GLOBAL KNOWLEDGE NETWORK – A SWOT APPROACH

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Abstract: We live at a local level but act at a global one and each organization is a player in a global world. Each company has its own knowledge base and network and we can say that at the global level exists an unorganized global knowledge base without connections between local ones which limits the access to knowledge. The solution for this problem is represented by a global knowledge network based on an organized global knowledge base. This paper underlines the need to create a global knowledge network and a global knowledge base composed of connected local knowledge bases and presents a SWOT approach for this issue.

Introduction

Actual society is characterized by an increased significance of information and communication technologies (ICTs) which have conducted to a transformation in the nature of economic activity, with associated implications for the shape of the society.

Knowledge has always been a factor of production since the very old times of human society and it has influenced and advanced the economic and social development. At the beginning of the human society, the knowledge was related to how to hunt and prepare the meat. Later it has become related to how to farm, to build or to manufacture. The technology developed changed only the degree and speed of knowledge integration in the economic activity.

Taking into consideration that the capacity to manipulate, store and transmit large quantities of information cheaply has rapidly increased in the recent years, we can say that the digitization of information and the associated pervasiveness of Internet facilitate a new application of knowledge to economic activity and more, favorite the intensification of new knowledge in the economy, generally speaking.

In this context, the problem of integrated information and knowledge base at the global level appears more critical now than it used to be in the past. This paper is presenting the steps in achieving a global knowledge network and global knowledge base and their relation with individual elements at local, regional and national levels and it presents a SWOT analysis approach for this issues.

Definitions

We consider necessarily starting with some definitions of concepts used in this paper, concepts such as:

1. knowledge – is organized and contextualized information which can be applied to create new meanings and new ideas

2. knowledge management – involves processes such as: capturing, creating, organizing, storing, transferring and using knowledge and experiences of workers and groups within an organization and making knowledge available to all organization and its partners
3. knowledge base – knowledge collected into schemas based of a specific field of interest
4. knowledge networks – are group of experts working together on a common interests, sharing knowledge and developing solutions for various problems which are then available to be used by other individuals inside or outside the network
5. community of practice – an informal group where ideas are generated and exchanged with members who have common interest in some subjects or problems, which collaborate to share ideas, find solutions and build innovations
6. practitioners – persons who practice specific professions and need specific knowledge to perform their tasks
7. global knowledge base – collection of knowledge from various knowledge bases arranged into schemas based on various fields of interest
8. global knowledge network – groups of experts and practitioners working together on a common interest, sharing knowledge and developing solutions to be used in various domains of activity.

Motivation

Each enterprise acts in the economic environment by using data, information and knowledge. These are the main resources with high impact on the way in which enterprises do business.

Organizations, no matter what type, are agents in a very complex world characterized by dynamism, diversity and too much unorganized information and too less knowledge. The enterprise's environment is influenced by:
1. competitors
2. government
3. politics
4. culture
5. education system
6. market, etc.

We underlined the fact that organizations have too much information. It is too much because each day we receives much more information than we needs and for specific information we loose precious time in the searching process. How is that possible? Because we create information and knowledge and we don't know how to organize it. The main result is represented by the fact that we create, transfer and store a huge quantity of information, which is not classified, and the access to the needed information or knowledge is very difficult. In our times, information quantity grows each day (each hour) and the information can be seen, at the global level, as a global database. From databases, one can extract information, and from information creates knowledge. But why should one reinvent the wheel? It would be much simpler to have access to a global knowledge base, to search in and to try to find the needed knowledge, and in case of negative results then one will try to create that needed knowledge. Ok, this looks very simple. It is very simple to say and very difficult to do. Why? We don't

have a global knowledge base. We only have a search engine, which can help us to search in a global information network. If we are lucky we can find the right information, and if we are really lucky, we can find the proper knowledge.

From the enterprises point of view, the plan to solve these problems already exists and each enterprise is working on or has already finished the optimization of the internal processes by discovering solutions such as:

1. business information systems analysis and design
2. workflow management
3. document management
4. knowledge management.

The solution we propose is one that provides access the global knowledge base through global knowledge network. This will be possible when each organization will have a proper knowledge base and will be a part in strategic alliances or knowledge networks. Then each partner will have the chance to access the other knowledge bases with the purpose to find solutions for their problems. We continue by presenting the way to create the global knowledge base.

