.29% answered "sometimes" and 41.29% of the respondents answered "never".
- 2) "The information is obtained through an own web site of the organization" -18.41% of the respondents answered "regularly", 4.98% of respondents answered "sometimes" and 76.62% of the respondents answered "never".
- 3) "The information is obtained through the Facebook profile of the organization" -31.34% of the respondents answered "regularly", 30.35% of respondents answered "sometimes" and 38.31% of the respondents answered "never".
- 4) "The information is obtained through advertisements in the printed media" - 2% of the respondents answered "regularly", 32.34% answered "sometimes" and 65.67% of the respondents answered "never".
- 5) "The information is obtained through advertisements in the electronic media" - 2.49% of the respondents answered "regularly", 50.25% answered "sometimes" and 47.26% of the respondents answered "never".
- 6) "The information is obtained by visit and participation on fairs" - 9.45% of the respondents answered "regularly", 46.77% answered "sometimes" and 43.78% of the respondents answered "never".
- 7) "The information is obtained through the use of the services of the development support centres" -18.91% of the respondents answered "regularly", 61.69% answered "sometimes" and 19.4% of the respondents answered "never".
- 8) "The information is obtained through the use of consulting agencies" - 1.49% of the respondents answered "regularly", 37.81% answered "sometimes" and 60.7% of the respondents answered "never".
- 9) "The information is obtained through use of the services of educational institutions" -2.49% of the respondents answered "regularly", 11.44% answered "sometimes" and 86.07% of the respondents answered "never".
- 10) "The information is obtained through the use of the services of guild associations, chambers" - 38.69% of the

respondents answered “regularly”, 45.23% answered “sometimes” and 16.08% of the respondents answered “never”.

The results for the second part of the questionnaire are resumed in the graph below:



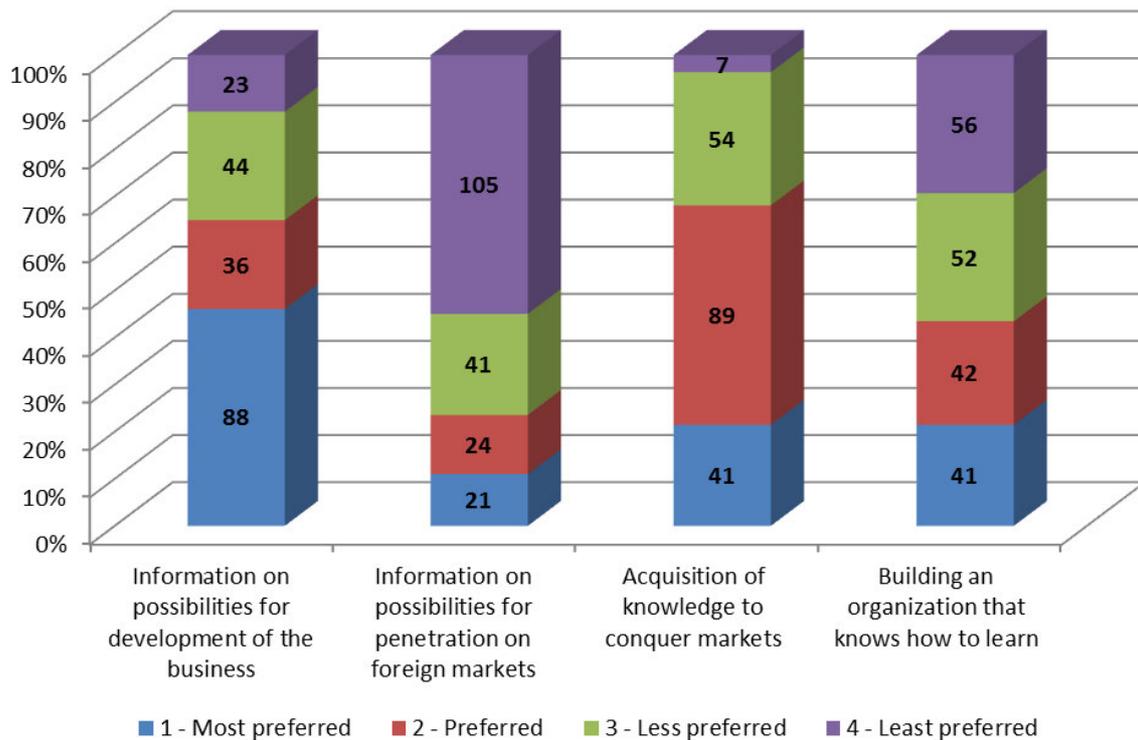
Graph 2. Level of personal engagement for development of the business

III) As to the location of the readiness for change and development through investment i.e. if they had funds available in which area would primarily invest them, where the offered choices could range from 1 to 4 (with 1 the most preferred choice was marked, and with 4 the least preferred choice), the respondents gave the following answers:

- 1) In obtaining information regarding the opportunities for development their own business (following trends, personal analysis, analysis of agencies, use the services of guild associations, chambers etc.) - 46% of respondents stated they most prefer it, 18.9% prefer it, 23% ranked it as less preferred and 12% as the least preferred choice.
- 2) In obtaining information on opportunities for penetration on foreign market (participation on fairs, using experiences of organizations, networking, relating with foreign partners) - 10.99% of the respondents stated they most prefer it, 12.57% prefer it, 21.47% ranked it as less preferred and 54.97% as the least preferred choice.
- 3) In acquisition of knowledge to conquer markets (personal or teams empowerment for development and marketing, purchase of services from consulting agencies) - 21.47% of the respondents stated they most prefer it, 46.6% prefer it, 28.27% rank it as less preferred and 3.66% as the least preferred choice.
- 4) In building an organization that knows how to learn (training on effective teamwork development and building; introducing of management / knowledge sharing systems; often attendance on trainings and seminars, awarding scholarships to talented young people who would be employed etc.) - 21.47% of the respondents stated they most prefer it, 21.99% prefer it, 27.23% ranked it as less preferred and 29.32% as the least preferred choice.
- 5) Nine of the respondents stated that they would not invest in anything from what was offered.

