HOW ORGANIZATIONS COPE WITH KNOWLEDGE ECONOMY? FORMALISING A "LEARNING BY SHARING" PROCESS INSIDE THE ORGANISATIONS

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Problem statement/objective(s)/Research question(s)/Aim : Taking into account globalism, competition and dynamism as a characteristics of current economy, the success of an organization depends on its ability to learn from its interactions with the environment (such as relationship with the supplier, competition, customer, state institution) and its internal dynamics (from the knowledge and abilities of they own employee). Altough intellectual capital and knowlege management and are a very wide spread in current debate, the concept of *knowledge sharing* and *organizational learning* are less approched. In fact, knowledge sharing as well as organizational learning are often problematic, thus in the proposed research analyze both influencing factors of these two processes are included. The emerging of organizational learning theory and knowledge management in recent years has given rise to important insights regarding learning process and knowledge sharing that still requires much reflections in order to be integrated into practice based on long run strategy.

This paper analyses what determinants are involved in knowledge sharing and organizational learning and which relationship exists between these two processes by designing a methodology in order to asses these process in an integrated one called *learning by sharing*.

Literature review/Conceptual framework: Different approaches on knowledge sharing resides among the literature. These approaches are focused on different two dimensions of knowledge: the *know what* and the *know how* of Polanyi (1966), the tacit or explicit characteristics of knowledge (Nonaka and Takeuchi, 1995), the coded knowledge and the knowing process (Alley, 1997), the distinction between information and knowledge (Davenport and Prusak, 1998), and the personal knowledge and social knowledge (Kolb, 1984). Furthermore, in terms of managerial point of view, knowledge sharing can have three roles: interpersonal, informational and decisional. Each of these roles is concentrated in the function of providing, processing and application of information and knowledge.

Due to personnel flow and dispersion of knowledge over many entities, organizations can no longer afford to innovate alone but rather must engage in alternative practices of innovation. As a result, organizations have begun to adopt strategies based on open innovation in order to use internal and external resources to exploit technologies and thus to the accumulation of knowledge from external sources (Chesbrough, 2003). Moreover, the accumulation of knowledge from external sources requires internal capacity to manage innovation for: 1.integration flows of knowledge innovation activities; 2.the application of successful internal and external knowledge; 3.direct actions for innovation (Robertson et al., 2012). In this sense, developing a knowledge capital can be supported by complementary relationships (vertical cooperation with suppliers and customers) and similarity of competences (horizontal cooperation with competitors and other organizations).

Based on a literature review of knowledge, the aim of this work is to build an integrative model of learning by sharing which takes into account four main differentiations of an organization: knowledge differentiations, competency differentiations, cooperation differentiations and competition differentiations.

Methodology & Results: Through this study an empirical base is conceived by testing the systemic learning by sharing diamond. Given the distinctive characteristics and selection criteria of the two research paradigms widely accepted, namely quantitative and qualitative research, this study adopted quantitative paradigm and used a deductive approach to test the relationships between the variables identified in the theoretical model. The research hypotheses used to examine these relationships are developed and formulated based on the findings provided by the study of the existing documents, according to the results of the research already carried out. Given the fact that literature review of this study is focused on testing the integrative model for promoting synergetic processes of knowledge sharing in the purpose of innovation, the specific objectives of the research can include: O1. Testing the learning by sharing framework by conducting a quantitative research. O2. Analysis of learning by sharing based on the four differentiation of an organization. O3. Determining the impact of learning by sharing processes on individual and organizational benefits.

The research was conducted during April – May 2013 and was based on the population made of organizations located in Northeast region of Romania. The research method was a descriptive explanation based on self-administrated questionnaires distributed by e-mails.

Results show that learning by sharing process is highly influenced by the four differentiations involved in the systemic learning by sharing diamond. First, it is confirmed that some individual factors may have a high

influence on learning by sharing. Thus, managers should promote a social networking – based culture, because this is the preliminary stage for the learning by sharing to occur. Secondly, they should not focus on a rewards system, but more on promoting a positive attitude regarding the satisfaction of helping others through learning by sharing. Such strategies could have a long – term and not a short – term effect. On the other hand, can be observed that learning by sharing has a high influence on innovation and organizational performance, this result is further evidence when deciding a long – term oriented strategy.

Implications & Contribution: This study provides empirical evidence for testing a new integrated model by taking into account four organizational differentiations. The value of the article reside from a guidance for practioners in order to see the importance of the learning by sharing process in current economy, and as well for academics in order to introduce a new paradigm in current economy theory. Hence, the research model proposed will be useful to for both practitioners and researchers by providing a methodology that could be implemented in any organizations, in order to investigate learning by sharing process in such a way that collaborative knowledge sharing becomes a part of the work culture. From a managerial perspective, the study identifies key factors essential for learning by sharing process and presents the implication on the development of organizational strategy to maintain a sustainable competitive advance.

The study explores the merger's inherent opportunities of looking at organizational learning and knowledge sharing within the organization by a single lens using the *complexity theory* as a tool for integration. Merging the concepts from literature of adaptive systems provides support for an holistic view on learning and knowledge sharing in organizations and demonstrates the value of a adaptative complex system.

JEL: L00 L14 L16

Keywords: learning by sharing, differentiation, competitive advantage, methodology, individual and organizational benefits

1. INTRODUCTION

In the increasingly dynamic and complex environment, knowledge and competences tend to become outdated in a very short time; therefore learning and his improvement are imperative for organizational succes. Coupled to this context, social developments have shown that the main features of the knowledge economy are related to: the expansion and deeping of scientific knowledge, management and use of existing knowledge in the form of technological and organizational knowledge, new technological knowledge production through innovation.

Learning is a continuous process and its importance to businesses today can not be disputed. Moreover, the dynamics of economic processes requires adaptability which is possible only through sustainable learning, where each employee really wants to enrich their knowledge. However, the real challenge is to bring as much the organizational learning curve of its own employees learning. Therefore organizations must not only develop and expand employee knowledge, but must use mechanisms and procedures in order to transform individual knowledge in assets. Continuous use of knowledge does not diminish the value, as other inputs. Conversely, the more knowledge is more widely used, the more it can be developed gradually, as employees gain experience in the business. In this way it appears that the new organizations need to develop and adapt logical mechanisms and methods for learning by sharing for systematize knowledge and information-based assets and to optimally combine existing knowledge by a collaborative competition within and outside the organization.

Theoretically, knowledge sharing is made by three main ways: dialogue (face to face), text (on paper or Intranet) and model / example of behavior as an element of organizational culture. Each organization builds its own model based on these elements. Therefore, to enhance interactions and increase effectiveness of the production of knowledge, organizations can put in place structured activities, some specific organizational development.

