

Awareness of the Concepts of Knowledge-based Economy and Organization within Romanian SMEs

Daniel URÎTU¹
Ștefan-Florin CORCODEL²
Ion Alexandru TĂNASE³

Abstract

The lack of overall competitiveness of Romanian SMEs, compared to the results of European firms, is the direct result of the limited access to economic, legal, technological and management knowledge. The transition to a knowledge-based economy has not been the same for every country in the world. Romanian organizational environment could not make an exception to the global trend of contemporary orientation towards knowledge, but, in the absence of policy options, this was manifested unsystematic, being localized mainly in the informal plan.

Based on these facts, this paper aims to highlight the proportion of Romanian entrepreneurs that are familiar with the concepts of knowledge based economy and organization and the characteristics of the organizations they lead, taking into account results that span over a period of five years.

The results obtained in the current research reveal a negative trend of the awareness of the concept of knowledge based economy and organization among Romanian entrepreneurs over the research period. The characteristics of the SMEs that are familiarized with the concept of knowledge based economy and organization, are frequently changing. Therefore, taking into consideration the criteria that were used in the current research (age, size, type of SMEs and level of education of entrepreneurs), it is impossible to make a general profile of the firms that are familiarized with this concept.

Keywords: *knowledge-based economy, knowledge-based organization, SMEs.*

JEL classification: M10, M20.

Introduction

The research presented within this article aims to highlight the proportion of Romanian entrepreneurs that are familiar with the concept of knowledge based economy and organization and the characteristics of the organizations they lead.

¹ Daniel URÎTU, Bucharest University of Economic Studies, Romania, Email: uritu.daniel@gmail.com

² Ștefan-Florin CORCODEL, Bucharest University of Economic Studies, Romania, Email: stefan.florin.corcodel@gmail.com

³ Ion Alexandru TĂNASE, Bucharest University of Economic Studies, Romania, Email: ialexandru.tanase@gmail.com

We consider that this research has a high importance in the context of the knowledge based economy and of the globalisation, because being a part of it, Romanian enterprises have to increase their performance in order to be competitive on the European and global market. The gap in competitiveness between Romanian firms and firms from other more developed countries is generated by limited access to economic, legal, technological and management knowledge.

In conducting the research we focused our attention on SMEs, because most of the businesses are SMEs and they have a very important role in any country, fulfilling multiple economic, technical and social functions. They are a source of entrepreneurial skills, innovation and job creation. In the EU approximately 23 million SMEs provide around 75 million jobs and represent 99% of all established businesses (Feaco's Survey, 2015).

Therefore we decided to analyze which is the trend of awareness of the concept of knowledge based economy and organization among entrepreneurs who lead Romanian SMEs and what characteristics have the firms they lead considering the following criteria: age of the company, size of the company, type of the company and level of studies of the entrepreneur.

1. Theoretical background

Knowledge-based economy is a common concept when we talk about global economic trends. This is due to the importance given to knowledge and bringing them to the forefront for the operation and development of enterprises (Urîtu, Popa, 2015).

The concept of knowledge-based economy was first mentioned by Peter Drucker in 1966 in his book "The Effective Executive". Peter Drucker made an analysis of the manual worker and the knowledge worker. The main difference between them is that the manual worker works with his hands and produces goods or services, while the knowledge worker works with his head and produces ideas, knowledge and information (Anushree et al., 2013).

There are different definitions of knowledge-based economy. Jones A. B. considers that knowledge based economy represents "the fundamental changing from the economy based primordially on the physical resources to the economy based primordially on knowledge" (Jones, 1999).

Professor Ovidiu Nicolescu (2006), synthesizing the definitions from the specialized literature, considers that "the knowledge based economy is characterized by the transformation of the knowledge in base material, capital, products, production factors essentials for the economy and through economic processes in which the generation, selling, acquisition, learning, stocking, developing, splitting and protection of the knowledge became predominant and decisive for the profit obtaining and for the assurance of the economic sustainability on the long term".

