

From the Sustainable Organization to Sustainable Knowledge-Based Organization

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Abstract

As a response to the changes that appeared in the economic environment along the years, new types of organizations have been developed. As a result, the organizational theories focused on identifying the main characteristics of the sustainable organizations and the knowledge-based ones. Besides, nowadays, they are presented as a key to success in turbulent times. But why should a company choose between sustainability and knowledge? Couldn't it just value, at the same time, the relationship with the community and the stock of knowledge that it owns? And if it can, which will be the particularities of this kind of organization? In order to find an answer to this question, a documentary study was conducted. The results pointed out that, from a theoretical perspective, a sustainable knowledge-based organization represents a formal entity in which economic, environmental and social objectives are achieved by developing the internal knowledge base.

Key words: *sustainability, knowledge, organization, sustainable knowledge-based organization*

JEL Classification: *D21, D80*

Introduction

Against the backdrop of globalization, the principles that are governing the business environment have changed. Increasing the rates of profitability is still the cornerstone of any successful company but satisfying the market demands is not enough.

Since the launch of Brundtland Report, in 1987, managers understood that in order to be competitive they must take into account not only the economic issues, but also the social and environmental ones. These circumstances facilitated the creation of a new type of company called “*sustainable organization*” which was oriented towards being profitable and developing the socio-environmental system in which it operates.

A couple of years later a new type of company was introduced by the organizational theories. Management specialists started to talk about the “*knowledge-based organization*” (Drucker, 1988) as the firm of the future. In this economic entity, knowledge is the key to gain competitive advantages and problems are solved by knowledge workers.

In other words, nowadays, a manager has to choose between developing a sustainable organization, which creates equilibrium between the need to economic growth, the one to protect the environment and the one to ensure social equity, or a knowledge-based one which focuses on obtaining the economic growth by creating, disseminating and using knowledge. But

why should he choose between sustainability and knowledge? Why couldn't he develop a sustainable knowledge-based organization? And if he can do it then which will be the main characteristics of this type of company?

In order to find an answer to this question we analyzed 37 articles that had been published in three international databases from January 2000 until October 2011. We applied a content analysis to the selected articles in order to obtain a definition and a description of the construct of sustainable knowledge-based organization.

In the next section of this paper, we present in detail the research methodology and we continue with a description of the concepts of "sustainable organization" and "knowledge-based organization". Taking everything into account we suggest a definition and a set of characteristics of the construct of "sustainable knowledge-based organization". In the end, we draw some conclusions and highlight further research directions.

Research Methodology

The purpose of this research was to determine what a sustainable knowledge-based organization is from a theoretical point of view. In other words, we wanted to identify a definition of this construct and highlight some of its potential characteristics.

In order to achieve our goal we employed an ethic approach and used a documentary study which consisted in the review of articles and studies from the field of knowledge management and natural resource management. First, we searched in the Emerald Publishing, Science Direct and EBSCO databases articles that had been published during January 2000 – October 2011 and had included in title, abstract or keywords one of the next phrases "sustainability", "knowledge", "sustainable organization", "knowledge-based organization", "sustainable knowledge-based organization". Then we analyzed the articles in order to determine their relevance for the research problem and we identified a number of 37 articles. Most of them were found in five journals: *Journal of Knowledge Management* (24.32%), *Journal of Business Strategy* (18.92%), *The Learning Organization* (13.51%), *Environmental Education Research* (10.81%) and *Journal of Cleaner Production* (5.41%). The other journals contributed with only one article.

In the next phase, we applied a content analysis to the selected articles in order to find some answers to the research questions. The units of analysis were represented by the specificity of the sustainable organizations and the main characteristics of the knowledge-based organization. Besides, we used techniques like systematization and tabling for identifying the characteristics of both sustainable and knowledge-based organizations. Then we compared the results and determined the similarities and differences of these two economic entities.

By comparing the particularities of the sustainable organizations with the ones of the knowledge-based organization, we observed that these entities are not as different as it seemed. Their similarities may facilitate the creation of a sustainable knowledge-based organization which could be oriented towards sustainability and knowledge creation, acquisition, dissemination and use. In other words, by systematization and tabling we have demonstrated that the sustainable organizations and the knowledge-based ones can constitute the base of a new economic entity capable of adapting to the market demands without constraining the managers to choose between sustainability and knowledge.