The results for the third part of the questionnaire are resumed in the following graph:

Graph 3. Level of readiness for change and development through investment



4. Conclusion

In the past few decades, the knowledge management occupies a key place in the managerial thinking and represents a key process within the organization that learns. Large number of organizations worldwide, more often practices this managerial concept on their way towards a knowledge-based organization. The knowledge management has not a direct effect on the financial performance, but its impact is more indirect and improves the soft performance in the organization, such as motivation, creativity, collaboration, etc. Knowledge must continually be improved and increased, because of its features depends on the competitive advantage of the enterprises. From the specificity of the knowledge and competencies that are developed on its basis, as well as from its differentiation and deficiency depends on how big “barriers” a company can set out to its competitors. In this context, it should be pointed out that as “most problematic” factors for doing business in the country, according to the results of the implemented survey, are the unfavorable business environment in the country, the lack of finance and inappropriately educated workforce in the Macedonian enterprises, which undoubtedly represents an important problem when it comes to their competitive ability.

By establishing a system for measuring and system for information on the performance of the knowledge management of the organization, it is possible to measure the degree of implementation and dynamic transformation of the intellectual capital in the enterprise. In our conditions, this gets especially high importance, taking into account the economic environment. The organizational collective knowledge base in Macedonia is very limited, especially by its total dissemination and depth. The information entropy in enterprises and organizations is not considered at all. The management has the objective to increase the effectiveness and efficiency of the organization by enabling the employees at all levels by using of their knowledge, experience and skills to get to the actual information that is needed to achieve the organizational goals. In this context, regarding the way of getting the necessary information, it was concluded that the Internet (ads on various sites, Web page of the organization, Facebook profile of the organization, etc.) is the most widely used method for obtaining and sending information, which leads to the conclusion that in our country is becoming increasingly prevalent the modern trend of business communication, although are still present the conventional ways for obtaining information such as the use of services from guild associations, chambers etc. In terms of readiness for change and development through investment, it was concluded that most of the respondents would primarily invest in getting information about opportunities to develop their own business and buying knowledge to conquer markets, which points out to the fact that there is awareness among Macedonian organizations for the need of investing funds for the acquisition of additional knowledge in order to remain competitive in circumstances of globalization in the business working.

Finally, based on the results of the empirical research which was realized in 201 enterprises in the Republic of Macedonia, it can be concluded that there is no strong orientation of the enterprises to transform themselves into a knowledge-based organization. Very often the main focus of the management is on the control over the incomes and expenditures, solving the everyday problems, and much less on new product development and innovation. In order the transition of the enterprises towards knowledge-based organizations to be easier, the enterprises should emphasize the importance of continuous learning as the main tool for achieving competitive advantage.

References

- Aleksić, A. (2009). "Uloga upravljanja organizacijskim promjenama u izgradnji održive konkurentne sposobnosti poduzeća", *Zbornik Ekonomskog fakulteta*, Zagreb.
- Doknic, N. (2001), "Organizaciono ponasanje", Beograd.
- Ivanic, V. (2012), "Organizaciona kultura kao determinanta konkurentnosti preduzeca u AP Vojvodini u recesionim uslovima", *PhD Thesis*, Fakultet tehnickih nauka, Univerzitet u Novom Sadu, Novi Sad. R.Srbija.
- Janicijevic, N. (2009), "Uloga organizacione culture na organizaciono ucenje, upravljanje znanjem i konkurentnost", Ekonomski fakultet, Beograd.
- Levi Jaksic, M., "Inovativne kompetentnosti organizacije", <http://www.tehnologija.iz.rs/clanci/cl-6.pdf> accessed [10.11.2011].
- Milosavljevic, M. (2004), "Znanje i inovativnost preduzeca", *Zbornik od naucni skup: Knowledge Mangement*, Univerzitet Braca Karic, Beograd.
- Senge, M.P. (1994), "The Fifth Discipline: The Art and Practice of the Learning Organization", Doubleday, New York.
- СМИЛЕВСКИ, Ц. (2000), "Предизвикот и мајсторството на организациските промени", ДЕТРА, Скопје.
- Vulovic, R., Papic, M., "Inovativna organizacija u novom vremenu sa novim resenjima" http://www.famns.edu.rs/skup1/radovi_pdf/Vulovic_Papic.pdf accessed [12.05.2013]
- Vukotic, V. "Ekonomska kultura i konkurentnost", http://www.vukotic.net/files/publikacije/1242826322_8139.pdf accessed [02.12.2011]
- Vucić, V. (2008), "Promjene u funkciji upravljanja ljudskim potencijalom", *Informatologia*.

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