In 1996, OECD states in one of its publications that its economies become more and more dependent of the production, distribution and usage of knowledge

and it uses the term “knowledge-based economy” as an admission of the knowledge and technology role in the economic development.

In 1998/1999, the World Bank carried out a report through which it pointed out the necessity to identify the role of knowledge in the developing process and even more in the increasing of life’s quality of the people. The existence of a gap of knowledge between the developed countries and the ones in development or underdeveloped which can be fixed only by acquiring, absorbing and transfer/passing of the knowledge is accentuated.

According to a study carried out by The World Bank Institute, the transition to a knowledge based economy was not the same for every country in the world. Thus, North America took advantage of the new opportunities and in this way it succeeded to achieve a higher growth rate and a higher productivity performance in the last decades. On the other hand, the economy of the countries from Eastern Europe had difficulties to compete with knowledge-based economies, but some of these (Hungary, Slovenia and Romania) had the advantage to become member states of the European Union, which lead to an easier accommodation to the new requirements (World Bank Institute, 2007).

Developing countries may create knowledge on the local plan, besides the advantage of using the knowledge that already exists in the developed countries. The knowledge generated locally and the transfer from one country to another can be real catalysts for development. Rapid progress in development can be made by learning from others, assimilating knowledge and adapting them to local circumstances. In addition to this, national and international institutions must acknowledge and understand that knowledge is the foundation of development, resulting in the need for initiation and implementation of policies that focus on knowledge.

In the same time, knowledge-based organizations are the collective intelligent actors of the informational society and have a determinant role in its assertion as a knowledge-based society. Particular to the informational society are, however, those organizations that are based on knowledge in a deeper way and extended to a collective scale of the groups and whole organization’s behaviour. In such a framework, the foundation of knowledge becomes systematic and institutionalizes under the following aspects (Dragomirescu, 2001).

- The supply of knowledge is seen as the main resource of the organization, critical to its global strategic performance;
- Intellectual-intensive processes become not only dominant but also essential for the operation of the organization towards achieving its objectives;
- The organization structures new roles and responsibilities for individual and collective actors, regarding the management of knowledge and the knowledge-related processes;
- Organizational culture institutes normative values related to creativity, competence, learning and communication;
- Issues related to knowledge get an essential role in the affirmation of the organization, in ensuring the integrity and coherence in terms of structure, strategy and action.

For Romania, the relevance of the concept of knowledge-based organization results from the country's engaging in evolution to the knowledge society, a requirement for its sustainable development and its European and Euro-Atlantic integration.

Romanian organizational environment could not make an exception to the global trend of contemporary orientation towards knowledge, but, in the absence of policy options, this was manifested unsystematic, being localized mainly in an informal plan.

In this context, of the knowledge-based economy, there are many entrepreneurs who are not familiar with this concept, although they widely use knowledge in their organizations, usually in an informal manner.

2. Methodology of research

The scope of this paper was to illustrate how the awareness of the concept of knowledge-based economy and organization among Romanian entrepreneurs has evolved in the last five years and what are the characteristics of the organizations they manage.

This research involves an analysis based on information collected from 5 editions of the White Charter of Romanian SMEs. In the primary research has been used the questionnaire as the tool for data collection.

Each of the 5 editions of the White Charter of Romanian SMEs is based on responses of more than one thousand entrepreneurs. In addition, taking into account that the analysed SMEs have different sizes, age, location, domain of activity and performances, the sample of the research has the correct stratified distribution at national level.

Taking into account the mentioned factors, we consider that the sample is representative at national level and that the results and the conclusions of this study are relevant for the whole analysed population.

3. Results

Given the rapidity of changes in the global economy and quick transition towards knowledge based economy it is important for Romanian economy to analyze the rate of the Romanian entrepreneurs who are familiar with the concepts of knowledge-based economy and organization.