In the end, we must recognize that the research is limited by the number of keywords searched in Emerald Publishing, Science Direct and EBSCO databases. Another limitation is related to the way in which the two concepts of knowledge and sustainability are defined. What we found in the literature is just a fraction from what is written but still is capable of reflecting the ambiguity of these concepts. On the other hand, in describing the construct of "sustainable

knowledge-based organization”, it is not our intention to give a complete overview of the issue but rather to present the nexus between sustainability and knowledge as a possible research area.

Characteristics of the Sustainable Knowledge-based Organizations

At the organizational level, globalization brought to the forefront the need for developing a close relationship with the community in which companies are operating and the need for gaining competitive advantages by using the internal knowledge base.

Some firms – namely, sustainable organizations – preferred to focus on the first need and started to establish economic, environmental and social objectives and to implement strategies that will bring benefits to all the stakeholders. The other ones – knowledge-based organizations – concentrated on the second need and developed activities that aimed to generate and to facilitate the share and use of knowledge between the employees. But should a company choose between these two types of needs or it could satisfy both of them? Could we talk about a sustainable knowledge-based organization in which development is defined through knowledge, economic, environmental and social elements?

Sustainable Organizations

The concept of “sustainability” has its origins in the social science field and was used for the first time, in 1785, by George Ludwig Hartig who sustained that the afforested areas can be sustainable only if they will allow to the future generations to obtain as many benefits as the current generation.

Two centuries later, the idea of sustainability was extended from the environmental context to the social and economic ones. Therefore, since 1987 when the Brundtland Report was published, concepts and principles of *sustainable development* and *sustainability* started to be used frequently. They aimed to highlight the complex correlation that exists between economic, environmental and social aspects on the short and long term. Despite this, the concept of sustainability is the most controversial and the least understood one.

For example, the environmentalists are referring in their researchers to “*environmental sustainability*” when they approach problems like depletion of non-renewable resources, pollution and the effect of industrialization on biodiversity (Kollmus and Agyeman, 2002). On the other hand, the sociologists use the phrase “*social sustainability*” in order to generally describe values like the right to education, gender equity and equality, freedom from extreme poverty, hunger and disease (Bonn and Fisher, 2011). Meanwhile, many members of the business community presented their interest on ensuring the long – term economic performance of their companies by using the phrase “*economic sustainability*”. But all these approaches are capturing only some limited aspects of this concept because sustainability – which is considered to be the 21st century leadership’s competitive edge for the future (Fisher, 2010) – is not all about environmental, social or economic aspects. It usually combines all these issues in a so-called “triple bottom line”.

The triple bottom line is a specific element of the sustainable organizations and includes economic (financial factors), environmental (risk / requirement factors) and social (human factors) issues which are solved through company’s collaboration with customers, suppliers, competitors, communities and other stakeholders (Lozano, 2008). So, a sustainable organization is a formal entity that operates through earned income and is capable of sustaining its own activities while contributing to the development of the socio-ecological system of which it is part of (Parrish, 2010). In other words, it balances the need for economic growth with environmental protection and social equity.

On the other hand, sustainable organizations are characterized by genuine visions that integrate the need to earn a profit with the responsibility to foster social justice and environmental protection. These visions offer an image on how to produce benefits while maintaining the quality of resources for the longest time possible and, at the same time, reflect company's interest on assuming its responsibility for employment, consumer welfare, local communities and the environment (Kollmus and Agyeman, 2002). Achieving all these implies establishing milestones and short-term objectives and encouraging learning, rationality, alignment motivation and empowerment (Lozano, 2008). Furthermore, in order to build a sustainable organization, one must develop an organizational culture in which values, norms and principles are encouraging behaviors that are sensitive to environmental and social issues.

But these are not enough because in order to be sustainable an organization needs planning on short, medium and long term, a good reputation and an ethic and authentic behavior (Kotler and Caslione, 2009). In other words, plans should be developed on short, medium and long term; company should have a positive image in the stakeholders' eyes thanks to its products / services and to its behavior on the market. If a company has developed specific plans for short, medium and long term and, at the same time, has its stakeholders trust vote then it is capable of transforming its vision into reality.

