Literature Analysis of Transfer and Learning Tacit Knowledge

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Abstract. *In discussing knowledge management as process for organizing and distributing collective knowledge in organizations with goal of reaching the right information to the right people at the right time [37, 380], important part of it is tacit knowledge. Through an extensive literature review this paper addresses issues of tacit knowledge transfer by personality and attitudes of employees towards the organization. Attention is placed on organization's commitment and confidence in associates and willingness to cooperate with other employees. Also, attention is paid to the transfer of skills and learning tacit knowledge through mentoring and coaching with emphasis on the support of modern information and communication technologies.*

Keywords. Knowledge management, Tacit knowledge, ICT, Knowledge sharing, Knowledge transfer

1. Introduction

The importance of intangible assets has increased rapidly in knowledge society. In order to survive, companies are in need of competitive advantage of more efficient exploitation of human resources and intellectual capital. One of the rising functions in organizations is the *intellectual capital management* and an important part of it is the *Knowledge management* (KM). Organizational support is required in each and every step to enhance learning and performance of organization.

Knowledge is the most important intellectual property and asset of the company [4, 7] and resource that enhances competitive advantages of each organization. It is an integral part of employees and as such it can be distinct from employee to employee and can be combined and used depending on employees. Application of knowledge depends on the situation, the perception of employees about the situation, employee attitudes and their personalities.

Various authors address the questions in defining KM by distinguishing *knowledge*, *information* and *data*. Although these three terms are sometimes used interchangeably, the terms are quite distinct one from another. Knowledge is information that facilitates action, i.e. individuals who are the domain experts within organizations. Data comprises facts, observations or perceptions, whence information is a subset of data including those data that posse's relevance and purpose [13]. Knowledge is defined as justified belief that increases an entity's capacity for effective action [31].

Drawing on the work of Polanyi [36] and Nonaka [30] two dimensions of knowledge emerge in organizations: *tacit* and *explicit*. This typology of knowledge had the considerable influence on theory of organizational learning and knowledge management in general [35, 10]. The aim of this paper is to present most important elements associated with transmission and ways of learning and transferring the tacit knowledge among employees, with emphasis on the support of modern information and communication technologies (ICTs).

2. Perspectives on knowledge

Attempt defining the knowledge was done by numerous authors examining the sources of knowledge, its nature and different knowledge sharing ways.

Unlike the information, which is visible, independent of various actions, decisions and environment and which can easily be conveyed and duplicated, knowledge is invisible, closely associated with the actions and decisions and identifies itself with existing environment; also is transferable through learning and cannot be duplicated [19, 25].

There are different kinds of knowledge that are classified according to different criteria through numerous divisions. Alavi and Leinder [1] presented several perspectives on knowledge. First one is

viewing knowledge as a state of mind which focuses on enabling individuals to expand their personal knowledge and apply it according to organizations' needs. The second perspective is as an object which posits that knowledge can be viewed as a thing to be stored and manipulated (i.e., an object). Also knowledge can be viewed as a process and a condition of having access to information. According to this view, organizational knowledge must be organized to facilitate access and retrieval of content. The fourth view of knowledge is as a capability. This suggests that KM perspective is centered on building core competencies, creating intellectual capital and understanding the strategic advantage of know-how.

According to some authors knowledge can be divided into *nonempirical* (occurred through reflection) and *empirical* (created through experience) [17, 256].

For the purposes of this article knowledge is defined as "*information + application + social environment + innovation and research*" [9, 178], whereby knowledge is viewed as a set of information corresponding to a particular context (Burton & Obel, 2004) by [35, 9].

3. Knowledge management – tacit knowledge transfer

Before digging deeply into the distinction among knowledge and knowledge sharing, the basis of KM has to be presented. Many and certainly most of the successful companies today are concerned with KM. This arises from the importance of knowledge for the organization and is highlighted in current organizational theory and contemporary organizational trends. KM is not only a necessity, but a source of competitive advantage and thus an important strategic resource for business organizations.