The table and the figure below present the evolution of the awareness of the concepts of knowledge-based economy and organizations within Romanian SMEs, taking into account the responses that entrepreneurs offered between 2011 and 2015.

Table 1. Awareness of the concept of the knowledge-based economy and organization within Romanian SMEs

Year	Entrepreneurs who know the concept of knowledge-based economy and organization
2011	33.72%
2012	19.88%
2013	26.13%
2014	22.29%
2015	21.44%

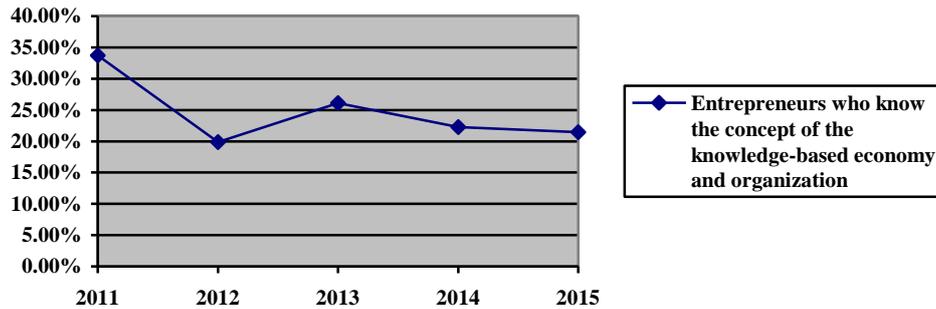


Figure 1. Evolution of the awareness of the concept of knowledge-based economy and organization within Romanian SMEs

The results obtained in the current research reveal a negative trend of the awareness of the concept of knowledge based economy and organization among Romanian entrepreneurs. Also the rate of the entrepreneurs who are familiar with these concepts is very low.

This is alarming, particularly in the context of Romania's integration into the European Union. Since 2007, the year of adherence to the European Union, Romania has had a better access to knowledge of the member states, which should lead to the usage of this knowledge by Romanian organizations.

An interesting fact is that most of the Romanian entrepreneurs use information and knowledge in their daily activities, but in an unsystematic and informal way, without knowing the concepts of economy or knowledge-based organization.

Therefore, there is a dire need to promote and popularize these concepts, and to stimulate the internalization of best practices in terms of adapting to the new economic paradigm.

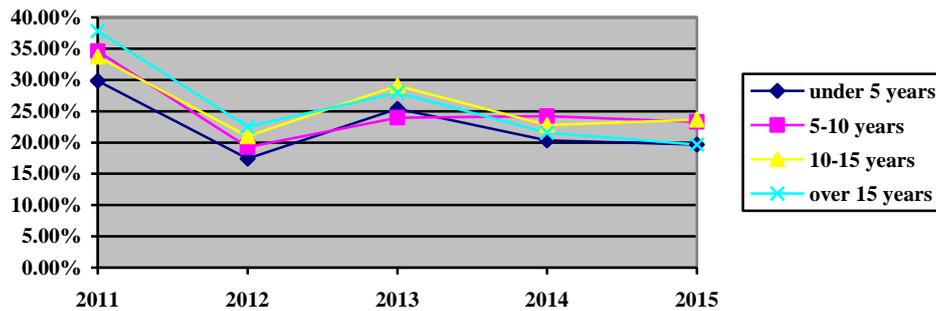


Figure 2. Evolution of the awareness of the concept of the knowledge-based economy and organization taking into account the age of SMEs

Considering the age of SMEs, we can notice that there is not necessarily a correlation between it and the rate of entrepreneurs who are familiar with the concept of knowledge-based economy and organization. But, from the last year analysis, we can see that the enterprises older than 5 years and younger than 15 years are more familiar with the concept of knowledge-based economy.

This is because the organizations younger than 5 years are still in the initial stage of the development and the entrepreneurs, who lead them, use all of their available time for the development and growth of the organization at the expense of documenting and informing about scientific terms and concepts.