Therefore, a sustainable organization is an ethic and authentic economic entity that develops the appropriate structures and plans in order to become capable of achieving the objectives defined at the economic, environmental and social levels and to ensure its growth through a rational resource allocation.

Knowledge-Based Organizations

The transition made from industrial economy to the knowledge-based one generated a couple of changes in the organizational theory. In other words, in the meta-theoretical plan, it appeared a new type of company called "knowledge-based organization" (Drucker, 1988), "knowledge intensive firm" (Nurmi, 1998) or "intelligent organization" (Hendricks, 1999).

Rich (1998) and Calabrese (2006) defined the knowledge-based organization from a *technological perspective*. They described it as an economic entity, from public or private environment, in which informational and communicational technologies are used for collecting and processing information that are needed in the process of decision making. They tend to focus on the tools used in this type of organization and not on its resources or processes.

On the other hand, Mahesh and Suresh (2009) adopted a *managerial approach* and presented it as a structure in which sharing knowledge is essential for maintaining effectiveness while problems are solved by a special type of employees, called knowledge workers. In other words, knowledge is the most important resource and its creation, dissemination and use are the keys to success. From this point of view, in a knowledge-based organization, employees are the most important resource and not the tools used for knowledge creation and dissemination. Gottschalk et al. (2009) supported this affirmation by defining the knowledge-based organization as a complex adaptive system composed of a large number of self-organizing components that seek to maximize their own goals while operating according to specific rules in the context of relationship with other components.

Beside the multitude of definitions and interpretations that had been given to this concept, opinions regarding the existence of knowledge-based organizations are divided. Some authors believe they are the companies of the future (Broughton, 2010) while others sustain that any firm is based on knowledge as long as it implies using employees' experiences, skills and abilities (Grey and Sturdy, 2009). The last ones support their point of view by highlighting the fact that most of employees' knowledge is connected to their experience just like learning processes are influenced by the internal complexity of individual lived experience. Therefore,

any employee has a life experience that can be changed into knowledge and may contribute to company's performance.

But if any firm is based on knowledge then why do so many differences appear between the traditional / bureaucratic organizations and the knowledge-based ones? As we may observe from Table 1, the first ones focus on stability and control while the second ones are oriented towards collaboration and intellectual capital development.

Table 1. Comparative analysis between bureaucratic organizations and the knowledge-based ones

Bureaucratic organizations	Knowledge-based organizations
Focus on organizational stability and repetitive internal processes.	Focus on serving the market in a timely manner.
Decisions are taken in an autocratic manner, without consulting the employees.	Current practices encourage changing ideas and improving employees' capacity of taking decisions.
Authoritarian, autocratic or bureaucratic leadership is applied.	Transformational and charismatic leadership is usually applied.
The quantity of tangible assets and used employees is increased.	It reduces the quantity of tangible assets and used employees while developing the internal knowledge and extending the relationships with clients, suppliers and external human resources.
It concentrates on activities internalization.	It concentrates on outsourcing the activities that are not essential.
Internal organization is characterized by structured networks.	Internal organization is characterized by less structured networks and semi-autonomous teams.
It is oriented towards increasing the number and role of middle managers.	It is oriented towards reducing the number and role of middle managers.
Secrecy is practicing and a closed culture is developed.	Multiple forms of collaboration with other firms are practicing and an open culture is developed.

Source: adapted after Peter Gottschalk, Stefan Holgersson, Jan Terje Karlsen, "How knowledge organizations work: the case of detectives", *The Learning Organizations*, Vol. 16, No. 2/2009, pp. 91 – 93 and Ovidiu Nicolescu, Luminita Nicolescu, *Economia, firma si managementul bazate pe cunostinte*, Editura Economică, București, 2005, pp. 101 - 119.

Taking everything into consideration, we may claim that knowledge-based organizations are those economic entities that are oriented towards being successful and gaining competitive advantages by developing employees' knowledge and creativity and by increasing the level of collaboration inside and outside company's boundaries.

Sustainable Knowledge-Based Organizations

At the confluence between these two concepts (Table 2.) has been developed the construct of *sustainable knowledge-based organization*. This may be described as an economic entity that manages its knowledge and other resources so that it generates, for a long time, efficiency and recognized performance at the economic, environmental and social level (Nicolescu, O. and Nicolescu, L., 2005).