Steps to create the global knowledge network

The creation of a global knowledge network involves each organization to follow steps such as:

1. implementing knowledge management – in this way, it will exist a knowledge base in each organization
2. understanding the need to create or to become part in strategic alliances with organizations from the same activity area, universities, research centers, foundations, financing organizations, independent research institutes, government, official and unofficial forums, local, regional and international organizations and non-state actors – this will be the first step to create knowledge networks
3. connecting their knowledge bases – partners must find a solution to create one knowledge base for the strategic alliance based on their knowledge bases
4. acting like an important agent inside alliances and try to create, transfer and use knowledge inside this structure – this is very important to develop the strategic alliance knowledge base;
5. becoming agent in more than one strategic alliance, not only at local level, but national, and international – this will be the first step to create a bigger knowledge base and, after this each agent which is part of different alliances must share the knowledge.

After this plan will be implemented, we will have a global knowledge base which will be characterized by knowledge bases placed in different locations but connected through knowledge management systems and information technologies.

In the next figure, we present the structure of global knowledge networks with its components:

1. enterprise's knowledge base;
2. local knowledge base – from community points of view;
3. national knowledge base;
4. strategic alliance's knowledge base;

5. activity area knowledge base;
6. international knowledge base;
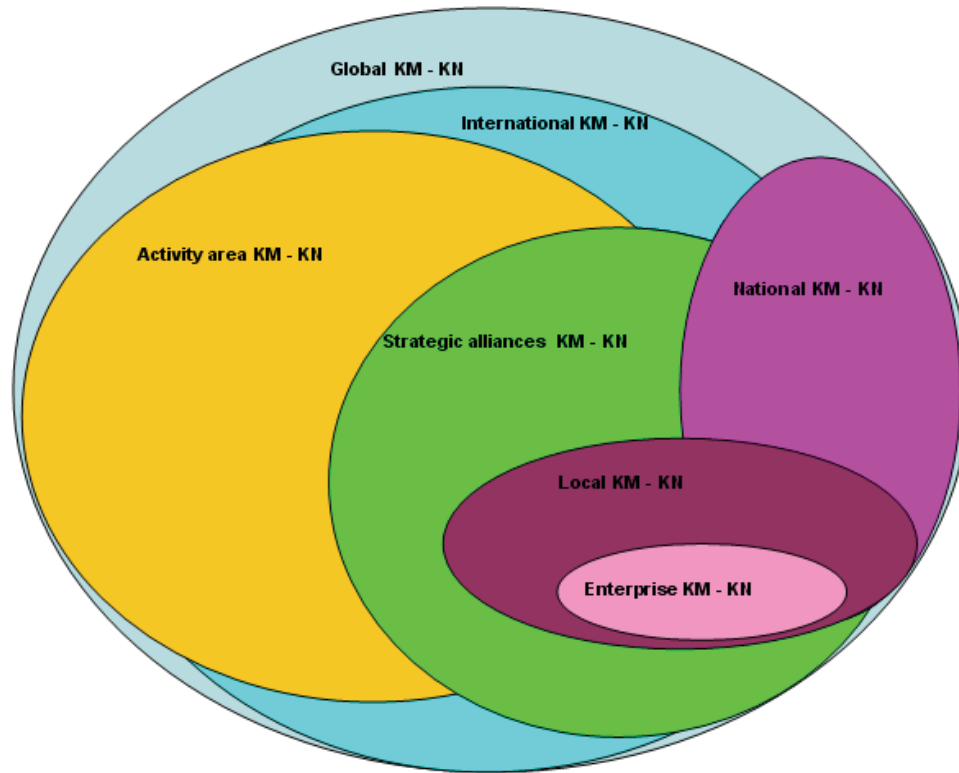7. global knowledge base.

Figure no. 1 Global knowledge Base – Global Knowledge Network

As you can see in Figure 1, the global knowledge base will have as components all elements mentioned above and if we decrease on scale level we can see the content of each knowledge base.

It will be very easy to search in the global knowledge base through a knowledge search engine and the knowledge will be on our screen in short time. Each owner will have the chance to develop the global knowledge base by adding new knowledge.