It is important to mention that the rate of entrepreneurs who are familiar with the concept of knowledge based economy is about the same in all categories of SMEs, grouped on the basis of age, the difference being very small, lower than 5 percent. Therefore, we consider that the SMEs age is not a relevant criteria for the classification of the entrepreneurs who are familiar with the concept of knowledge-based economy.

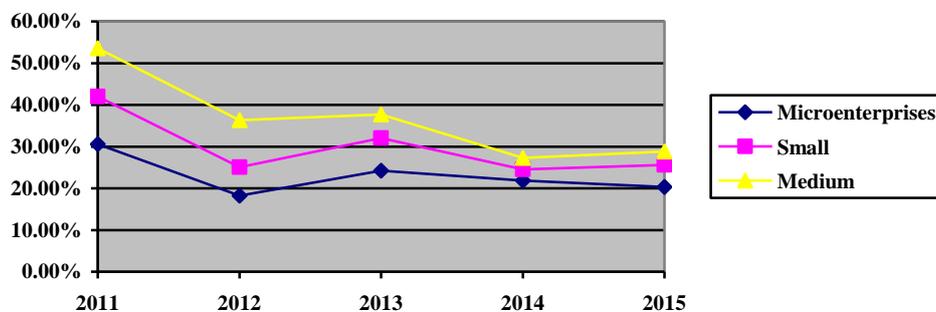


Figure 3. Evolution of the awareness of the concept of knowledge-based economy and organization taking into account the size of SMEs

Considering the size of SMEs that were analyzed, a positive correlation between this criteria and the rate of entrepreneurs that are familiar with the concept of knowledge-based economy is revealed. The bigger a firm is, the higher the probability of being familiar with the concept of knowledge-based economy is.

According to the results of the research, microenterprises generally are managed by entrepreneurs who are more frequently less informed about knowledge-based economy or organization. In general this is due to limited resources, as in the case start-ups.

Medium size enterprises show the highest rate of SMEs that are managed by entrepreneurs who are familiar with the concept of knowledge-based economy, the lowest rate being registered in 2014 (27.27%) and the maximum in 2011 (53.57%). They have a greater economic power and can afford to access knowledge.

The bigger firms and institutions are more attached to the hierarchical configuration and functionality and they have a higher level of formality. Therefore the managerial and professional practices based on knowledge are well known and widely used in this type of organizations.

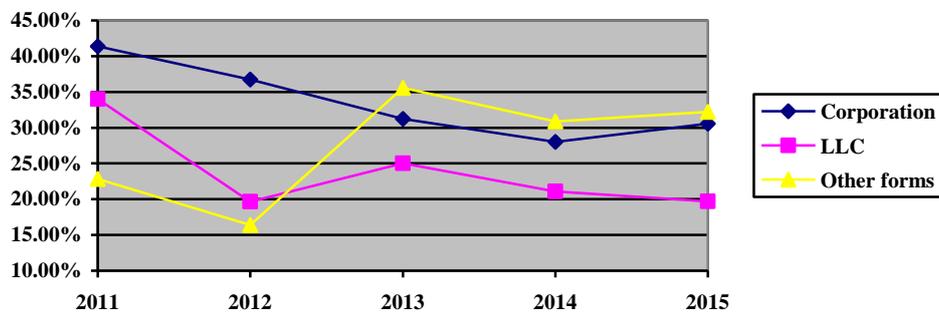


Figure 4. Evolution of the awareness of the concept of knowledge-based economy and organization taking into account the type of SMEs

The examination of SMEs depending on the form of legal organization points out that the limited liability companies and the corporations have a decreasing trend of the awareness of the concept of knowledge-based economy, while economic agents with another legal form have an increasing trend of the awareness of this concept.