So, from a theoretical approach, this kind of firm aims to combine the most important characteristics of the sustainable organization with the ones of the knowledge-based organization. So, if we put together the specific elements of these two types of companies – which were presented earlier – then we obtain a theoretical portrait of the sustainable knowledge-based organization which includes:

- developing organizational structures and practices that encourage the creation, dissemination and use of knowledge;
- using strategic knowledge;

- collaborating with employees, customers, suppliers, other companies, institutions and members of the community;
- developing programs that bring benefits to employees and other stakeholders;
- establishing objectives regarding knowledge, economic, environmental and social issues;
- developing plans on short, medium and long term;
- adopting a moral and authentic behavior on the market.

Therefore we may consider that a sustainable knowledge-based organization is an economic entity oriented towards creating, disseminating and using knowledge inside and outside its boundaries, which establishes economic, environmental and social objectives for a short, medium and long term period.

Table 2. Comparative analysis between sustainable organizations and the knowledge-based ones

	Sustainable organizations	Knowledge-based organizations
<i>Similarities</i>	<ul style="list-style-type: none"> • establishing short, medium and long term objectives (Câdea, 2006; Lozano, 2008); • developing and open organizational culture (Kollmus and Agyeman, 2002; Nicolescu, L. and Nicolescu, O., 2005); • organizing the activity around self-organized teams (Lozano, 2008; Nicolescu, L. and Nicolescu, O., 2005); • encouraging the collaboration with all the stakeholders (Kotler and Caslione, 2009; Nicolescu, L. and Nicolescu, O., 2005) • ensuring a favorable working environment for employees professional development (Câdea, 2006); • promoting employees empowerment (Gottschalk et al., 2009; Lozano, 2008); • reacting in a timely manner to the changes that appear in the internal and external environment (Gottschalk et al., 2009; Kotler and Caslione, 2009); • adopting an ethical and authentic behaviour towards employees, customers, suppliers, business partners, local institutions, non-governmental organizations and other stakeholders (Kotler and Caslione, 2009). 	
<i>Differences</i>	<ul style="list-style-type: none"> • the objectives focus on the economic, social and environmental issues (Câdea, 2006; Lozano, 2008); • promoting transactional leadership (Lozano, 2008); • organizational culture includes values, norms and principles that aim to increase stakeholders awareness to social and environmental issues (Kollmus and Agyeman, 2002). 	<ul style="list-style-type: none"> • the objectives focus on developing an internal knowledge base (Nicolescu, L. and Nicolescu, O., 2005); • promoting transformational and charismatic leadership (Gottschalk et al., 2009); • reducing the numbers and roles of the middle and first line managers (Nicolescu, L. and Nicolescu, O., 2005); • outsourcing the activities that are not essential for the company (Nicolescu, L. and Nicolescu, O., 2005).

Source: Leon, R., "Strategic factors for developing sustainable knowledge-based organization" in J.G. Cegarra (Ed.), *Proceedings of the 13th European Conference on Knowledge Management*, vol. 1, Academic Publishing International Limited, Reading, 2012, p. 619.

Transposing the Sustainable Knowledge-Based Organization into Reality

As we have noticed before, the sustainable knowledge-based organization seems to be the solution to a highly dynamic and uncertain environment. On the one hand, it addresses to the gap that exists in the specialized literature. Research must be continue in the theory of the firm area since the sustainable firm and the knowledge-based one cannot offer a practical and viable solution to the changes that occur rapidly in the economic reality.

On the other hand, it offers an answer to the question regarding how a company can adapt, in a timely manner, to a changing environment. In other words, we sustain that managers should concentrate on transforming their firm in a sustainable knowledge organization if they want to gain competitive advantages in a context in which technological progress occurs faster, clients' preferences are changing rapidly, investors' behaviour is more protective and information is traveling from one continent to another in just a couple of milliseconds. But what does this action really imply? What do managers have to do in order to ensure that their companies can be described as the sustainable knowledge-based ones?