The term KM does not imply on a set of technologies or methodologies, but a practice and discipline that involves interaction of people, processes and technology [15]. It is set of procedures and technological tools that ensure an integrated and systematic approach in identifying, managing and sharing intellectual property of organizations.

Knowledge management is defined as "*creating, acquiring, storing, sharing, transferring and utilizing both explicit and implicit forms of knowledge at individual, group, organizational and community level through harnessing of people, process and technology*" [23]. Some authors perceive KM from an operational perspective, as systematic process by which "*organization indentifies, creates, acquires, shares and leverages knowledge*" [5]. In recent years many of the researchers have been interested in the area of KM and employees, more in human resources management (HRM), combining it with perspectives of strategy management and information technology. HRM is approach that creates trust and learning atmosphere, so that enables employees to create, share and utilize the knowledge and expertise.

The initiation of KM process involves creation or acquisition of knowledge by an organization or individual. After the new knowledge is created, or acquired, the KM mechanisms should store the knowledge and make it formalized and accessible. Second step is sharing or transferring the new knowledge from a sender to a known receiver. Once the knowledge is shared, it can be used in facilitating innovation or incorporated in organization's products, services and practices to derive a value from it [23].

Chivu and Pospescu [5] analyzed the main role of HRM in KM. They concluded that HRM helps the organization to articulate the purpose of KM systems; also that HRM is a knowledge facilitator and an experience creator. They discussed the ways in which specific functional areas of HRM (employee resourcing, career management, human resources development) can respond to challenges of KM and also the role of HRM in facilitating innovation and creativity. They also indentified two distinct strategies for effective implementation of KM process: *explorative strategy* and *exploitative strategy*. Exploitative strategy supports acquiring, storing, transferring and utilizing knowledge and explorative strategy supports creating, sharing and utilizing knowledge. For effective implementing, each strategy requires desired situation. Organizations can manage them by exploitative strategy. Exploitative strategy encourages company and people to document their explicit knowledge to databases in order to re-use knowledge and for its success organizations have to create and reinforce IT-based situation.

Mathew et al. [27] conducted a study which showed that the KM initiative is essentially determined by the organizational culture, structure and technology. They concluded that organizations should have affect on all three factors to be able to successfully exploit knowledge in organization. Research conducted by Daud and Yusoff [10] suggests that a combination of process of KM, as well as organizational skills and intellectual capital as a strategic organizational asset, enables the increases of organizational effectiveness.

3.1. Tacit vs. Explicit knowledge

Study of tacit knowledge, which was first started by Michael Polanyi [36], can be characterized as "invisible" and difficult. In his numerous works, Polanyi dealt with tacit knowledge which evoked a great interest in other authors. This resulted in significant numbers of papers and studies and above all disagreements and contradictions about this issue.

Two key words bind many definitions of tacit knowledge: intangible and inexplicability. Also, tacit

knowledge is almost always seen in relation to explicit knowledge.

Explicit knowledge is accurate, it is easy to articulate and therefore easy to code, document in writing or in pictures, easy to carry, share and communicate – it is generally more accessible and systematic than tacit knowledge and relates to the technical knowledge. In contrast, tacit experiential knowledge is subconsciously understood and applied and also difficult to articulate. It is very personal, includes intangible factors that are related to beliefs, experiences and values of employees and working knowledge of employees [33, 362]. Explicit and tacit knowledge have a symbiotic relationship whereby tacit knowledge contributes to explicit knowledge and vice versa [40].

Nonaka and von Krogh [32, 636] state that tacit knowledge is closely related to senses, movement skills, physical experience, intuition and implicit rules. Tacit knowledge lies in actions, procedures, routines, ideals, values and emotions. If it leans to the explicit side, or if the part of it is explicitly defined, it is available through mind – it means that explicit knowledge is not completely separated from tacit. These two types of knowledge are in dynamic interaction and are therefore inseparable and complementary. For example, in pronouncing sentence containing explicit knowledge, it is required to have tacit knowledge to be able to express a pause, to form a sound, rhythm and find words to emphasize individuals [32, 638]. One can even say that tacit knowledge is ingrained and automatic and it is related to how people perceive themselves and environment. Therefore is rightly considered that tacit knowledge resides in individuals and not in books or databases. Wine tasting, art of playing the violin and the art of literary interpretation of complex parts can serve as examples of such knowledge.