Many practitioners and academicians in the field of knowledge management admit that since knowledge sharing is crucial for achieving common results, this process should be considered as a task of the workstation. However, many organizations and institutions alike have concluded that not always knowledge sharing occur; despite of relationship-based strategies are followed (Hansen et al., 1999).

The study of a systemic model present interest in terms of understanding the relationships between its components and prediction of the way in which this system will work under new conditions. A system's model is required to enable the description and representation of multiple aspects such as input factors, process and output factors. Therefore, this article includes the development of a systemic model focused on learning by sharing, taking into account the preliminary stages of building a system's model, respectively defining the problem and building the systemic model. During the first stage of elaboration of this model, a description will be made for the relationship between "organizational learning" and "knowledge sharing" (Pohontu, 2013), thereafter, it continued with the depiction of the need of such a model and its description.

Due to personnel flow and dispersion of knowledge over many entities, organizations can no longer afford to innovate alone but rather must engage in alternative practices of innovation. As a result, organizations have begun to adopt strategies based on open innovation in order to use internal and external resources to exploit technologies and thus to the accumulation of knowledge from external sources (Chesbrough, 2003). Moreover, the accumulation of knowledge from external sources requires internal capacity to manage innovation for: 1.integration flows of knowledge innovation activities; 2.the application of successful internal and external knowledge; 3.direct actions for innovation (Robertson et al., 2012). In this sense, developing a knowledge capital can be supported by complementary relationships (vertical cooperation with suppliers and customers) and similarity of competences (horizontal cooperation with competitors and other organizations).

To achieve the purpose, the article discusses an exploratory research and diagnosis, dominant holistic, interdisciplinary approach. Exploratory character is revealed by describing peculiarities components model of learning by sharing, and the use of diagnostic investigation aims to investigate the issue of cause and effect for highlighting the need for a new model system based on knowledge transfer and organizational learning. Holistic approach is emphasized by the use of objective statements, by literature review, leading to obtain statements applicable to all organizations. Interdisciplinarity is the result of combining elements of management, strategic management and knowledge management. In this approach, knowledge sharing among with organizational learning resides at the core of the model and is concentrated more at intra-organizational then at inter-organizational level. Based on the theory of Porter (1990), learning by sharing model prupose to show an understandings about how a collaborative approach of the employee could add new value to the market. If is added a low levele of human and financial resources, it can be explained the poor long-term development and the need to conduct research on innovation to propose a new model, is highlighted.

2. THE LINK BETWEEN ORGANIZATIONAL LEARNING AND KNOWLEDGE SHARING

Since the business environment experience a great dynamic, organizations must be able to quickly acquire new dynamic skills (which permit to adapt themselves to continuous technologic change), to identify and share best practices, to learn from their mistakes. Starting with competences, abilities, and finishing with intellectual operations and knowledge, all are acquired by learning activities.

The emerging of organizational learning theory and knowledge management in recent years has given rise to important insights regarding learning process and knowledge sharing that still requires much reflections in order to be integrated into practice. The assembly of traditional perspective of each of the areas involved sparked sophisticated discussions about the "learning analysis unity" (at individual or organizational level) (Stacey, 2003; Field, 2004), the "nature of knowledge" (explicit or tacit knolwedge) (Blackman and Henderson, 2005; Spender, 2006), contributes to organizational knowledge (Spender, 1996).

In recent years, there was an increased interest on the relationship between "organizational learning" and "knowledge sharing" through "complexity theory (Firestone and McElroy, 2004). Merging these concepts offers new perspective, not only for its outcome, but also for each concept involved. While merging these concepts, there is an area of interest for researchers and practitioners alike, in this sense little empirical research has been conducted to identify ways to clarify the learning process (except the empirical research of Pohontu, 2013) and its interaction with knowledge sharing in the work context.

The study explores the merger's inherent opportunities of looking at organizational learning and knowledge sharing within the organization through a single lens by using the "complexity theory" as a tool for integration. Merging the concepts from literature of adaptive systems (Holland 1995) provides support for a "holistic view" on "learning and knowledge sharing" in organizations and demonstrates the value of a adaptative complex system. Morover, in order to present the link between knowledge sharing and organizational learning, "community of practice" (Brown and Duguid, 1991) is presented as being one of the pillars of knowledge management wich have a great significant on learning behavior.

Before deeping to the literature review, there is a need to focus on the key aspects comprised in this article, namely knowledge, knowledge sharing and organizational learning.

So far there is no common agreement regarding the literature on the meaning of knowledge, or their definition (Singh et al., 2008). Some researchers believe that there are differences between knowledge and information (Nonaka, 1994), the information is considered to be a flow of messages, while knowledge is based on information and justified by personal beliefs. Other researchers think that all the information can be considered information; however knowledge is more than "know-how" (Kogut & Zander, 1992; Machlup, 1980). Thus, many researchers believe that knowledge and information are interchangeable, pointing out that there is a more practical utility in distinguishing knowledge from information regarding the knowledge transfer (Bartol and Srivastava, 2002; Huber, 1991, Makhja and Ganesh, 1997).

Therefore, it can be adopted in this paper that the term of knowledge is processed information at an individual level and includes ideas, facts, expertise and relevant decisions for the employees as well as for the organizational performance (Alavi & Leidner, 2001). However, a more current knowledge formation process shows a nonlinearity argued by the fact that knowledge transformation is inherent and unpredictable (Pohontu et al., 2012). Thus, each transformation process faces many interactions such as: the presence of agents, entry's heterogeneity, conditions and organizational culture. As a result, the outputs or inputs cannot be assimilated as linear functions, taking into account the fact that small changes in the inputs may cause unpredictable changes on the outputs.

It is already clear that through an effective knowledge sharing, organizations may be able to gain competitive advantage and superior performance (Shiva et al. 2011). Knowledge sharing represents the cornerstone of knowledge management (Gupta and Govindarajan, 2000) and so modern organizations strive to achieve knowledge management in order to allow efficient knowledge sharing within the organization (Isaa and Haddad, 2008). Given to this, knowledge is considered as an asset capable of providing many benefits that allow a differentiation between successful and unsuccessful organizations. Knowledge sharing relates to the provision of information and know-how needed to help others to solve problems, developing new ideas or to implement policies and procedures (Cummings, 2004; Pulakos et al., 2003).