The corporations are, in general, large organizations, so they have in management board specialists with good academic knowledge and there is a higher probability that they are more familiar about the concept of knowledge-based economy. Having larger dimensions, it is harder for them to change anything over a short period of time - this is why the evolution of the awareness of the concept of the knowledge-based economy has the lowest fluctuation in time.

The economic agents with other legal forms of organization are more unpredictable and this is why they have the highest fluctuation of the evolution of the awareness of this concept. (Figure 4).

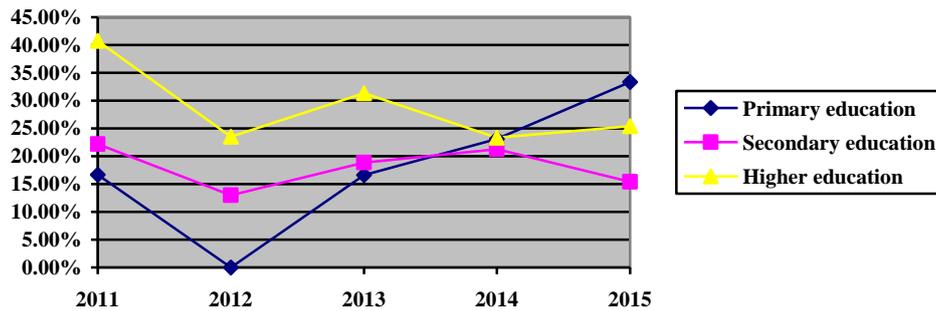


Figure 5. Evolution of the awareness of the concept of knowledge-based economy and organization taking into account the level of education of entrepreneurs

Analysis of SMEs depending on the level of education of entrepreneurs (Figure 5) shows that until 2014 there was a positive correlation between the entrepreneurs' level of education and the awareness of the concept of the knowledge-based economy. Beginning with 2014, there is an inadequate evolution of the awareness of this concept taking into account the education of the entrepreneurs. We did not examine the cause of this phenomenon, because this is not a subject of the current research, but this represents a foundation for future research.

The entrepreneurs that have finished university-level studies are more familiar with the concept, due to the fact that universities include in their study curricula topics about knowledge-based economy and organizations.

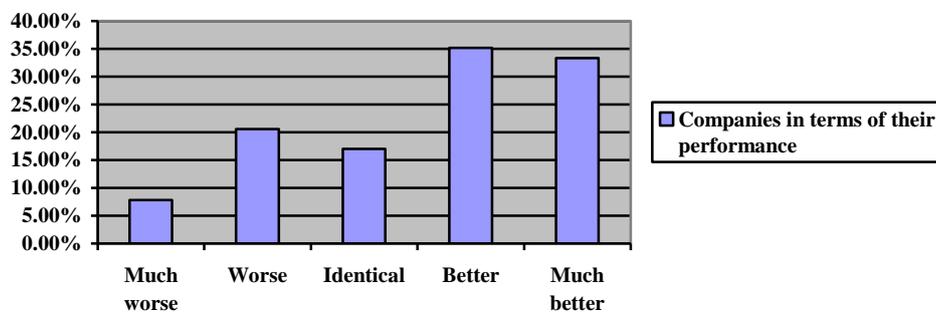


Figure 6. The correlation between the awareness of the concept of knowledge base economy and organization and performance of SMEs from 2015 compared to 2014

Interpretation of results based on the performance of companies from 2015 compared to 2014 (Figure 6) reveals that 33.33% of entrepreneurs who lead companies with much better performance than in the previous year are familiar with the concept of knowledge based economy and organization, while among firms with much worse results there only 7.81% of entrepreneurs are familiar with that concept.

This can be explained by the fact that the companies which have better results are lead by entrepreneurs who have more knowledge, experience and interest in this matter.