The classification within tacit knowledge itself is not discussed by many authors. The current debate is held around Collins work "*Tacit and Explicit Knowledge*" [7] in which the author criticizes Polanyi stating that the terms defined by Polanyi are not entirely clear and consistent. Collins's work has been fertile ground for the encouragement for some authors to deal with his division and contribute with knowledge. Thus, based on Collins division, Henry recognizes in clinical medicine three types of tacit knowledge: rational, somatic (physical) and collective tacit knowledge [14, 14]. Lowney [22], however, widely discussed how tacit knowledge is more or less explicit and that tacit knowledge always has an explicit part. As there are no extremes, authors of this article agree with the thought that tacit knowledge is not fully tacit but it has a part of explicit knowledge in itself and other way around.

Finally, significant contribution in the field of tacit knowledge was given by Dinur [11]. He presented tacit knowledge taxonomy based on research on knowledge transfer, which was conducted in six multinational companies. In his paper Dinur assumes that the main classification of knowledge on two categories, explicit and tacit, is wrong, because it is impossible to completely separate the tacit from explicit and vice versa. Therefore Dinur presented nine (sub)types of tacit knowledge and through division itself provides the ability for understanding which tacit knowledge possess an explicit dimension. Types of tacit knowledge by Dinur [11, 260] are:

1. **Skill:** skills that need practice (swimming or playing an instrument).
2. **Cause-Effect:** this type of tacit knowledge is related to complex problem solving, (i.e. how to diagnose and repair a complex machine).
3. **Cognitive:** attitudes, intentions or thoughts, (i.e. as how to know a client is lying or not).
4. **Composite:** knowledge aimed at understanding a large array of varied, complex information (i.e. human anatomy or playing chess).
5. **Cultural:** different cultural concepts that the source of knowledge usually takes for granted; they are often related to collective knowledge (i.e. how to behave when given a business card from a Japanese business partner).
6. **Unlearning:** a new way of doing the same thing; this requires unlearning of past behaviours – previous practice needs to be unlearned.
7. **Taboo:** such knowledge "*must be recognized and dealt with in order to change its taboo status*".
8. **Human:** important when the use of knowledge requires human relationships and trust.
9. **Emotional:** emotions are also type of tacit knowledge.

3.2. Uniqueness of tacit knowledge transfer

Knowledge transfer, as a significant element of KM, is important issue in modern organization, especially the challenge of tacit knowledge transfer. It is necessary to define the distinction between the concepts of sharing and transferring (tacit) knowledge.

Tacit knowledge is assumed as knowledge about the behavior among cultures, emotions, cognitive knowledge that can be transmitted, as well as skills – which can be connect with externalities that occur within or between industrials sectors.

The transfer of knowledge throughout the organization is considered as a critical driver of its effectiveness, which is especially true for multinational companies [11, 246]. Chan et al. [4, 13] raised the question of how the interaction between individuals and groups should be for a successful knowledge transfer. They also discussed the key processes in knowledge transfer. They emphasize that organizational effectiveness is limited if individuals are not willing to share knowledge with other employees.

The question arises about the possible ways of learning the tacit knowledge, which are actually two sides of same coin – tacit transfer of knowledge is related to the transfer channels which are also ways of learning knowledge. For example, skills as a form of tacit knowledge for transfer include face to face interaction or a form of training. However, these channels can be simultaneously viewed as ways of learning. Of course, not all tacit knowledge is related to these channels of transmission – some manuals are transmitted and are taught by reading and remembering. An additional issue that arises relates to the impact on employees and transfer of tacit knowledge in organizations.