This concept came into consideration and was treated independently without any connection to the organizational theory. Later, Cangelosi and Dill (1965) worked for the first time on this topic in an organizational context. Currently, there is a growing literature on organizational learning and the focus began to be blamed on the exploration of the comprised dimensions of organizational learning. For a short period after the appearance of this, the organizational learning concept has been a challenge for both authors and readers (Rauliuc and Bratianu, 2012). The evolution of this concept has evolved into a new concept that integrates the right meaning. Recognizing the fundamental feature of learning for the organization is only enough to make learning take place and be effective. Senge argues that a true manager should include several roles simultaneously: as a teacher, as a designer, and as an administrator. However, none of these parts is possible without visibility. A manager who is just about providing the necessary technological, financial, human and knowledge resources is definitely old-fashioned.

2.1 The Complexity Theory

Organizational learning epistemological foundations and knowledge management theories and practices evolves with the complexity theory and its applications in organizational contexts. The "complexity theory" (Stacey, 2001) focuses on the dynamics of interaction, self – organization, connection, holism and emergence. Moreover, organizational theory incorporates complexity in an attempt to represent the understanding of organizational experience in a holistic way.

In terms of complexity, the author Hawking (2000) predicts that we live in a "complexity century". As Newtonian science informed industrial notions about organizations and

organizational management throughout the past century, theorists are currently searching for new introspective sciences in organizations and processes. Within the organizational learning and knowledge management, complexity provides a gateway for the integrated investigation of learning that occurs in organizations and the interaction between organizational learning and knowledge sharing.

In recent literature, authors in the field of organizational learning and knowledge management began to develop learning and knowledge – based strategies. Authors such as Bierly and Chakrabarti (1996) define knowledge – based strategies as a strategic set that forms the organizational learning process and determines the organizational knowledge basis. In contrast to this definition, Zack (1999) suggests that knowledge – based strategies include explicitly the notion of adaptation to the organization's business strategy. This author suggests that knowledge – based strategies describe an approach of organization's intention to adapt knowledge – based resources and capabilities to the intellectual needs of the business strategy. There are also initial efforts of organizational learning and knowledge management of understanding the strategies dimensions. As part of the knowledge – based strategy typology, Bierly and Chakrabarti (1996), Nonaka (1994) describe four tensions in the learning process: the tension between internal and external learning, radical and incremental learning, fast and slow learning and narrow and broad knowledge base. Based on these aspects, Zack (1999) adds that knowledge – based strategy includes decisions on creation, development, and knowledge resources and capabilities administration of an organization.

2.2 Communities of practice and learning

Communities of practice denote a group that works under the same guidance, and therefore a group that has many aspects in common during the undertaken tasks. Etiene Wenger (2007), a known leader in the theory of "communities of practice" suggests that "the group" (a whole who transform knowledge into competencies) is important for both "learning manner" and "learning content". Communities of practice can facilitate both learning in single loop and double – loop. In "Single loop", learning occurs when problems are solved by changing actions or strategies to achieve the desired results without changing the theory or the hypotheses underlying these actions. In "double-loop", learning occurs when problems are solved by changing the theory and the hypotheses underlying these actions. The main advantage of the theory of "communities of practice" is the encouragement of exchange of ideas, hypotheses and theories by an open environment where members are committed to new ways of solving problems.

Communities of practice are collaborative, based on interactive networks consisting of individuals who share the same interests, in terms of knowledge. Communities of practice emerged as a "knowledge sharing" facilitator instrument and an adequate learning environment (Lave and Wenger, 1991). Communities of practice have become a feature of knowledge management whereas their application on business has received an increased attention (Lesser, Fontaine and Slusher, 2000). This kind of practices can exist, wherever there is a "willingness to share" information, knowledge and experiences. However, participation in the network is essential. Therefore it is important to identify different kinds of

network inside the firm to promote learning by sharing process. While personal interactions can boost relationships and trust within the group, "communities of practice" can also take place virtually, meaning that individuals can collaborate even if physically are not in the same place. Moreover, members don't have to be from the same organization, they can also come from outside of it. Both networks and "communities of practice" are larger than the firm and this is the reason why they are both more appropriate to foster among members the learning by sharing process which needs some continuous movements between knowledge inside and knowledge outside.

2.3 Interdependence of organizational learning and knowledge sharing

"Knowledge sharing" and "learning" are social phenomena; the current study draws useful conclusions in terms of social construction of knowledge and learning. Such a perspective assumes that organizations are a group of individuals acting regularly and who share a sense of collective identity.

In their paper, Pasteur, Petit and Schagan (2006) argue that despite the fact that "knowledge transfer" and "organizational learning" have the same objectives, the ways and methods of achieving them varies greatly both in theory and in practice. Some authors, such as Wiig et al. (1997) believe that "organizational learning" is part of the knowledge management strategy, while others assert that "knowledge management" is a strategy of organizational learning implementation, or both of them are interlinked.

Collaboration is a process by which people that see different aspects of a problem can constructively explore their differences in the search for solutions which are going beyond their own vision of what is possible (Tiwana, 2000). In the work of Tiwana, we could see how important is the differentiation of the actors to achieve a solution in a complex world. So traditional management fails to take into account these fructuous differentiations.

3. NEED FOR A NEW INTEGRATED MODEL OF LEARNING BY SHARING

In analyzing learning by sharing model, "collaboration" can be seen as a process by which individuals who see different aspects of a problem can constructively explore their differences and search for solutions that can go beyond their own limited vision of what is possible (Tiwana, 2000). The only way to enable the sharing of knowledge is to put individuals together through collaboration controlled by managers in order to create an enjoyable environment for all participating parties. Therefore, individual and group skills through learning may be the key to an efficient transfer of knowledge.

Conventional treatment of organizational learning tends to be correlated with individual learning. A good example is the model focused on knowledge transfer and learning found in experiential learning theory (Kolb, 1984), which provides a model for describing the relationship between "learning", "learning styles", "skills" and "knowledge sharing". Under this theory, the model of learning is described as a four-step cycle: "active experimentation", "concrete experience", "reflective observation", "abstract conceptualization". In this sense, through active experimentation and concrete experience the development of competences take

place. On other hand, reflective observation and abstract conceptualization represent tow main important step in codifly correctly tacit knowledge and codify correctly competencies in a dynamic process of learning. These learning styles identify the preferences for different types of knowledge and knowledge processes. Such a model provides a theoretical approach to understanding how individuals describe and share knowledge gained through learning. Building on the model developed by Kolb and organizational model developed by Olsen (1975), Kim (2004) performed a new model focusing on the characterization of organizational learning developed as a "shared mental model of the organization". In this case, the addresses in a manner that emphasized individual learning to organizational learning source. In this context, knowledge management should focus on organizational learning is a key dimension for knowledge management that involves a continuous assessment of organizational experiences and their conversion into knowledge making them accessible to the whole organization.

