

Role of Knowledge Based Communities in Knowledge Process

Sebastian Ion CEPTUREANU¹
Eduard Gabriel CEPTUREANU²

Abstract

In the new economy, knowledge is an essential component of economic and social systems. The organizational focus has to be on building knowledge-based management, development of human resource and building intellectual capital capabilities. Knowledge-based management is defined, at company level, by economic processes that emphasize creation, selling, buying, learning, storing, developing, sharing and protection of knowledge as a decisive condition for profit and long-term sustainability of the company. Hence, knowledge is, concurrently, according to a majority of specialists, raw material, capital, product and an essential input.

Knowledge-based communities are one of the main constituent elements of a framework for knowledge based management. These are peer networks consisting of practitioners within an organization, supporting each other to perform better through the exchange and sharing of knowledge. Some large companies have contributed or supported the establishment of numerous communities of practice, some of which may have several thousand members. They operate in different ways, are of different sizes, have different areas of interest and addresses knowledge at different levels of its maturity.

This article examines the role of knowledge-based communities from the perspective of knowledge based management, given that the arrangements for organizational learning, creating, sharing, use of knowledge within organizations become more heterogeneous and take forms more difficult to predict by managers and specialists.

Key words: *knowledge, knowledge based management, knowledge based communities.*

JEL classification: M13, O32, D8.

INTRODUCTION

Knowledge is a critical factor in many organizations. Burton Jones (Jones, 1999:6) is the first to distinguish between data, information and knowledge, considering knowledge as stocks of cumulative information and skills, while Thomas Stewart (Stewart, 1998) indicates that information is different from knowledge in size, nature and content. According to Coincross (Coincross, 1997: 23), the spatial proximity of people is decisive in the generation and use of information and knowledge. For Nicolescu O. and C. Nicolescu, wealth and power will follow the priority of intangible intellectual resources, the knowledge capital (Nicolescu; Nicolescu, 2011: 11). Other specialists (Jones, 1999: 6) are

¹ Bucharest University of Economic Studies, Romania, Email: sebastian.ceptureanu@man.ase.ro

² Bucharest University of Economic Studies, Romania, Email:eduard.ceptureanu@man.ase.ro

differentiating data, information and knowledge, considering that there is a relationship between them that can be structured as a pyramid based on data, followed by information and with knowledge at its peak.

Data is a set of signals transmitted from a transmitter to a receiver, a set of objective facts about an event with heterogeneous, scarce utility unless they add value to be converted into information (Caldararu, 2011). The information constitutes a data collection with corresponding explanations, can be understood and is characterized by certain relevance, meaning and purpose that bring added knowledge to the receiver (Caldararu, 2011).

With reference to this, it should be noted these observations of Fleming (Fleming, 1996: 53):

- A collection of data is not information;
- A collection of information is not knowledge;
- A collection of knowledge is not wisdom;
- A collection of judgments is not the truth.

The knowledge seem to be the only power guaranteeing social, economic and democratic development that is not eroded over time. Organizational focus to capture and assimilate knowledge is a confirmation of functional maturity, aligned with contemporary information and knowledge based society (Ceptureanu, 2010). Knowledge is an important and decisive economic factor and increasingly more management processes recognize its strategic value (Ceptureanu & Ceptureanu, 2010). Knowledge can be acquired as a result of experiences and lessons and are significantly influenced by understanding capability and identification or capture the essence of the facts, both at individual and organizational levels (Ceptureanu & Ceptureanu, 2015).

Knowledge are cumulative stocks of knowledge and skills generated by the receiver's use of information, which depend on the receiver' intellectual abilities and generates value added (Nicolescu & Nicolescu, 2011: 15-16). There are a fluid mix of experiences, values, contextual information and insights that provides a framework for evaluating and incorporating new experiences and information. Knowledge emerge and apply in people' minds while in organizations, knowledge is an integral part of the processes, practices and organizational rules (Ceptureanu, 2011).

Knowledge is based on information which are sintetized or organized to increase understanding and comprehension. The knowledge is a premise for the decisions and actions of an individual, group of persons or an organization. They may change during learning process which causes changes in the understanding, decisions and actions of individuals. Some specialists have succeeded in explaining the relationship between information and knowledge visually: "it must take a bite (of information) that should be chewed and digested so that they become knowledge" (Benet & Benet, 2004: 26-27).

Knowledge, unlike labor, land and capital, is an asset that gain value as it is used. The more you use, the more it becomes effective and efficient. According to Karl Erick Sveiby (Sveiby 2000: 18-27), in the knowledge economy, knowledge has four characteristics:

- are tacit;
- are action oriented;
- rely on rules;

- are changing constantly.