In order to answer to these questions, we recommend adopting a systemic perspective and perceiving the process of transforming the company into a sustainable knowledge-based one as an onion (Figure 1). In the center, we have the specialized human resources – the heart of the firm – then the organizational culture (where values and knowledge are shared), the organizational structure (that allows changing knowledge into action) and the organizational strategy (that shows all stakeholders what the firm is doing and what it aims at).



Fig. 1. The main elements of a sustainable knowledge-based organization, from a circular and interdependent perspective

First of all, since we are living in the “knowledge era” and the most valuable resource of a company is represented by its employees then managers have to ensure that they have capable, specialized, creative and open-minded human resources. In other words, company’s employees must be very well prepared, in term of professional knowledge, and at the same time, they have to have very well developed social skills (strong work ethic, positive attitude, good communication skills, time management abilities, problem – solving skills, acting as a team player, self-confidence, the ability to accept and learn from criticism, flexibility / adaptability, working well under pressure etc.). All these will guarantee that they will not only be capable of doing their job but they will also have the capacity to share their knowledge and experience with their colleagues. In other words, they will be able to create, disseminate and use both tacit and explicit knowledge. Besides, the employees will be capable to gather, to analyze and to synthesize the information about the internal and external environment which will help managers to identify the weak signals from the market and will give them the necessary time to develop robust and resilient strategies.

But, although it brings a lot of benefits (namely, sustaining personnel development and empowerment without increasing company’s costs; facilitating the access to a larger amount of knowledge that can be used in order to improve firms’ products / services or even the organizational processes) having qualified human resources is not enough. Developing an open organizational culture and a flexible organizational structure are also necessary. These are practically the ones that enable firms to achieve their key goals and to transform knowledge into action.

When it comes to the organizational culture, managers should start by focusing on the core values that will define the way in which they want to do business. For example, although it has changed its strategies during the time, Boeing has always been faithful to its philosophy of product integrity and leading edge aviation. Besides, in New Zealand, Telecom and Clear are disputing their customers using their values while Dee Hock – the founder and CEO of Visa – managed to differentiate on the market by organizing the workplace around purpose, vision, principles and values rather than around rules, regulation and control.

Therefore, in order to ensure that they are managing a sustainable knowledge-based organization, managers must ensure that organization's values, norms and principles are oriented towards developing a responsible behaviour and applying win-win strategies in the interpersonal and inter-organizational relationships. They have to define which behaviors are going to be encouraged and incorporated in all the organizational processes (performance management; recruitment and selection; professional development etc.) In other words, each and every one of these elements should highlight the fact that the firm has a responsibility to the community, the city, and to one another; it encourages a culture where all can excel; it values the community in which it operates, soliciting its inputs and responding with empathy to its concerns; it is committed to the highest standards of integrity and professional ethics and to the rights and human dignity.

All in all, managers must focus on developing an organizational culture that encourages collaboration and communication inside and outside company's boundaries and is also oriented towards increasing stakeholders' awareness on environmental and social issues. They must create a trustful environment where the employees will have a high level of engagement in organizations' goals and they will feel more motivated to get involved into company's development, to express their ideas and to share their opinions with their colleagues without being afraid that they will be ridiculed, criticized or ignored.

If things remain at this level and all the efforts concentrate on these two directions – employing the persons that “fit” to company's profile and developing a trustful work environment and an open organizational culture – then the firm will only be oriented towards becoming a sustainable knowledge-based organization. It will have the resources but it won't have the necessary instruments for using them.

In order to achieve this goal and to evolve from a potential sustainable knowledge-based organization to a real one, a flexible organizational structure is needed. This is a complement to company's strategy and the foundation of the organizational culture. As a result, it has to facilitate the communication and cooperation between employees and also between the company and its stakeholders; it has to be flexible, to encourage employees' creativity and to increase their performance and motivation. At first sight, a hierarchical organizational structure may be a solution because it indicates a balanced relationship between management and subordinates and it offers the possibility to develop a close relationship between managers and their subordinates. Despite all these, the communication will have a low level of development (information will not be changed between departments; time will be lost in transmitting the information from subordinates to the top management; information may be distorted etc.) and departments will concentrate on making decisions that bring them benefits. Therefore, the firm will not be able to adapt in a timely manner to the market's demands.