3.1 The systemic learning by sharing model

Given the complexity and uncertainty of the external factors like mobility and dynamism of the organization's internal factors, this paper proposes a new learning model that focuses on knowledge sharing under intra and inter-organizational level approach. The systemic model (as can be seen in Figure 1) is designed based on the "theory of communities of practice" (Duguid, 2005), which focuses only on the internal process within organizations (Duguid triangle: horizontal arrow linking knowledge (knowing that) and skills (knowing how) and the bottom of the graph (cooperation), and the "competitive adavange theory" developed by Porter (1985, 1990), with the four forces involved in sustainable competitive advantages, which focuses on both the internal environment (the production of knowledge and skills within the organization) and the external environment of the organization (the cooperative and the competition mode).

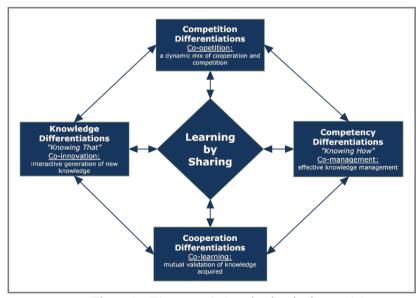


Figure 1 – The systemic learning by sharing model Source: Pohontu et al. (2012)

Essentially, through this model, "competitive advantage" and "learning by sharing" are seen as two common processes through its objectives (market needs constant adaptation to remain efficient), and from the point of view of perspective of time (long-term). However, the biggest challenge of this model is effective mobilization of certain interactions in organizations before (or simultaneously) in order to compete with external factors as well as organizations need to transform knowledge (both owned by the organization and its members) in organizational skills using cooperative relations. The proposed model is an "open" model, bearing in mind that it accords attention also to the external factors (competition, status and trends in the environment).

Thus, unlike other models found in the literature, the proposed system model reveals the complexity achieved by the activities of organizations in knowledge-based economy. In this economy there is a free open world economy (mobility of goods, services, capital assets, information and knowledge), organizations must be based on both competition and cooperation. Therefore, to become more adaptable and to be able to respond quickly to the market changes, there must be a high interest for learning. Such versatility is not just about learning and knowledge creation, but also about the creation of new connections between these components, known by scientists as "Cognitive Division of Labor" (Mouhoub, 2003), stating that connections are also important than each component to create new knowledge.

On the other hand, as mentioned above, due to the continuous flow of individuals within organizations, learning and knowledge sharing are two very dynamic processes. The purpose of learning and knowledge transfer leads to competence development, and to be more specific to become more competitive. The proposed system achieves a synergy between the two processes: "learning" and "knowledge sharing". However, the most important feature of this model is that it promotes learning through knowledge sharing taking into account the four differentiations of an organization: cooperation, knowledge, skills and competition. Adding this differentiations was possible by combining the four forces of Porter skills within the organization.

Term "differentiations" is used because it is a concept in "business strategy" and can be considered a way to establish a long-term competitive advantage. Moreover, these differentiations involved aims to propel a long-term strategy by focusing on the processes of learning by sharing. Combined with the four forces of Porter, description and argumentation communities of practice carried out by Duguid (2005), "Knowing That" and "Knowing How" ontologies were added to this model. This approach was made because there are two kinds of knowledge; one that is reflected from a practical standpoint - Knowing How, the other is reflected from a theoretical point of view - Knowing That. Also, these two kinds of knowledge reflect different understandings of learning.

3. 2 The four differentiations processes comprised in learning by sharing model

The systemic model learning by sharing as developed in this chapter incorporates interactive cooperation and collaboration between the four differentiations involved at a high level of

learning by sharing. In the following paragraphs the four differences involved in the proposed model are presented.

On the horizontal part of the model are two distinctions that have a direct connection with individuals within organizations, namely knowledge and skills by the means of two kinds of knowledge: "Knowing that" and "Knowing How". Despite this, two aspects cannot be substituted; Knowing How does not lead to knowing that.

- 1. *Knowledge-based differentiations* are created, mediated and contested through social interactions that occur within the organization. By definition, the generation of knowledge is a dynamic process of interaction between equipped partners. Organization could be regarded as a system of knowledge in a strong sense, organizational knowledge cannot therefore be seen as a whole. As mentioned before, differentiation based on knowledge includes the theoretical aspect of the act of "knowing", the aspect of "knowing that". Thus, this process can be seen as a step in developing skills and co-innovation, because it includes more and less explicit knowledge, tacit knowledge. Therefore, with great power on knowledge sharing, organizations are less likely to face one of the biggest challenges, namely the continuous development of skills.
- 2. Competency-based differentiations refer to practical sense of the act of knowledge, i.e. "knowing how". In contrast to knowledge based differentiation, this differentiation is built mostly of "tacit knowledge". In this respect, co-management can be considered as a partnership of knowledge, like a problem solving process (rather than a static arrangement) and includes both the generation of knowledge and shared learning. Joint learning approach is closer to the concept of cooperative learning. Unlike individual learning, which can be competitive in nature, members involved in the common learning process exploit learning resources and expertise between them (by requiring other's information, to evaluate an idea, work monitoring, etc.). In order to achieve a co-management is necessary to apply effective knowledge management.
- 3. *Cooperation-based differentiations*, refer to the validation processes and creating mutual knowledge. Unlike individual learning, individuals involved in co-learning leverage the resources and skills to each other. Specifically, co-learning is based on the fact that such knowledge can be created within the organization, where members actively interact by sharing experiences and taking asymmetric roles.
- 4. *Competition-based differentiations* through competition based on co-opetition, represent a dynamic mix of cooperation and competition. From another perspective, strong competition between organizations must turn into co-opetition links (by this collaboration organizations can achieve a high level of innovation and knowledge), as presently knowledge became more collective than in the past. This concept describes the fact that in the current business environment in order to be competitive in the long term, organizations need to collaborate with other organizations in the same field. The competitors can join together to enjoy a common edge through a temporary or long-term partnership on the transfer of knowledge. A famous example of the applicability of the concept of co-opetiton can be found in the IT

industry, specifically cooperation between IBM and Apple PowerPC chip development. IBM and Apple's direct competitors in the same market have collaborated to accelerate development, reduce costs and increase their market value. However, the dark side of this concept is the need for a greater focus on specific issues, such as how, by whom, when and under what conditions knowledge is transferred.

It is already mentioned that the main source of knowledge-basd management is the process of "knowledge sharing", but in the proposed system model, knowledge sharing takes place by considering differentiations through cooperation and differentiations on competition. From a classical point of view, knowledge sharing is primarily focused on a process that results in the organization. Therefore, inside of complex society, organizations must learn to build and use both "knowledge sharing" and "knowledge war" that takes place between the two dimensions, namely: the internal and external environment. These two differences are important because the generation of knowledge helps build mutual competences, intelligent action and, therefore, a higher possibility of achieving or maintaining a competitive advantage.