The success of a country's economy can be summarized in its ability to capitalize on the knowledge it possesses, knowledge establishing itself as a factor with a decisive role in economic progress (Ceptureanu, 2010:152-156). Knowledge productivity is decisive in achieving economic success, and in this sense, the delineation of rich countries compared to the less wealthy will be based on generation, access and use of knowledge.

Use or consumption of a quantity of knowledge does not mean a decline of knowledge stock but rather means amplifying the amount of accumulated knowledge, means new solutions, theories and applications. Knowledge has always been extremely important, as evidenced even throughout history, those who use knowledge as a strategic resource succeed, which demonstrates their unmatched potential. A comprehensive analysis of knowledge and their integration into the management processes of the company, to achieve adaptability to contemporary business models, is based on the idea that knowledge as a critical factor for organizational success depend on information and communication technologies within the organization (Malhotra, 2005: 7-28). A number of organizations believe that by focusing exclusively on people, technologies, and techniques they can manage knowledge while for others it is, rather, the interaction between technology, techniques and people who allow an organization to manage knowledge effectively (Bhatt 2001: 68-75). By creating an environment that promotes culture and applied learning, an organization can gain competitive advantage.

1. TYPES OF KNOWLEDGE

Specialists from the OECD (OECD, 1996), defines four categories of knowledge according to the purpose and method of use.

- *Know-what knowledge* is the fundamental, elementary knowledge because people, employees, organizations know what they know but do not know when and how they will apply their knowledge in economic processes. It is an accumulation of stories about deeds, they are the most common and least used (Nicolescu, Nicolescu, 2011: 33-34), but they are a starting point for other types of knowledge.

- *Know-why knowledge* is scientific knowledge about laws, principles, often representing results of fundamental scientific research. This type of knowledge has become the most common, mainly in areas of interference between sciences and often implies a multidisciplinary content (Nicolescu & Nicolescu, 2011: 33-34).

- *Know-how knowledge* is the ability to transform learned knowledge and use them to solve organizational problems, practically is the capability to "know how" to do something. Know-how knowledge are integrated, developed and protected within company because this knowledge gives it competitive advantage by contributing to the production, marketing and promotion of their products and services. This knowledge is based on practical research, improvement and modernization of processes, systems, products.

- *Know-who knowledge* represents the synergy know-what knowledge and know-how knowledge. This type of knowledge is related largely to the environment and is considering a rise in outsourcing activities (Nicolescu, Nicolescu, 2011: 33-34). This knowledge provides access to experts, with the task of developing special relations to address changes in the competitive environment.

According to specialists Nicolescu O. and C. Nicolescu (Nicolescu & Nicolescu, 2011: 33-34), depending on their nature and portability, knowledge is divided into:

- Explicit knowledge; it is codified and can easily be translated into a formal language, can be recorded and can be transmitted from one individual to another.
- Tacit or implicit knowledge; it is insufficiently configured, has a high degree of resistance on the encoding and transmission by technical means because it envisage personal knowledge of individuals, rely on experience and intangible factors such as beliefs, perspectives and values.

Tacit knowledge is available in any organization and represents what employees know, but can communicate or share with others with great difficulty, becoming very difficult to transfer. Tacit knowledge involves information difficult to express, formal or shared. They stand in contrast to explicit knowledge that are conscious and can be embodied in words. An individual is experiencing tacit knowledge through intuition rather than as a body of facts or sets of instructions that is conscious of and can explain them to others.

Tacit knowledge develops when unconscious processes, mental inductive create a representation of the structure representing the relationship of the important variables. In other words, people may have abstractions unconsciously, people can learn more about the complex structure underlying the systems without being aware of it or being able to articulate their understanding. Difficult to express, encode and transmit, tacit knowledge leads to easier protection of it compared to explicit knowledge. The difficulty of copying it allows tacit knowledge to become an inimitable competitive advantage source.

Tactical and explicit knowledge are complementary and come in multiple and complex interdependencies within organizational flow of knowledge (Nicolescu & Nicolescu, 2011: 34-35). In this context it worth mentioning the particularly interesting approach of Nonaka and Takeuchi on flows of knowledge and the convergence within them of tacit and explicit knowledge (Nonaka & Takeuchi, 1995).

Managerial and organizational issues related to the integration of knowledge over time are critical elements that affect overall performance, innovativeness and competitiveness of companies. Knowledge intensive integrating companies have managed to develop more innovative products and services while less intensive companies are associated with lower rates of growth and profitability (Tsekouras, 2006: 126-147).

Tacit knowledge is an attractive concept that people understand it intuitively, but is often used vague and imprecise. Only certain types of tacit knowledge are ever likely to be used explicitly, while some of them are inarticulable and can be transferred solely by apprenticeship, observation and practice. Although tacit knowledge have been the subject of many theoretical articles, empirical research that actually operationalize the concept are limited.