On the other hand, communication and decision – making is more efficient and quicker in a matrix structured organization. This implies increasing employees' responsibilities, organizing the activity around semi-autonomous teams and reducing the numbers and roles of the first line and middle managers. As a result, problems will be solved faster, the necessary time for transmitting information will be shorter (the employees will find out faster what the purpose of the company is; which aspects are valuable; which behaviour is desired; on which criteria their

evaluation is made etc.) and each employee will have a global perspective on what is happening in the firm.

All these will be reflected by company's strategy and goals which will reflect not only its values but also its purposes and the subjects on which its activity concentrates. In other words, the firm's strategy will have to be oriented towards promoting the responsibility for the community using a set of specific objectives (oriented on developing the internal knowledge base, increasing the standard of living of the members of the community, protecting the environment and satisfying customers' demands). Besides, the strategy will have to be materialized in programs and activities that, on short, medium and long term, will encourage:

- knowledge creation, dissemination and use (like, creating quality circles to which employees and customers may participate; organizing session of focus-groups for different themes; developing teambuilding activities; investing in research and development activities etc.),
- employees' development (like, organizing coaching / mentoring / training programs; applying job enlargement / enrichment; increasing their responsibilities and their autonomy etc.),
- involving in the life of the community (like, participating to the public programs that focus on developing the communication / transportation infrastructure of the community in which the firm operates; developing programs of social responsibility etc.).

In this way, the company will become a model for its stakeholders who will start to be more sensitive to what is happening in the environment and will not focus only on the economic issues but also on the ones regarding knowledge, natural and social environment. In other words, the level of cohesion between the firm and its stakeholders will increase because the last ones will start to analyze themselves as a part of a system and not as a unique entity.

Based on the close relationship that will develop with its employees, providers, customers, shareholders and others members of the community in which the firm operates, company's reputation will increase. Besides, the information will be obtained faster and with reduced costs since stakeholders will perceive the organization as a trustful partner. They will be more willing to share the information that they have and to contribute to company's success.

As a consequence, the organization will become a sustainable knowledge-based one because it will have the necessary resources (the specialized employees and a favorable context for their development) and also the appropriate instruments for exploiting them (an organizational structure that allows transmitting information from outside the company to inside and vice versa and a strategy that reflects the true value of the firm).

Conclusion and Further Research

After analyzing the articles published for the last eleven years in the international databases, we argue that the value added of this research is represented by the fact that it identifies a gap in the specialized literature and it proposes a new type of organizational entity which is capable to adapt to the specificity of the current business environment. In other words, it proposes the sustainable knowledge-based organization as a possible theoretical solution in the context in which the sustainable firm and the knowledge-based one proved to be incapable of adapting in a timely manner to the dynamic and uncertain character of the economic environment.

Therefore, we assert that a new type of company is needed in order to face the challenges that appear due to the high levels of complexity and uncertainty that dominates the economic environment. In other words, obtaining a competitive advantage is becoming harder since the volume and quality of knowledge is continually increasing, consumers' needs and preferences

are rapidly changing and information is flowing from one continent to another in just a couple of milliseconds. In this context, choosing between sustainability and knowledge becomes a difficult task. And why should this be made when any organization can have both of them?

As we have proved earlier the sustainable organization and the knowledge-based one are not two entities that are standing at opposite poles. They are just two different kinds of post-bureaucratic organizations. So, building a sustainable knowledge-based organization is not impossible because sustainability and knowledge are not mutually exclusive. In fact, they are almost sustaining each other; thanks to a good collaboration with all the stakeholders, knowledge acquisition and dissemination becomes an easy and cheaper process and its results not only improve company's performance but also sustain developing and implementing plans on short, medium and long term.

Under these circumstances, we argue that the sustainable knowledge-based organization is a new type of company capable of adapting to a complex and dynamic environment by exploiting one of the most important resources – knowledge – without affecting the benefits that the future generation may have.

So, from a theoretical point of view, a sustainable knowledge-based organization is the result of a merger between sustainable organization and the knowledge-based one. Therefore, it combines the economic, environmental and social objectives with the ones that are oriented towards creating, disseminating and using knowledge in order to develop a good relationship with all the stakeholders. Its main characteristics are represented by: establishing economic, environmental and social objectives for short, medium and long term; creating an open organizational culture; organizing the activities around interdependent and autonomous teams; developing programs that bring benefits to the company, its stakeholders and its environment; focusing on developing the capacity of taking decisions of the employees and also the internal knowledge base.