To summarize, our systemic approach takes into account 4 main aspects of a systemic approach, 1 - interactions between agents (the interactions between levels and agents are important, they could create a meta level wich could organize learning in intermediary approach), 2 - building an intermediary level which will be involved in learning by sharing behavior (the whole is more than the sum of its parts, the intermediary level is very important and useful to create new behavior based on learning by sharing because such behaveior needs confidence, and this could be reached by community of practice at intra and interorganizational level), 3 - the dynamic character of learning by sharing (the learning by sharing processes cannot be copy and implement in different organization, this kind of processes require adaptation to the environment and culter of each organization on reward motivation), 4 - the key role of communication in the learning by sharing (in order to implement and develop learning by sharince procees the involved agents must be capable to communicate in the right level in using the same concept and the same way of practice.

This type of new model of learning by sharing increases the effectiveness of different actors and the total stock of knowledge available to the company, and shows how important it is today to know simultaneously how to produce, consume and share knowledge within organizations for increasing their effectiveness. In this sharing mechanism, the relationship between the exchange of explicit and implicit knowledge are crucial. Based on the work of Nonaka (1994), these two types of knowledge are embedded in a dynamic process. This process of sharing knowledge to manage complex situations in the global economy where agents must also simultaneously *learn and teach* others and must also simultaneously *cooperate and compete*.

4. RESEARCH METHODOLOGY

Considering the proposed systemic model of learning by sharing, the following research model is proposed with the role of investigating the relationship between the four differentiations included. After using the approach proposed by Rajagopalan (2001) the analytical framework of this study is threefold: determinants, processes and outcomes.

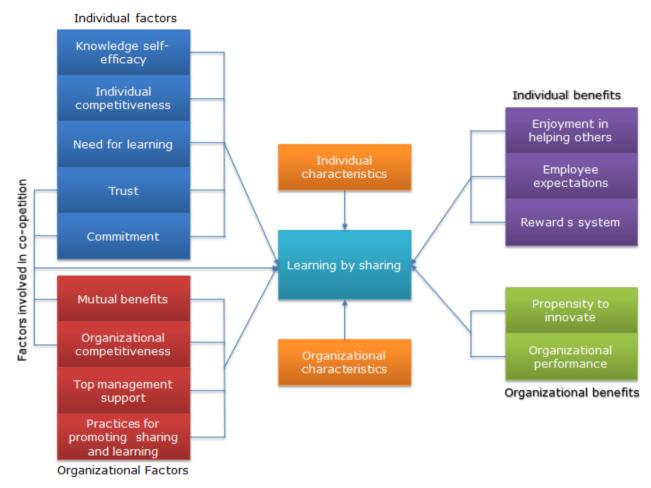


Figure 2 – Research model

As seen in the figure above, the research model includes seven variables divided into 15 dimensions. In this research model, the emphasis is on learning by sharing process, these two variables were combined into a single variable called "learning by sharing". The dimensions used in this research model were adapted from previous studies, and were validated and used by most researchers in the field.

However, the originality of this research model comes from the fact that learning by sharing process are combined under a single process and are certified in accordance with the key factors of cooperation – competition mix, individual and organizational factors and organizational and individual benefits.

Therefore, strategy and research methodology for the study of these topics is be based on a review of the views expressed in the literature and adopt the most appropriate research direction, in agreement with the realities of the investigated area, namely Romanian organizations.

Given the fact that literature review of this study is focused on testing the integrative model for promoting synergetic processes of knowledge sharing in the purpose of innovation, the specific objectives of the research can include:

- 01. Testing the learning by sharing model by conducting a quantitative research.
- O2. Analysis of the operation of knowledge sharing based on the four differentiation of an organization.
- O3. Determining the impact of learning by sharing processes on individual and organizational benefits.

Analyzed sample

Taking into account the intended research purpose, the target population of this research consists of employees from organization located in North-East region of Romania, from private sector, regardless the dimension or field of activity.

In the preliminary phase, the questionnaire was tested through its application within 10 managers for ensuring the consistency of the message sent. In this phase, respondents were asked to examine the meaning, relevance and clarity of the questions used in the questionnaire.

Measuring instrument and description of the involved variables

The development of the questionnaire that investigates general attitudes and perceptions regarding knowledge transfer and organizational learning in Romanian organizations was undertaken by taking into account the purpose and the objectives of the research. Thus, the investigated population was based on a probabilistic sample based on simple random selection.

Setting the content of the questionnaire

For each considered dimension was constructed or adopted from the literature, a set of representative questions that could show the most important aspects of the dimension.

The design of the questions was considered following basic rules (Leonte, 2001): applicability of the question, clarity and accuracy of the question, subjects' ability and willingness to answer correctly, the simplicity of the used language, reducing the load of subjectivity of the question, avoidance of double meanings load of the questions and reduction of their size.

Carrying out the research

The research was conducted during April – May 2013 and was based on the population made of organizations located in Northeast region of Romania. The research method was a descriptive explanation based on self-administrated questionnaires distributed by e-mails. This meant to help in verifying the hypotheses and to determine the responsible factors for producing or not producing behaviors. The questionnaire was sent by e-mail based on a call for study participation to a total of 5600 organization. In the invitation was stated that the purpose and the results of the research will be used only for scientific reasons. In addition, it has been stated that it is very important to be honest when they answering the questionnaire

items. In this sense, it was specified that all data provided will be kept confidential. Moreover, through the e-mail has been explained how to complete the questionnaires and how to use scales. Of the total of e-mail sent, 280 valid questionnaires have been received, representing a response rate of 5%.

5. ANALYSIS OF RESEARCH RESULTS

H1 – There is a direct relationship between individual factors and learning by sharing, in the sense that the individual who will get high scores in terms of individual factors will have a high level of learning by sharing behavior.

			Total score for learning by sharing
Sig.	(2-	Knowledge self-efficacy	537
tailed)		Individual competitiveness	.044
		Need for learning	.384
		Trust	481
		Commitment	.117
N			280

Table 1: Correlation between individual factors (component dimensions) and learning by sharing

In order to verify if there is a significant correlation between individual factors and learning by sharing, in the first stage was calculated the total scores for those two included variables. Total score for individual factors was based on calculating the scores for each of the five dimensions (KSE, IC, NL, T, E), then was calculated the total score for all dimensions. In this way was preceded with learning by sharing variable. Thus, it was possible to calculate the Spearman r correlation coefficient.