The key issue regarding management of tacit knowledge hypothesis revolves around whether to try to capture them as "a lesson learned" or "best practices" or whether to promote an environment where they can be shared informally. Understanding the type of tacit knowledge that could be involved in the process knowledge can help in this decision.

Much of the literature on knowledge management systems addresses such focus on adequate ways to facilitate creation, storage and transfer of knowledge. Typically, such research focuses on cognitive aspects of individual tacit knowledge that can be brought to the surface and articulated indirectly. While some theorists argue that there may be a tacit knowledge collectively others only at individual addresses.

As Malhotra (Malhotra, 2005: 7-28) conclude, rather on focus on coding knowledge, organizations should focus on systems that facilitate collaboration between the holders of knowledge and the one that need them. Indeed, recent research has begun to recognize the need to integrate support for knowledge sharing from person to person in systems designed to facilitate knowledge transfer within complex-specific contexts (Brown et al., 2006).

Knowledge management model developed by Jennex and Olfman (Jennex & Olfman, 2006: 51- 68) stresses the need for knowledge management systems to integrate both the knowledge base and connections with people who have expertise based on knowledge.

A better understanding of the various features of size tacit knowledge will help researchers and practitioners in the development of more sophisticated knowledge management systems that can adequately address the needs of users of knowledge, both for knowledge encoded and interaction with knowlege experts.

Individual tacit knowledge

Ambrosini and Bowman (Ambrosini, Bowman, 2001: 811-829) aproach on individual tacit knowledge is based on individual skill development, unlike Blackler (Blackler, 1995: 1021-1046); Castillo (Castillo, 2002: 46-59); Lam (Lam, 2000: 487-513) which does not differentiate between tacit skills and tacit knowledge. Nonaka (Nonaka, 1994: 14-37) and Takeuchi (Takeuchi 2001: 37-72) considers tacit knowledge with both cognitive and technical dimension, respectively. Technical dimension of tacit knowledge is the know-how, skills, implicit learning through experience, being almost impossible for the individual to articulated or described it. Cognitive tacit knowledge is the knowledge developed through cognitive mental models or exemplified situations.

Other experts have identified levels of individual and tacit knowledge and the way it works. Both Castillo (Castillo, 2002: 46-59) and Ambrosini and Bowman (Ambrosini & Bowman, 2001: 811-829) have identified three levels of individual tacit knowledge. At first level, identified by Castillo (Castillo, 2002: 46-59), tacit knowledge is non transferable and is derived from implicit learning and knowledge, is completely inarticulabile or "deeply rooted" (Ambrosini & Bowman 2001: 811-829), so extremely difficult if not impossible to access by individuals.

The second level identified by Castillo is the sagacious, wise, practical knowledge, corresponding to the level of cognitive tacit knowledge defined as such by Nonaka (Nonaka, 1994: 14-37).

The third level identified by Castillo (Castillo, 2002: 46-59) is semantic tacit knowledge which, acording to Nonaka terminology (Nonaka, 1994: 14-37) are explicit and can be converted into tacit and internalized within the organization. Semantic knowledge are found in conversations among experts, whose communication is based on the assumption that they

have a scientific background and a degree of understanding and common language in which linguistic expressions are abstracted. Semantic knowledge originally were explicit, can be easily articulated by asking the right questions.

Collective tacit knowledge

Specialists such as Ambrosini (Ambrosini, 2003: 67-72), Blackler (Blackler, 1995: 1021-1046), Lam (Lam, 2000: 487-513), Spender (Spender, 1996: 45-62) and Collins (Collins, 1993: 95-116) have used the term collective knowledge to describe all knowledge, both explicit and tacit, held by members of a group, organization or society in which different individuals have different sets of knowledge.

Collective explicit knowledge are called encoded knowledge by Collins, Blackler and Lam, objective, materialized knowledge (Spender, 1996: 45-62), and recorded in archives such as libraries, books, databases accessible to all group members and usually transferred through formal learning procedures.

2. THE ROLE OF KNOWLEDGE-BASED COMMUNITIES IN KNOWLEDGE TRANSFER

Specific for knowledge oriented companies, whether they are learning organizations or ordinary companies, which use the knowledge as raw materials or sell them in the form of goods or services, is that they often takes the form of knowledge based community on sets of knowledge-based communities. Approaches and opinions of experts on this concept varies considerable (Wenger, 1999; Wenger & Snyder, 2000: 139-145; Lesser & Everest, 2001; Swan et al., 2002; Cox, 2005; Ceptureanu 2010).