Transfer of tacit knowledge is associated with channels for tacit knowledge transfer, considering that some channels are less, some more suitable for this purpose. Regarding channels of transmission and its richness and effectiveness – the term channel richness denotes characteristic of the channel and includes the recipient which is actively involved, while the effectiveness of channel includes the degree to which the channel is appropriate and fits the type of knowledge transfer [11, 261]. Nevertheless that in relation to explicit knowledge the tacit knowledge transfer channels are different.

To conclude – tacit knowledge can be linked to the knowledge of others and in this way knowledge can be transmitted; it is subjective and can be transferred to the pull principle – if required, which means that employees are actively seeking knowledge and are willing to learn.

3.3. Tacit knowledge transfer in social context

The social dimension in knowledge transfer is very important – especially it relates to confidence and willingness to transfer knowledge. In the transfer of tacit knowledge in subsidiary companies it has been found that employees who are instructed to transfer knowledge in the branch should promote a trust climate that enhances interactive communication between the sender and recipient of knowledge [26].

Lee et al. [20, 12283] found that a number of collaborative knowledge networks and relationships is positively associated with creating and sharing knowledge. Particularly interesting for network transfer are people – when people connect together, multiple paths for creation and flow of knowledge exists. Combining knowledge of different employees creates new opportunities and responds to challenges in innovative ways [27]. In addition, Lin [21] argues that the survival of enterprise may be substantially undermined if employees are not willing to share/transfer knowledge, by which the very ethics foundations can seriously be affected.

One of the cases in the literature [11] is associated with the team for product development and knowledge transfer in a pharmaceutical company. A complex tacit knowledge, regarding the process of launching the product on the market, has been identified and was effectively transmitted through policies and manuals, three-day training, face to face interaction between team members and leaders and solving problems on the spot. Commitment to the team, as a cultural tacit knowledge, was also recognized and it was attempted to transfer through a three-day training and team interaction and leadership, but these channels of transmission have not proved effective. Creating unity in the group in this case was identified as *unlearning knowledge* – employees, who were individuals in performing tasks, had to go against their own ego. They have tried to create unity through the time spent together and making decisions, which was also unsuccessful because the tasks in most cases were undertaken individually and not in teamwork.

The importance of tacit knowledge transfer among employees lays in relationship and impact on organizational innovation capability and as well in networking through employee learning, blending with the culture of organization, creating a specific combination of resources and capabilities by which the organization will achieve competitive advantage. It is proved that the transfer of knowledge is precious, intangible resource and a key to competitive advantage. For example, in Uganda a research has been conducted on impact of KM on competitive advantage of companies [18] and a positive correlation has been noticed. Similarly, another study [4] has shown that competence of community and interaction allows transfer of know-how and that behavior related to effort of knowledge transfer is significant and positively correlated with innovation community members.

Empirical research was conducted on impact of channels used to transfer knowledge, on effectiveness of franchise [29]. The research showed that from three channels – operating manuals, trainings and support services – the greatest impact on the effectiveness of franchise systems had support of franchisor recipient and training.

Although it is difficult to communicate tacit knowledge, organizations must find ways of transmission of such knowledge among their employees.

3.4. Knowledge Management in Croatia

Practice of KM in Croatia was analyzed through several studies. First research has been focused on large Croatian companies and the results indicated underdevelopment of KM practices in Croatia. In fact, quite a number of companies are actively concerned about individual factors that influence the success of KM, although the research has shown that there is wide room for advancement and improvement [43]. Study [43] proves that large Croatian companies have started to manage their knowledge, but it also

indicates while information technology is the most developed factor in large Croatian companies, knowledge management measurement is the least developed.

According to another, later study [28], Croatian companies lay in the second phase of KM regarding the evaluation criterion of average maturity of KM. Also, the results of research conducted in 200 large, medium and small Croatian companies have shown that trend of KM exists and that there is a positive growth potential in future development. Empirical research was done in 2008 by Faculty of Economics in Zagreb and Ljubljana in order to determine the state of KM in Croatia and Slovenia. Researchers determined the maturity of KM in organization and general characteristics of the organization.