First of all, the research is limited by the fact that is only presenting a theoretical perspective on the issue – the gap between theory and practice is well known. Besides, the results are restricted by the number of keywords and databases on which the research was focused. A greater amount of keywords and international databases would have probably offered more insight in the research problem and would have increased the level of complexity.

All these results are going to represent the framework of a future research in which we attempt to find an answer to the following questions:

1. which are the main characteristics of a sustainable knowledge-based organization from the knowledge management experts' perspective?
2. which are the most important factors that influence the economic performance of this type of organization?

Acknowledgements

This work was supported by the European Social Fund in Romania, under the responsibility of the Managing Authority for the Sectoral Operational Program for Human Resources Development 2007-2013 [grant POSDRU/CPP 107 / DMI 1.5 / S / 78342].

References

1. Bonn, I., Fisher, J., Sustainability: the missing ingredient in strategy, *Journal of Business Strategy*, Vol. 32, No. 1/2011, pp. 5-14.

2. Broughton, V., The fall and rise of knowledge organization: new dimensions of subject description and retrieval, *Aslib Proceedings: New Information Perspectives*, Vol. 62, No. 4/2010, pp. 349-354.
3. Calabrese, F.A., Knowledge – based organization in context, *VINE. The journal of information and knowledge management systems*, Vol. 36, No. 1/2006, pp. 12 – 16.
4. Căndea, D., De la dezvoltarea durabilă la întreprinderea sustenabilă, *Întreprinderea sustenabilă*, No. 1/2006, pp. iii – vi.
5. Drucker, P., The coming of the new organization, *Harvard Business Review*, Vol. 66, No. 1/1988, pp. 45 – 53.
6. Fisher, D., Leading a Sustainable Organization, *Journal of Quality & Participation*, Vol. 32, No. 4/2010, pp. 29-31.
7. Gottschalk, P., Holgersson, S., Karlsson, J.T., How knowledge organizations work: the case of detectives, *The Learning Organization*, Vol. 16, No. 2/2009, pp. 88-102.
8. Grey, C., Sturdy, A., Historicising knowledge-intensive organizations: The case of Bletchley Park, *Management & Organizational History*, Vol. 4, No. 2/2009, pp. 131-150.
9. Hendriks, P.H.J., Do smarter systems make for smarter organization?, *Decision Support Systems*, Vol. 27, No. 1-2/1999, pp. 197 – 211.
10. Hock, D., *Birth of the Chaordic Age*, Berrett-Koehler Publishers Inc, San Francisco, 1999.
11. Kollmus, A., Agyeman, J., Mind the gap: why do people act environmentally and what are the barriers to pro-environmental behaviour, *Environmental Education Research*, Vol. 8, No. 3/2002, pp. 239-260.
12. Kotler, P., Caslione, J.A., *Chaotics: management și marketing în era turbulențelor*, Editura Publica, București, 2009.
13. Leon, R., “Strategic factors for developing sustainable knowledge-based organization” in J.G. Cegarra (Ed.), *Proceedings of the 13th European Conference on Knowledge Management*, vol. 1, Academic Publishing International Limited, Reading, 2012, pp. 618 – 625.
14. Lozano, R., Developing collaborative and sustainable organizations, *Journal of Cleaner Production*, No. 16/ 2008, pp. 499-509.
15. Mahesh, K., Suresh, J.K., Knowledge criteria for organization design, *Journal of Knowledge Management*, Vol. 13, No. 4/2009, pp. 41-51.
16. Nicolescu, O., Nicolescu, L., *Economia, firma și managementul bazate pe cunoștințe*, Editura Economică, București, 2005.
17. Nurmi, R., Knowledge – intensive firms, *Business Horizons*, Vol. 41, No. 3/1998, pp. 26 – 32.
18. Parrish, B.D., Sustainability – driven entrepreneurship: Principles of organization design, *Journal of Business Venturing*, No. 25/2010, pp. 510-523.
19. Rich, W., Spontaneous talk, linguistic capital and diversity: Communication in knowledge-based organizations, *Administration & Society*, Vol. 30, No. 3/1998, pp. 315 – 329.