Communities of practice, as they are also known, is a concept developed by Lave and Wenger (Lave & Wenger, 1991) in the context of social construction of knowledge. Community of practice (sometimes incorrectly called "communities of practice") is made up of members who interact with each other through a common practice. Therefore, it is precisely this collective social practice that link people together across formal organizational boundaries, creating that community (Botha et al., 2008).

It is important to remember that these are not teams. A community of practice can be defined as "a group of professionals interconnected informal by addressing a common categories of problems, jointly tracking a solution, representing therefore a repository of knowledge" (Botha et al., 2008).

Knowledge-based communities designate a group of practitioners who share a common interest or passion in an area of expertise and are willing to share their experiences to other members (Brown & Duguid, 1991: 40-57). It differs from a team working together mainly in that it does not have time limited specific targets, but there operates indefinitely to promote problems around which that community was formed.

For other specialists, knowledge based community consists of a group of people, usually within the same organization, possibly from others, focused on the same objective and / or common interests and that, using informal mechanisms and often formal, share their knowledge, learn individually and in groups, create and develop advanced ideas and

practices that generate added value for the company (Allee, 2000). Knowledge based community consists of people working in different departments of the organization and, sometimes, outsiders - clients, suppliers, autonomous researchers, consultants and other stakeholders etc - that are involved in the operationalization of the value chain of the organization (Nicolescu & Nicolescu, 2011). Several research studies reveals that, in fact, knowledge-based community is more than a group of people, it manifests itself as a medium of knowledge processing, where synergy occurs (Nicolescu & Nicolescu, 2011).

According to Lesser and Everest (Lesser & Everest 2001: 37-41), knowledge based communities help create an environment in which knowledge can be created and shared and, more important, used to improve the effectiveness, efficiency and innovation. In other words, a knowledge based community can form a common context that supports a recipient in decoding a received message (Gammelgaard & Ritter, 2008: 46-51).

Although communities develop informal and spontaneous, spontaneity can be structured in some cases (Brown & Duguid, 2001: 44-67). When people work together in communities, sharing knowledge is a social process, where members participate in joint learning process at different levels and creating a "knowledge community".

After the initial launch of the concept, a number of attempts were made to test the concept in organizations and in solving managerial issues (Ana et al., 2009: 364-400). Recent studies on the topic have paid a special attention to how to approach these communities (Swan et. al., 2002: 477-496), alignment with the different communities and the role of virtual communities (Kimble et al., 2001: 220-234). Gammelgaard (Gammelgaard, 2008: 46-51), for example, popularize virtual communities of practice, with some reservations, for knowledge transfer within multinational companies.

To summarize, the general requirements for a knowledge based community are a common interest, a common strong context, including its own jargon, habits, routines and ad hoc informal relationships for solving problems (Brooking, 1999: 57-91).

Prerequisites for creating knowledge-based community are:

- recognition by managers, employees and other stakeholders that the most important knowledge resides in people and their interrelationships rather databases (Boone, 2001);
- modern communication tools and technologies represents only a facilitator for knowledge process, people having the crucial role in addressing and capitalization of knowledge
- Knowledge based management key to success is people's behavior.

Table 1. Comparison between knowledge based communities and other groups

Item	Knowledge based communities	Formal department	Project team	Informal network
Purpose	Share knowledge Promote problem solving skill Accumulate organization	Responsible for divisional function Specialized task assignment	Complete paper target Cooperation cross divisions	Integrate and exchange valuable information

Item	Knowledge based communities	Formal department	Project team	Informal network
Teaming	Participate by free will	Lead by division manager	Choose by paper leader	People with common interest or mutual trust
Characters of members	Similar	Similar	Different	Different
Boundary	Vague	Clear	Clear	Undecided
Driving force	Passion, trust, sense of identity, commitment	Goal of division	Goal of project	Meet mutual needs
Duration	As long as common interest exists	Until reorganization	Until end of project	Lack of definite starting & ending

Source: Wenger & Snyder (2000); Cohendet & Meyer-Krahmer (2001)

The above knowledge-based communities must possess certain skills and attributes, as resulting from investigations of Oxbrow and Abell (Oxbrow & Abell, 2002), presented in the table below.

Table 2. Key skills and attributes of knowledge based communities

Main skills	Major attributes
<ul style="list-style-type: none"> • Understanding of business experience and awareness • Ability to communicate • Computer skills • Understanding, experience and awareness of knowledge management • Management planning, strategic awareness • Capacity management information • Leadership • Management of change • Awareness of the content and organization of knowledge • Personnel Management • Project Management 	<ul style="list-style-type: none"> • Creativity • Vision • Team Player • Enthusiasm • Decision • Entrepreneurial spirit • Persuasion • Ability to perceive the situation as a whole • Reliability • Flexibility • "Lateral" thinking • Tenacity • Credibility

Source: (Oxbrow & Abell, 2002)

A trend in recent years is the extension of relations between knowledge based communities not only within the same organization but also with different organizations (Gogus, 2006; McKenzie, 2005). Often these relationships across the organization develops in close connection with the virtual value chain.