In the next rows we will present a global knowledge network SWOT analysis approach by using the characteristics of this analysis and by changing it to our purpose. This analysis is far to be complete; it wants to underline the main characteristics of a global knowledge network project.

The SWOT analysis approach

For this SWOT approach, we start by presenting the key elements of this analysis:
1. cultural aspects – each culture has its own specific elements and it is impossible to create a global structure;
2. legal aspects – each country has its own law but there is a start to a law unification;

3. political aspects – are different at national level but we can see some unification processes; this political aspects can affect or help the knowledge sharing processes between countries;
4. economical aspects
    a. market demands can change very quickly and we can see an increased need to find solutions to answer those demands in the shortest time; these solutions imply to have access to knowledge and best practices;
    b. competition – companies will not share knowledge to competitors because they don't want to lose their market place;
5. management aspects – we can see different styles of management and each strategy is focused on some objective, but we can see in the same time a unification of management style, for example: European management style;
6. technological aspects
    a. informational aspects – ICTs allow the information and knowledge transfer at low costs;
    b. new technologies – imply high skilled people to use them
7. educational aspects – educational institutions must adapt the learning programs to society demands;
8. environment aspects – global problems need global solution and player from the entire world; the cooperation between different organizations to solve environment problems is already done by using ICTs.

Based on these elements mentioned above, we present in the next table the SWOT analysis for a global knowledge network:

Table no. 1 Global knowledge network – the Swot analysis

Strengths	Weaknesses
1. large ICTs utilization inside enterprises; 2. low costs for information transfer assured by ICTs; 3. people are able to share their knowledge; 4. increased number of educated people; 5. increasing knowledge transfer; 6. increasing number of alliances; 7. valuable knowledge owned by people and organizations; 8. people concretize the need to have access to knowledge bases; 9. solutions for knowledge management and strategic alliances are already implemented; 10. existing practice in knowledge management and knowledge management area; 11. training programs which can be seen in many enterprises.	1. knowledge divide – knowledge exists in the entire world but at different levels; 2. lack of knowledge classification inside many organizations – they need to implement knowledge management and to create knowledge bases; 3. the lack of knowledge networks – organizations must become important agents in strategic alliances and they need to agree to share their knowledge; 4. lack of trust between people – we share our knowledge especially with known persons; 5. no existent model for global knowledge network; 6. implementation of knowledge management at a global and creation of global knowledge networks need a long time; 7. lack of full understanding of knowledge management; 8. lack of experience in knowledge management implementation; 9. lack of knowledge management strategies at different levels; 10. lack of access to different knowledge bases; 11. no standard for knowledge transfer; 12. conservationism from people's side; 13. expensive education;

	14. lack of secure information networks;
Opportunities	**Threats**
1. increased number of highly educated people; 2. arrival of new ICTs; 3. loosening of regulations; 4. global politics – unitary politics at a global level; 5. a global effort to protect the copyright and the intellectual property; 6. global events; 7. market requirements will expand; 8. global trend to implement knowledge management solutions and to create strategic alliances; 9. change in people education, profiles, lifestyles; 10. short time needed to resolve global and local problems; 11. research activities on knowledge management and knowledge networks topics; 12. increased quality of product, services and of solutions to solve problems.	1. shift in enterprise's strategy; 2. military conflicts which can affect the access to a global knowledge base; 3. political problems unsolved and others which may appear; 4. cultural differences; 5. legislative changes which can affect the knowledge transfer; 6. new ICTs which will need skilled persons; 7. vulnerable to attacks on global knowledge networks; 8. possible misunderstandings of global knowledge network's role; 9. attacks on knowledge base or knowledge networks (local, regional, national or international).

The discussion about global knowledge network remains open. Its importance for the society is clear; the problem is how to make it real. From our point of view, the only solution is to connect all local knowledge bases and in this way we will have a global knowledge base.

Conclusions

The knowledge economy is that type of economic environment where enterprises can increase or fall based on they way in which they create, share, access, store and use knowledge.

Global knowledge network is a dream which becomes slowly reality. It will have different communities as target groups: students, researchers, policy – makers, managers, experts, employees, various organizations, etc. It will represent a real help for them to accomplish their tasks.

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