Though these results are encouraging and better than the results of previous research, author states that the comparison of these two studies is not possible because of different research methodologies. The statement is true that Croatian companies have progressed in KM through years, but it also challenges for perspectives in research as well as in development of KM in Croatian companies

4. Tacit knowledge in context of learning among employees

Learning in the organization is essential to ensure competitive advantage because it involves sharing and transferring knowledge and mediates between the acquisition and use of knowledge. New employees in organizations are often taught by older employees, or by "*natives*" in organization. This is important for organization because it elevates the level of knowledge of new employees. For new employees such knowledge is important because it can help them adapt to the culture of organization that may have different strategies and they have to manage it.

Interesting taxonomy of learning from an economic perspective was made by Malerba [24, 848], dividing the learning on: learning by doing, learning by using, learning from advances in science and technology, learning from industry spillovers, learning by interacting and learning by searching.

Due to the specific nature of tacit knowledge authors dare to claim that it would be wrong to separate the issue of transfer and transmission channels of tacit knowledge of the issues of learning tacit knowledge. Moreover, the channels of tacit knowledge transfer, such as apprenticeships, training and face to face communication, are means through witch tacit knowledge can be learned and communicated. For some of transmission channel this is the only way of learning, while for others appropriate are transfer channels which cannot be considered a way of learning (only learning tool that can be combined with the way of learning). Stewart [41] stated that employees may be reluctant to give away that which is seen as vital to their identity and job security. People will increasingly need to be connected to data, experts and expertise. Human resources employees may also need training in terms of their roles in KM.

4.1. Behavioral aspects of knowledge transfer/learning

Transfer of tacit knowledge, as well as sharing knowledge in the organization (as a short-term), largely depends on the employees themselves. Emphasize lies on the importance of behavioral aspects which makes the process of knowledge transfer successful. This was confirmed by Lin [21], showing that the transfer of tacit knowledge depends on confidence in commitment of employees and organization. Significant are also attitudes of employees on the mutual transfer of tacit knowledge and it should be positive. Meaning that employees should be satisfied with their jobs and be engaged and committed to organization and also have a positive attitude about how the organization perceives their contribution.

Also, considering the willingness to transfer knowledge in the aspects of people's personality, authors emphasize how conscientious people are more willing to share their tacit knowledge. Such people (employees) are more focused on the effectiveness and welfare of the organization. "*We humans have language and use the collective tacit knowledge, but there is no such tacit (or explicit) knowledge that is involved in what computers and artificial intelligence are complex, as animals do instinctively and people learn to work automatically*" [22, 34]. Collins [8, 38] adds that the animals and machines can do different things, but he argues that in this case no discussion about knowledge is possible. It is clear that discussion about tacit and explicit knowledge is a philosophical dimension and is fertile ground for opinions and contribution of many authors.

Thus, from the aspect of KM and knowledge transfer, employees will strive to achieve what is required of them. People with pleasant character and more extroverted people are better in transferring tacit knowledge because it requires openness to collaboration, good interpersonal relationships and willingness to help and also a certain degree of honesty – which is important for feedback from employees when discussing knowledge transfer and tacit knowledge learning. People in a stable emotional state are more suitable associates and people open to experiences, such as imagination and intuition, are considered the ideal in tacit knowledge transfer. In addition, the application of tacit knowledge or "*knowing the tacit knowledge*" to some extent depends on the ability of intuition and imagination.

4.2. Mentoring vs. coaching in tacit learning process

In the process of learning tact knowledge it is important for managers and group leaders to reinforce and facilitate trust, promote cooperation, openness and honesty, friendliness and spontaneity and also to encourage employees to mutual transfer of tacit knowledge. Cooperation in learning the tacit knowledge means cooperation and adjustment, whereas "*necessary to develop social skills such as communication, reciprocity, empathy, cooperation and adaptation*" [3, 51]. Transfer of knowledge must be voluntary – on altruistic basis and also personalized.