Table 3 summarizes the types of tacit knowledge, adopting the terminology of Castillo (Castillo, 2002: 46-59) on the size of tacit knowledge and terminology of Blackler (Blackler, 1995: 1021-1046) on the size of collective knowledge and appropriate mechanisms for

transfer for each dimension. Type of tacit knowledge and the extent to which they can be articulated determine the best approach to knowledge transfer.

Tacit knowledge is implicit learned and inarticulable and therefore can not be transferred in an explicit manner. However, novices can acquire tacit knowledge or skills from experts, not by asking questions, but the using methods of observation, apprenticeship and mentoring (Leonard & Sensiper, 1998: 112-132; Nonaka, 1994: 14-37; Spender, 1996: 45-62).

Although apprenticeship is a centuries-old tradition, was usually seen as a method of training and its potential application in the area of knowledge based communities is largely unrecognized (Hammer et al, 2004: 14-18). In certain areas, apprenticeships proved to be an effective method of capturing tacit knowledge that can not be gained through other methods. A key aspect is the opportunity for apprentice to observe the disciple expert skills determining a work performance improvement for the novice (Nadler, Thompson van Boven, 2003: 529-540).

Mentoring, guidance is another mechanism of transferring and retaining knowledge in knowledge based communities (Geisler, 2007: 467-477); Swap et al. (2001: 95-114). Empirical studies have shown the relationship between guidance / mentoring and performance and job satisfaction (Bryant, 2005: 319-339, Swap et al., 2001: 95-114) since the transfer of knowledge refers to tacit knowledge embedded in organizational routines.

Table 3. Types of knowledge and transfer methods

Types of knowledge	Level of articulation	Transfer method
Tacit individual	Nontransferable: inarticulately	Demonstrations, observation, apprenticeship, effective practice, mentoring
	Perspicacious: partly articulable	Metaphor, analogy, stories, studies of critical incidents, behavior modeling
	Semantic: articulated through determination	Asking questions that order delimiting express deep knowledge base
Explicit individual	Explicit: Easy articulated	Formal learning procedures, education, reading, formal training
Tacit collective	Cultured: Partly articulated but depend on context	Socialization, observation, informal patterns of behavior. Also, direct explanation of the rules in a particular context.
	Incorporated: articulated or partially articulated through formal or informal routines and procedures	Informal watching, workplace training
Explicit collective	Coded: Easy articulate usually recorded	Formal learning procedures

Source: Caldararu & Seremeta (2011)

Recent studies have begun to recognize the need to integrate support for interpersonal knowledge sharing in design of knowledge management systems, in order to facilitate complex, specific knowledge transfer (Brown et al., 2006: 73-95).

Other specialists, such as Lave and Wenger (Lave & Wenger, 1991: 22-54) have introduced the concept of community of practice and considers as "an intrinsic requirement of the existence of knowledge". Communities of practice have been identified as essential conditions for learning and innovation within organizations, and were formed spontaneously without formal constraints imposed by the organization.

A company may consist of one or more community-based knowledge. In small organizations – micro and small sized companies - usually there is only one knowledge based community. In contrast, medium-sized companies and always in large sized companies are established and operate more than one knowledge-based community. The size and interconnection of them causes essential changes in functionality and performance of organizations.

Knowledge-based communities has several advantages. According to specialists Snyder and Wenger (Wenger & Snyder, 2000: 139-145), these can be summarized as follows:

- contribute to operationalizing of strategies, are their "heart and soul";
- initiate new development of the organization;
- solves problems faster;
- transfer good practice within the organization;
- develops the skills of staff involved;
- enhances the functionality and performance of the organization.

According to Verna Allee (Allee, 2000), the establishment of knowledge-based communities have advantages for the host organizations. These include:

- Assist in creating a common language, methods and models around specific themes;
- Increase access to expertise within the organization;
- Enhances retention of knowledge when employees leave the organization;
- Act as a means of developing and maintaining long-term organizational memory;
- Connect practitioners with common interests and needs, usually on the same site;
- Reduce the learning curve for new employees;
- Respond more quickly to customer needs and requirements;
- Favor the emergence of ideas and increased opportunities for interdisciplinary innovation;
- Support solve problems more quickly, both at specific and organization problems.

In a knowledge-based community an essential role has the links among its members. They should be based on five elements (Abell & Oxbrow, 2002):

- Mutual benefit;
- Reliability;
- Respect;
- Friendship;
- Loyalty.