Based on correlation coefficient analysis it can be stated that the first hypothesis is partially validated.

At first glance, the results show that not all dimensions included in individual factors variable have influence on learning by sharing. Taking into account the construction of the hypothesis, there was a need for a detailed investigation. Thus, *knowledge self-efficacy* and *trust* registered negative results, in terms of correlation coefficient. In essence, this result is contrary to expectations; the influence of these factors has been seen as positive in several studies (Cabrera et al., 2006, Lin, 2007; Tseng, 2007, Chen et al., 2012; Ignasio and Rios, 2013).

According to the literature, there are many ways of explaining human behavior. One of the most powerful theory is social cognitive theory formulated by Bandura (1986, 1999), which states that individuals are not autonomous agents which act without context influence, or entities who mechanically respond to environmental conditions. In his theory, personal factors, the context and the behavior work as determinants of mutual influence (Bandura, 1989). Therefore, human behavior is partly self-generated and partially determined by environmental conditions. In terms of social cognitive theory, individuals are agents, self-assessors of motivators and actions who are constant concerning the interaction with the

environment (Bandura, 2001). A central concept in social cognitive theory of Bandura, is represented by self-efficacy theory, which is concerned about individual beliefs about their capabilities to achieve a certain performance behavior. However, self-efficacy is not associated with a number of skills who can be owned by individuals, but is focused on individuals' beliefs about their own ability to act in a variety of circumstances (Cisneros and Munduate, 2000). Knowledge self-efficacy contributes whether a person can take to finish a certain task. Thus, it is expected that a person with a high self-efficacy is more prone for knowledge sharing. There is several research which link self-efficacy with knowledge sharing behavior (Endres, Endres, & Chowdhury Alam, 2007 Mon & Leung, 2004 Mon, Leung & Koch, 2006). Moreover authors such as Bock and Kim (2002) found a positive relationship between these two variables, however self-efficacy was understood as expectations of those who contributes, which is moving away from the original concept of Bandura (1977).

Regarding individual competitiveness dimension, the value of correlation coefficient (0.044) indicates that this factor has the lowest value, indicating that it is not an important factor of influence on learning by sharing. According to the authors such as Schepers & Van den Berg, 2007, Wang, 2004; Willem & Scarbrough, 2006, an organizational climate that emphasizes individual competitiveness can be a barrier for knowledge sharing, while the prospect of cooperation helps to create confidence, a necessary condition for knowledge sharing. Also, Wang (2004) noted that it is unlikely that knowledge sharing takes place between individuals who are competing for a certain interest (extrinsic or intrinsic motivation).

H2 – There is a direct relationship between organizational factors and learning by sharing in the sense that individuals who will get high scores on organizational factors will have a high level of learning by sharing behavior.

		Total score for learning by sharing
Sig. (2-	Mutual benefit	522
tailed)	Organizational competitiveness	042
	Top management support	.547
	Practices for promoting knowledge sharing and learning	.485
N	-	280

Table 2: Correlation between organizational factors (component dimension) and learning by sharing

In order to verify the second hypothesis, Spearman coefficient correlation was calculated. The condition of distribution normality of the variables was verified through Kolmogorov-Smirnov z, for organizational factors the results were K-S z = 1.417; p<0.05 (0.036), in this case the distribution is not normal, regarding the learning by sharing variable the results were K-S z = 1,219; p>0.05 (0.102), the distribution were normal. As the condition of linearity was accomplished, the Spearman correlation coefficient has been calculated.

According to results, there is a positive correlation between organizational factors and learning by sharing, since r = .174 p = 0.0, p < 0.05.

Similar to overall organization, individuals are acting in their own interest. Therefore, it was considered important to study the motivation that goes beyond relationships. Thus, on the assumption that both parties can benefit from relationship. Because of the importance of collaboration in terms of relationship, this aspect was investigated separately by trust and commitment, which are seen as key determinants of relationships. The negative value of mutual benefits indicates that an individual who is in a cooperative relation with its competitor will get the advantage of knowledge accumulation. Through collaboration, individuals aim to increase knowledge, and through competition they will try to gain competitive advantage. Therefore cooperation between individuals in the sense of learning by sharing cannot take place unless the conditions of cooperation will be followed.

H3 – There is a direct relationship between factors involved in co-opetition and learning by sharing in the sense that individuals who get high scores on factors involved in co-opetition will have a high level of learning by sharing behavior.

		Total score for learning by sharing
Sig. (2-tailed)	Trust	481
	Commitment	117
	Mutual benefits	522
	Organizational competitiveness	.042
N		280

Table 3: Correlation between factors involved in co-opetition (component dimension) and learning by sharing

In order to verify the second hypothesis, Pearson coefficient correlation was calculated. The condition of distribution normality of the variables was verified through Kolmogorov-Smirnov z, for factors involved in co-opetition the results were K-S z=1.122; p<0.05 (0.161) in this case the distribution is normal, regarding the learning by sharing variable the results were K-S z=1,219; p>0.05 (0.102), the distribution were, as well, normal. As the condition of linearity was accomplished, the Spearman correlation coefficient has been calculated.

According to results, there is a negative correlation between organizational factors and learning by sharing, since r=-.324 p=0.0, p<0.05. Therefore, the third hypothesis is rejected.

As can be seen from above table, the values of correlation coefficient in terms of trust, commitment and mutual benefits recorded negative results, while only organizational competitiveness recorded a positive result, but not a very statistical significant correlation. Thus, mutual benefits have the highest value, and the lowest was achieved by commitment. From this results it appears that individuals who commit in a relationship with the competitor they will not embrace learning by sharing.

The result of this hypothesis indicates that the aggregation of the four considered dimensions in order to verify the influence on learning by sharing indicates that it is not necessary to

propose new work procedure to promote collaborative relationships based on co-opetion. Therefore, in the final framework, this variable will be removed. The individual openness on the possibility to collaborate with competition will be analyzed only in terms of mutual benefits.

H4 – *Individual benefits may be associated with a high level of learning by sharing behavior.*

		Total score for learning by sharing
Sig. (2-tailed)	Enjoyment in helping others	.248
	Employee expectations	.245
	Rewards system	.216
N		280

Table 4: Correlation between individual benefits (component dimensions) and learning by sharing

In order to verify the fourth hypothesis, Spearman coefficient correlation was calculated. The condition of distribution normality of the variables was verified through Kolmogorov-Smirnov z, for individual benefits the results were K-S z = 1.899; p<0.05 (0.036), in this case the distribution is not normal, regarding the learning by sharing variable the results were K-S z = 1,219; p>0.05 (0.102) the distribution were normal. As the condition of linearity was accomplished, the Spearman correlation coefficient has been calculated.