Conclusions

The results obtained in the current research reveal a general negative trend of the awareness of the concept of knowledge based economy and organization among Romanian entrepreneurs over the last five years. Also the rate of the entrepreneurs who are familiar with these concepts is generally very low. This is alarming, particularly in the context of Romania's integration into the European Union

Considering the age of SMEs, we can notice that there is not necessarily a correlation between it and the awareness of the concept of knowledge based economy within them.

Considering the size of SMEs that were analysed, a positive correlation between this and the awareness of the concept of knowledge based economy and organization can be observed. The bigger a firm is, the higher the probability of being familiar with this concept is.

As a conclusion, one can see that the characteristics of the SMEs that are familiarized with the concept of knowledge based economy and organization, are frequently changing. Therefore, taking in consideration the criteria that were used in current research (age, dimension, type of SMEs and level of education of entrepreneurs), it is impossible to make a general profile for the firms that are familiarized with this concept.

An interesting fact is that most of the Romanian entrepreneurs use information and knowledge in their daily activities, but in an unsystematic and informal way, without knowing the concepts related to the knowledge-based economy and organizations.

The criteria of knowledge-based organizations remains the need for development of a knowledge-based society at national level. The recognition of Romanian creativity, as a main source of the competitiveness and identity in an international environment with globalisation trends, is highly necessary.

The public awareness related to European integration, the effects of learning from the experience acquired from partnerships with foreign partners in joint projects and the effect of learning from international research exchanges are useful for the development of knowledge-based economy.

In contemporary society it is typical for organizations to pursue the leaders of a certain field, learn from each other, resort to knowledge transfer, to face each other or to ally in order to create and use new ideas. In such conditions, the extra-organizational environment becomes richer in knowledge, which provides an improvement possibility to organizations, in terms of learning and developing from outside sources.

In addition to this, a recommendation for the promotion of the concepts of economy and knowledge-based organizations is the adaptation of the university and post-university educational content, primarily in economic profiles, computer science, management and administration by deepening subjects or modules on relevant topics.

Finally, we consider that this paper is a useful study material for those interested in the subject of knowledge based economy and its awareness among Romanian SMEs. Any feedback on the content of the paper and on means of improving the research will be highly appreciated.

References

1. Anushree, P., Vandana, Saurabh, M., Shashikant, R., 2013, *Relationship between e-commerce and knowledge economy and their role in risk assessment process*, Journal of Global Research in Computer Science.
2. Dragomirescu, H., 2001, *Organizații bazate pe cunoaștere*, Bucharest.
3. Feaco's *Survey of the European Management Consultancy 2014-2015*, 2015, [online], <http://www.feaco.org>, [Accessed on 25.01.2017].
4. Jones, A.B., 1999, *Knowledge Capitalism-Business, Work and Learning in the New Economy*, Oxford University Press, Oxford.
5. National Council of Small and Medium Sized Private Enterprises from Romania, 2012-2016. *White Charter of Romanian SMEs*. CNIPMMR.
6. Nicolescu, O., 2006, *Economia, firma și managementul bazat pe cunoștințe*, Ed. Economică, Bucharest.
7. OECD, 1996, *The Knowledge Based Economy* [online], <http://www.oecd.org/sti/sci-tech/1913021.pdf>, [Accessed on 20.01.2017].
8. Uritu, D., Popa, A.E., 2015, *Financing Sources for Romanian SMEs in the Context of Knowledge Based Economy*, Proceedings of the 9th International Management Conference "Management and Innovation for Competitive Advantage". Bucharest, Romania.
9. World Bank Institute, 1999, *Knowledge for Development* [online], https://openknowledge.worldbank.org/bitstream/handle/10986/5981/WDR%201998_99%20-%20English.pdf?sequence=1&isAllowed=y, [Accessed on 18.01.2017].
10. World Bank Institute, 2007, *Building Knowledge Economies. Advanced Strategies for Development* [online], <http://siteresources.worldbank.org/KFDLP/Resources/461197-1199907090464/BuildingKEbook.pdf>, [Accessed on 18.01.2017].