Effectiveness and efficiency of knowledge-based communities depend decisively on the harmonization of the participants' individual values with the values of the organization, the harmonization of their motivation with business needs (van Winkleen & Ramsell, 2003). The motivations of participants are intellectual (developing their own expertise, understanding, discover new opportunities, increasing influence in the organization etc.), affective (the satisfaction of helping others, building trust in their own capabilities, achieving recognition of personal worth by others etc.), or to achieve some personal goals such as higher personal income. Organization's needs has to do more to effectively use intellectual capital in all its forms - knowledge, structural or relational.

In order to achieve this harmonization authors recommend taking the following four actions (Nicolescu & Nicolescu, 2011):

- choosing a theme, a problem suitable to arouse the interest of people in the community and be sufficiently well defined;
- precise wording of the purpose or objectives to be achieved;
- selecting a leader for the group, to be proactive and respected members of the group;
- ensuring the organization has a strong support for knowledge-based community.

Learning in knowledge based communities it is seen as deriving from the social process of becoming an individual practitioner as it provides a social context to become an integral part of a community. The social construction of identity is different for each individual and influences the interpretation of the world. Learning and creation of new knowledge can then take place within that community and can be shared through social practice.

Lave and Wenger (Lave& Wenger, 1991) have introduced the concept of legitimate peripheral learning (LPP legitimate peripheral learning). It connects learning and participation in a community of practice. The objective is not to acquire specific knowledge, but access to the community, its culture and language. As the newcomer learns formal and informal culture and values of the community, it becomes a legitimate member. Essentially such a process enable the member to move succesfully from the periphery to the full participation status.

Brown and Duguid (Brown & Duguid, 1991) investigated organizational learning from community perspective. They refer to the canonical and non-canonical practice. Canonical practice cover compliance with formal rules and procedures, while the non-canonical refers to informal routines that dominate everyday procedures. At the same time, they warn about management emphasis on strict canonization because inhibits the ability of problem solving ability within organization. They stress that unstructured dialogue, especially through stories leads to innovation and problem solving. The story functions as a repository of wisdom and is essential in creating new knowledge. This is closely related to the concept introduced by Levitt and March (Levitt & March, 1988: 319-340) of historical determination of learning as the interpretation of historical events (rather than the events themselves) are retained and passed on. It is also linked to the externalization process of Nonaka's theory (Nonaka, 1994), when the tacit knowledge becomes explicit through the use of metaphor.

CONCLUSIONS

Knowledge-based communities are one of the main constituent elements of a knowledge management framework. Many large firms have set up dozens of communities. In this context, it should be recognized that there are several types of communities. They operate in different ways, are of different sizes, have different knowledge areas of interest and addresses are on different levels of maturity.

Milton (Milton, 2010) states that there are four types:

a. Communities of practice. Communities of practice are standard in knowledge management. A community of practice is a community of practice; in one field or discipline of practice. The purpose is primarily community members to help each other to improve its practice of using tacit knowledge of the community as a shared resource. Community does not offer no host organization; all the products we create are for the benefit of community members. Communities of practice are generally voluntary, and often receive minimal funding from the host organization or at all.

b. Communities of purpose. Communities are different purpose. In this case they are funded by a company or a host organization, and in turn commits to provide results. They have a contract, budget and performance indicators. This community will have a clearly identifiable component members, rather than being entirely voluntary, with common objectives. Its members often act as a virtual team, but more than a multi-disciplinary team, even if often behaves as a team.

c. Communities of interest. Communities of interest from people who are interested in a particular, but not practitioners in that area. Their purpose is to receive and share information, but this information does not help them in their work as practitioners. Membership is entirely voluntary.

d. Social communities. Social communities are communities of friends. Their goal is to share information or knowledge - their goal is to create and strengthen social bonds. Membership is voluntary, but it is often assumed a request or invitation. People are invited to social networks, even though the invitation comes through adherence to shared community.

The importance of these communities' typology is major because it allows understanding the motivations of their members and prevents situations when a type of community members are treated as if they are members of the other community.

Botha (Botha et al., 2008) summarizes the key factors regarding communities of practice:

- Learning is a social phenomenon;
- Knowledge is integrated into the culture, values and language of the community;
- Learning and a member of the community are inseparable;
- We learn by doing and therefore knowledge and practice are inseparable;
- Empowerment is essential for learning: The best learning environments are created where there is real effects on individuals and communities of practice to which it belongs.
- The company's management must understand the advantages, disadvantages and limitations of communities of practice. For example, because there are so vaguely defined, it can be very difficult to identify when a problem needs to be solved. To solve this problem some companies their maps the communities of practice (Botha et al., 2008). Another problem could be the combination of knowledge transfer and company.

Sometimes, because of the urgency in solving specific issues and certain elements of organizational culture that demands innovative solutions, knowledge based communities replace functional project teams as they benefit from knowledge from different fields, they also apply to redistribute.