According to results, there is a positive correlation between organizational factors and learning by sharing, since r = .329, p = 0.0, p < 0.05.

As can be seen in above table, enjoyment in helping others dimension has the highest significant positive effect on learning by sharing, in terms of individual benefits (0.248). This result is consequent with previous studies found in the literature. Therefore, managers are encouraged to promote a behavior based on social exchanges. On other hand, reward system dimension recorded the lowest value of the correlation coefficient (0.216). This result is confirmed by previous studies who stated that this factor is not an important factor in promoting knowledge sharing (Constant, et al., 1996; Gupta and Govindarajan, 2000; Bartol and Srivastava, 2002, Adel et.al., 2007). A reward system could provide a temporary effect on knowledge sharing (Kohn, 1993). In this regard, Leonard-Barton (1998) stated that rewards system can determine how knowledge is accessed and flow within the organization. Moreover, rewards help in recognizing employee competences, as a fair and objective way, based on performance bonuses, which in turn increase the rewards system. As well is very important that employee do not fear that their careers may confront with danger if knowledge sharing can lead to mistakes or failures.

An important aspect in sense of individual benefits is psychological contract. A psychological contract includes subjective beliefs about time sharing and therefore commitment to the organization as a result of rewards receiving. It makes referrals to unwritten items of exchange relationships between employees and organization and includes employee beliefs about organization obligations towards them (Rousseau, 1995). In other words, it is about

employer-employee relationship governed by social exchanges and norms of reciprocity (Conway and Briner, 2005).

Following the verification of this hypothesis, it appears that individual benefits are an important aspect in creating learning by sharing culture, and greater emphasis should be placed on cognitive human being. The success or failure of the organization in fulfillment of its obligations to employee has influence on employee engagement concerning organizational effectiveness. Obligation compliance of both parties has a positive impact on employee attitudes towards strategic advice and operational contributions. It is also argued that employee satisfaction is an important factor in determining the quality of service (Zeithaml, et.al, 1990), which means that a successful psychological contract between employer and employee has a direct influence on acquiring and maintaining a durable competitive advantage.

H5 – Organizational benefits may be associated with high level of learning by sharing behavior.

		Total score for learning by sharing
Sig. (2-	Propensity to innovate	.315
tailed)	Organizational performance	.330
N		280

Table 5: Correlation between organizational benefits (components dimension) and learning by sharing

In order to verify the second hypothesis, Spearman coefficient correlation was calculated. The condition of distribution normality of the variables was verified through Kolmogorov-Smirnov z, for organizational benefits the results were K-S z = 1.196; p<0.05 (0.001) (Appendix 13), in this case the distribution is not normal, regarding the learning by sharing variable the results were K-S z = 1,219; p>0.05 (0.102), the distribution were normal. As the condition of linearity was accomplished, the Spearman correlation coefficient has been calculated.

According to results, there is a positive correlation between organizational factors and learning by sharing, since r = .343 p = 0.0, p > 0.001. Therefore this hypothesis is validated.

As can be seen from above table, organizational performance dimension recorded the highest value of correlation coefficient in relationship with learning by sharing, namely (0.330). However, the results of component dimensions of organizational benefits does not have high significant differences, which means that promoting of learning by sharing could have long effect on assuring a propensity to innovate and organizational performance. The results of this coefficient correlation are confirmed by previous empirical studies who have been concerned about one of these dimensions included, namely propensity to innovate for knwoeldge sharing (Wasko and Faraj, 2005; Jantunem, 2005), and organizational performance for organizational learning (Brown & Duguid, 1998, Hansen, 1999; Mesmer-Magnus & DeChurch, 2009).

6. CONCLUSION

In current economy, organizations undergo a double mutation: everything is marketed and capitalized, and knowledge and innovation have become the pillar of competitive advantage. The main purpose of this paper is based on concepts from "knowledge management" and "organizational learning" field as discussed in the literature, being treated independently by some authors. Such an approach resulted in increased ambiguity between the two concepts. Essentially, the learning by sharing process has three advantages, according to traditional approaches. Firstly, the learning by sharing approach is represented by the dynamic method established for a long – term to increase the organizations' competitiveness. Secondly, the learning by sharing – based processes can be useful and applied without requiring the financial resource. In this respect, employees only need to cooperate and be open to suggestions from other colleagues. And finally, by promoting learning by sharing procedures the creation of a working environment (avoiding unfair competition) can be ensured.

Therefore, in addition to contributions to the theory, the results of this study contribute in practical terms, the relationships between the factors that influence learning by sharing may provide a clue as to how organizations can promote knowledge sharing – based culture.

By combining the power of knowledge sharing to organizational learning, organizations can create procedures, cultures and structures that allow scanning, evaluating, anticipating and taking concrete measures on unexpected threats and opportunities.

The proposed model depends on the collective understanding of the processes inducing the learning by sharing behaviors. Therefore, learning by sharing can be used by organizations in order to develop a realistic environment that can conduct knowledge sharing.

By increasing the level of learning and knowledge generation within an organization, the synergy between knowledge sharing and learning process becomes increasingly clear. In acceptance of this premise, we can't say that the two concepts, "knowledge sharing" and "learning process" can be treated separately, but more than that they can't function one without the other. Therefore, we can summarize the following benefits of learning by sharing concept. Organizations should fulfill their role of learning organizations by integrating knowledge management and organizational learning initiatives and practices within functions. By implementing such practices, they will be capable of acquiring a sustainable competitive advantage. The success of knowledge management initiatives and promotion of organizational learning can only be achieved if the organization is concerned with establishing a clear long – term strategy. Such a strategy should be implemented taking into account that knowledge – based resources necessary for the organization to become one that learns. The existence of a unified culture can reduce the communication barriers and lead to a closer cooperation within the organization. Thus it must show the existence of a framework whose components (vision, strategy, values, etc.) recognize the benefits raised from supporting organizational learning and knowledge transfer. In order to achieve the synergistic benefits of knowledge sharing and organizational learning initiatives, organizations should develop deliberate strategies that serve to integrate human resource management principles. Human resource management can motivate, encourage or facilitate knowledge sharing through policies. Moreover, organizations should strive to improve employee retention rates, so that knowledge can be retained within organizations. It is also required the understanding that the purchase of computer systems or installing computer networks will not ensure the knowledge sharing promotion. Instead, successful learning by sharing lays in the availability of qualified sharing and knowledge application staff, so that the technological tools have only a facilitating role.