All these arguments underline the importance of recognizing and supporting knowledge based communities. Knowledge management systems must therefore support these communities and must not rely on canonical practices. Based on this conclusion that, at the organizational, knowledge-based communities is a specific method for organizational knowledge management, with specific features, reflecting the peculiarities of knowledge processes within company. Its performance is based on specific internal motivation of its components, the creation of a special type of distributed leadership on effective focus on knowledge sharing intensive community members and enhancing the creative process with pragmatic direction.

References

- Abell, A., Oxbrow, N. (2002). *Competing with Knowledge*, Library Association Publishing, London
- Allee, V. (2000). Knowledge Networks and Communities of Practice, *OD Practitioner*
- Ambrosini, V., Bowman, C. (2001). Tacit knowledge: Some suggestions for operationalization. *Journal of Management Studies*, 38(6)
- Ambrosini, V. (2003). Tacit and ambiguous resources as sources of competitive advantage. Basingstoke, UK: Palgrave Macmillan
- Ana F., Dietz, J.L.G., Liu, K., Filipe, J. (2009). *Knowledge Discovery, Knowledge Engineering and Knowledge Management*. Springer Heidelberg Dordrecht London NewYork
- Benet A., Benet, D. (2004). *Organizational survival in the new world*, Butterworth-Heinemann, US
- Blackler, F. (1995). Knowledge, knowledge work and organizations: An overview and interpretation. *Organization Studies*, 16(6)
- Bryant, S. E. (2005). The impact of peer mentoring on organizational knowledge creation and sharing: An empirical study in a software firm. *Group & Organization Management*, 30(3)
- Brooking, A. (1999). Intellectual Capital. Core Asset for the Third Millennium Enterprise, International Thomson Business Press
- Brown, J.S., Duguid, P. (2001). Structure and Spontaneity: Knowledge and Organization. In: Nonaka, I., Teece, D. (eds.) *Managing Industrial Knowledge*, Sage Publications, Thousand Oaks
- Brown, S. A., Dennis, A. R., Gant, D. B. (2006). Understanding the factors influencing the value of person-to-person knowledge sharing. *Proceedings of the 39th Annual Hawaii International Conference on System Sciences*, January 4-7
- Brown, J.S., Duguid, P. (2000). Balancing act. How to capture knowledge without killing it. *Harvard Business Review* 78 (3)
- Brown, J.S. & Duguid, P., (1991). Organizational Learning and Communities of Practice. Toward a Unified View of Working, *Organization Science*, vol.2, no.1
- Boone, M. (2001). Opening Dialogue with the Whole Organisation, *Knowledge Management Review*, no. 4, issue 4

- Botha A., Kourie D., Snyman R. (2008). *Coping With Continuous Change in the Business Environment: Knowledge Management and Knowledge Management Technology*, Chandos Publishing
- Caldararu, E. A., Seremeta, R. (2011). Knowledge Transfer and Tacit Knowledge in the New Economy, *The 17th International Conference The Knowledge-Based Organization*, Sibiu
- Castillo, J. (2002). A note on the concept of tacit knowledge. *Journal of Management Inquiry*, 11(1)
- Ceptureanu, S., Ceptureanu, E. (2010). Knowledge creation/conversion process, *Review Of International Comparative Management*
- Ceptureanu, S., Totan, L. (2010). Knowledge-based communities, *The 16th International Scientific Conference Knowledge-Based Organization*, Academia Fortelor Terestre Nicolae Balcescu, Sibiu
- Ceptureanu, S.I., Ceptureanu, E.G. (2012). Knowledge based Management Survey in Romanian Companies, Business Excellence Challenges during The Economic Crisis, vol 1, *7th International Conference on Business Excellence*, Brasov
- Ceptureanu, S., Ceptureanu, E. (2015). Knowledge Management in Romanian Companies, *Quality-Access to Success 16* (145)
- Ceptureanu, S.I., Ceptureanu, E.G., Zgubea, F., Tudorache, A. (2012). Economic Survey on Knowledge Based Management in Romanian Companies, *Review of International Comparative Management* 13 (2), 325-337
- Ceptureanu, S., Ceptureanu, E.G, Tudorache, A., Zgubea, F. (2012). Knowledge Based Economy Assessment in Romania, *Economia. Seria Management*
- Ceptureanu, S., Ceptureanu, E., Tudorache, A. (2010). Management in Romanian SMEs, *Revista Economică*
- Ceptureanu, E. (2010). Knowledge based Managers and Leaders, *16th International Conference The Knowledge-Based Organization: Economic, Social and Administrative Approaches to the Knowledge-Based Organization*, Conference Proceedings 2, Sibiu
- Coincross, F. (1997). *The Death of Distance: How the Communications Revolution Will Change Our Lives*, 2nd Edition, Harvard Business School Press, Boston
- Collins, H. M. (1993). The structure of knowledge. *Social Research*, 60(1)
- Cox, A. (2005). What are communities of practice? A comparative review of four seminal works. *Journal of Information Science*, 31(6)
- Gammelgaard, J., Ritter, T. (2008). Virtual Communities of Practice: A Mechanism for Efficient Knowledge Retrieval in MNCs. *International Journal of Knowledge Management* 4(2)
- Geisler, E. (2007). The metrics of knowledge: Mechanisms for preserving the value of managerial knowledge. *Business Horizons*, 50(6)
- Gogus I. (2006). Building Partner Communities at Oracle, *Knowledge Management Review*, no. 6
- Hammer, M., Leonard, D., Davenport, T. (2004). Why dont we know more about knowledge? *MIT Sloan Management Review*, 45(4)
- Jennex, M. E., Olfman, L. (2006). A model of knowledge management success. *International Journal of Knowledge Management*, 2(3)
- Jones, A.B. (1999). *Knowledge Capitalism Business. Work and Learning in the New Economy*, Oxford University Press