Current views of human resources management argue that there should be a strategic orientation that would allow the organization to build its own unique human capital needed to possess a sustainable competitive advantage. This suggests that organizations with different strategies most likely will need different types of human capital in order to achieve success. However, in the ever changing competitive environment that the organizations are facing today, some skills are required regardless of the business strategy: the ability to continuously renew knowledge – based assets. The human resource management should therefore devote its efforts on understanding the way in which the knowledge flow increases that would ensure adaptation to unforeseen competitive forces. Understanding the dynamics of knowledge sharing can help identify people management practices in organizations.

Moreover, organizations must not only develop and expand employee knowledge, but must use mechanism and procedures in order to transform individual knowledge in assets. Continuous use of knowledge does not diminish the value, as other inputs. Conversely, the more knowledge is more widely used, the more it can be developed gradually, as employees gain experience in the business, yet they can be lost easily by employees who leave the organizations (personnel fluctuation). Therefore it is extremely important for modern organizations to develop logical mechanism and methods for learning by saring in order to systematize knowledge and information based assets and to optimally combine existing knowledge in order to enhance organizational performance.

Summary of empirical results

The analyses made on achieving target four, respectively testing the integrated model for promoting synergistic processes for knowledge transfer towards innovation, on the North – East organizations showed that:

- individual factors have a partial influence on learning by sharing. Thus, the knowledge self-efficacy and trust dimensions recorded the highest negative score (-0,537, respectively -0,481). Essentially, the results of this study are inconsistent with the previous studies conducted on the knowledge self-efficacy in terms of learning by sharing process.
- the need for learning has recorded the highest score (0,384). This result indicates that individuals with a high level of need for learning are more prone to learning by sharing, but are not motivated by the performance. Performance oriented individuals are not open to engagement in activities aimed at improving skills and knowledge, which by their nature are

complex and have long – term effects (Kozlowski, 1997), but rather are directed on activities that endure immediate success.

- knowledge self-efficacy dimension has recorded the lowest value of correlation proving that individuals who do not trust their personal capacities and do not think that can contribute to organizational efficiency, are not likely to share knowledge. In such situations, managers should seek to encourage a proactive behavior.
- organizational factors showed a significant positive correlation between the two analyzed variables. From this influence point of view, it was found that there was coherence with the previous studies that used the same dimensions. Of these, management support dimension recorded the highest value of the correlation coefficient (0.546). These results are confirmed by identified studies in the literature (Lin, 2006). On the other hand, collaboration conditions dimension recorded the lowest value of the correlation coefficient, -0,522 respectively. Thus, it is clear that individuals who are not open to cooperation with competition will not be willing to learning by sharing.
- that most component dimensions recorded negative values. These results indicate that the summing of the four dimensions considered for verifying the influence of learning by sharing shows that it is not necessary to propose new work procedures to promote the collaboration competition mix based relationships.
- in terms of learning through knowledge transfer benefits, both categories of benefits recorded a positive influence on the learning process of knowledge transfer. These results are similar to those found in the study records. Thus, the satisfaction to help others dimension is the main reason for which the individuals are predisposed to learning by sharing, this variable recorded the highest score in terms of individual benefits (0,248). In contrast, the reward system achieved the lowest value of the correlation coefficient (0,216). This result is confirmed by previous studies highlighting that the reward system is not a very influential factor of knowledge sharing (Bartol and Srivastava, 2002). An effective reward system could provide a temporary effect of the knowledge sharing (Kohn, 1993).
- in terms of organizational benefits, organizational performance dimension recorded the highest value of the correlation coefficient (0,330). However, between the organizational benefits of the two component variables there are no important differences. Also it is important for employees not to be afraid that their under development careers may face danger if the knowledge sharing may lead to mistakes and failure. In terms of individual benefits two important aspects are the psychological contract and positive psychology. In other words, it is the employer employee relationship governed by social changes and reciprocity norms (Conway and Briner, 2005).
- in terms of individual characteristics, the results indicate that the education level and years in the same organization have a statistically significant influence on the learning by sharing. Thus, from the education level point of view, research findings have highlighted the fact that individuals who have a medium, secondary or post-secondary education level are more likely to have willingness to learning by sharing compared to those who have a higher education or postgraduates master. Regarding the influence of seniority within the

organization concerning the learning by sharing, it was found that as individuals have a higher seniority in the organization are more likely to transfer knowledge. One of the reasons for which this result has been registered could be the development of an equitable relationship between employees and organization over time.

Overall, research findings highlight several implications in practical terms that can be considered by managers in order to promote learning – based culture through knowledge transfer. First, it is confirmed that some individual factors may have a high influence on learning through transfer. Thus, managers should promote a social networking – based culture, because this is the preliminary stage for the knowledge transfer to occur. Secondly, they should not focus on a rewards system, but more on promoting a positive attitude regarding the satisfaction of helping others through knowledge transfer. Such strategies could have a long – term and not a short – term effect. On the other hand, managers can observe that learning through knowledge transfer has a high influence on innovation and organizational performance, this result is further evidence when deciding a long – term oriented strategy.

Following the present accomplishment, the consequent main conclusions can be listed:

- 1. Organizations should fulfill their role of learning organizations by integrating knowledge management and organizational learning initiatives and practices within functions. By implementing such practices, they will be capable of acquiring a sustainable competitive advantage.
- 2. The success of knowledge management initiatives and promotion of organizational learning can only be achieved if the organization is concerned with establishing a clear long term strategy. Such a strategy should be implemented taking into account that knowledge based resources necessary for the organization to become one that learns. Achieving of a better communication strategy, creating a coherent context for systems and people within the organization are some steps that must be taken. The existence of a unified culture can reduce the communication barriers and lead to a closer cooperation within the organization. Thus it must show the existence of a framework whose components (vision, strategy, values, etc.) recognize the benefits raised from supporting organizational learning and knowledge transfer.
- 3. In order to achieve the synergistic benefits of knowledge transfer and organizational learning initiatives, organizations should develop deliberate strategies that serve to integrate human resource management principles. Human resource management can motivate, encourage or facilitate knowledge transfer through policies. Moreover, organizations should strive to improve employee retention rates, so that knowledge can be retained within organizations. It is also required the understanding that the purchase of computer systems or installing computer networks will not ensure the knowledge transfer promotion. Instead, successful learning by sharing lays in the availability of qualified sharing and knowledge application staff, so that the technological tools have only a facilitating role.

The value of the article reside from a guidance for practioners in order to see the importance of the learning by sharing process in current economy, and as well for academics in order to

introduce a new paradigm in current economy, learning by sharing. Based on further research the proposed learning by sharing model will be developed a research methodology for empirical analysis. Even the learning by sharing model is designed at micro, meso and macro level (as the competitive advantage of Porter, 1990), by future research the value of this model could be shown based on a qualitative and quantitative research method.

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