- Kimble, C., Hildred, P., Wright, P. (2001). Communities of Practice: Going Virtual. In: Malhotra, Y. (ed.). *Knowledge Management and Business Model Innovation*. Idea Group Inc., Hershey
- Lam, A. (2000). Tacit knowledge, organizational learning and societal institutions: An integrated framework. *Organization Studies*, 21(3)
- Lave, J., Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press, New York
- Lesser, E., Everest, K. (2001). Using Communities of Practice to Manage Intellectual Capital. *Ivey Business Journal* 65(4)
- Leonard, D., Sensiper, S. (1998). The role of tacit knowledge in group innovation. *California Management Review*, 40(3)
- Levitt, B., March, J. (1988). Organizational Learning, *Annual Review Of Sociology*, Volume: 14
- Malhotra, Y. (2005). Integrating knowledge management technologies in organizational business processes: getting real time enterprises to deliver real business performance, *Journal of Knowledge Management*, 9(1)
- McKenzie, J.(2005). How to Share Knowledge between Companies, *Knowledge Management Review*, 8 (55).
- Milton, N. (2010). The four community types, available at <http://www.nickmilton.com/2010/04/four-community-types.html>
- Nadler, J., Thompson, L., & van Boven, L. (2003). Learning negotiation skills: Four models of knowledge creation and transfer. *Management Science*, 49(4)
- Nicolescu, O., Nicolescu, L. (2005) *Economia, firma și managementul bazate pe cunoștințe*, Editura Economică, București
- Nicolescu, O., Nicolescu, C. (2011). *Organizația și managementul bazate pe cunoștințe*, Editura Pro Universitaria
- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1)
- Nonaka, I., Takeuchi, H. (1995) *The Knowledge Creating Company*, Oxford University Press
- Senge, P. (1990). *The Fifth Discipline: The Art and Practice of the Learning Organization*, New York: Doubleday/Currency
- Spender, J.C. (1996). Making knowledge the basis of a dynamic theory of the firm. *Strategic Management Journal*, 17
- Swap, W., Leonard, D., Shields, M., Abrams, L. (2001). Using mentoring and storytelling to transfer knowledge in the workplace. *Journal of Management Information Systems*, 18(1)
- Swan, J., Scarborough, H., Robertson, M. (2002). The Construction of Communities of Practice in the Management of Innovation. *Management Learning* 33(4)
- Stewart, T.A. (1998). Leading Edge: A New Way to think about Employees, in *Forum Magazin*
- Stewart, T.A. (1998). *Intellectual Capital: The Wealth of Organizations*, Nicholas Bradley Publishing House, London
- Sveiby, K.E. (2000). Tacit knowledge, *The Knowledge Management Yearbook 1999-2000*
- Takeuchi, H. (2001). Towards a universal management of the concept of knowledge. In I. Nonaka, D. J. Takeuchi (Eds.), *Managing industrial knowledge: Creation, transfer and utilization*. London: Sage

- Tsekouras, G. (2006). Gaining competitive advantage through knowledge integration in a European industrialising economy, *International Journal of Technology Management*, 36, (1-3)
- van Winkleen, C., Ramsell, P. (2003). Why Aligning Value is Key to Design Communities, *Knowledge Management Review*, 6 (5)
- Wenger, E. (1999). *Communities of Practice, Communities of Practice: Learning, Meaning, and Identity*, Cambridge University Press
- Wenger, E., Snyder, W. (2000). Communities of practice: The organizational frontier. *Harvard Business Review* 78(1).