Ways of learning and teaching tacit knowledge as knowledge of *know-how* and intuitive knowledge can be most efficiently transmitted through *one on one* (face-to-face) communication. Methods of learning such as mentoring, internships, demonstration and skills application, on the job training, or perhaps an apprenticeship are best suited for this purpose. Ways of learning are related with competencies that employees need to acquire. But, whatever they were, they are associated with tacit knowledge, networking, personalization of learning to each employee and the conversation between "student" and "teacher" is important.

Due to the particular nature of tacit knowledge, it can be taught also through storytelling. Experiential or accidental learning of knowledge which is often unconscious and is learned by doing and passing through various life situations, is nowadays associated with an internship or training period [34, 257], the same can be stated for learning of tacit knowledge. When employees are not able to meet face to face, tools for networking like chat or video conference may be appropriate.

Mentoring and coaching as favorites in ways of learning tacit knowledge emphasizes the social dimension. Differences and advantages of these methods of learning tacit knowledge are reflected in questions such as: "*Who is involved in coaching and mentoring? Who sets the direction of activities and interactions? What is focus of activities? What does a mentor/coach do? What is the timeframe? What are the key qualities of mentor / coach?*" [25, 4].

Training can be conducted by an outsider and it can be a personal manager who sets goals of the process. It is focused on short-term assignments and specific skills, while the coach (trainer) provides feedback and encouragement for his "students" and endeavors to increase efficiency by offering technical improvements. It is a process that takes 3-12 months. The coach must possess the skills of learning (coaching) others, confidence development but does not have to be expert in the required area.

Mentoring means that a mentor can be someone outside the organization. He or she provides student with greater freedom to self-set goals and the role of mentor role is in giving advice, suggestions and verifying the experiences, giving feedback, but with a deeper and broader perspective. Mentoring is a form of long-term development and lasts 1-2 years, in which mentor has similar skills as those of his students and generally is an expert in the field in the specific filed [25, 4].

Mentoring and coaching are management approaches and are also set of skills for training employees and achieving results. These are the activities of learning and development, where they overlap – a good coach is also a good mentor, a good coach a good mentor, depending on the situation and relationships.

Mentorships and coaching of employees enable to achieve their full potential with a focus on skills and can be used whenever the need to raise motivation and overall organizational effectiveness arises [39, 2]. Ability of organizations is to recognize and improve existing skills to develop a strong competitive advantage – in the staff development the most attention is paid to developing different skills. For this reason mentoring and coaching are the most appropriate ways of learning tacit knowledge and organizations should pay more attention to it. This statement is confirmed by the Dinurs' tacit knowledge typology from which it can be concluded that mentoring and coaching are suitable channels of transmission and ways of learning for all nine types of tacit knowledge.

5. Supporting ICT in learning and transfer of tacit knowledge

Thanks to information technology it is possible that the individual expert knowledge is transformed into knowledge which is widely attainable [2, 11285]. Knowledge projects are more likely to succeed if they are supported by technology and web-based intranets; such tools provide opportunities for organizational learning and increase the functional specialization (Davenport & Prusak, 1998) by [27, 34].

KM uses strategies associated with ICT. Based on the fact that intranet is commonly used in KM their functions are: exchange of information among employees, participation in management, support and development activities, support in educational activities and informal chat communication [28, 200]. These systems could be somewhat appropriate for transfer and learning tacit knowledge – especially when it comes to establishing relationships between employees, exchange experiences, advices, storytelling through networking and chat.

Some of tacit knowledge may be more or less explicit – they can be encrypted and documented and can manage the storage systems of knowledge, allowing support of transfer and learning.

ICT is an important aspect of learning and knowledge transfer and although in the tacit

knowledge transfer in face to face communication has a large impact; it can be used as an effective mean of communication. Research in the level of using *Target Costing Systems* (TCS) infrastructure and information technology [6] showed that companies using such system can create, upload and share various forms of tacit knowledge among employees to facilitate innovation process. Likewise, mentors can use ICT to support their students through direct communication and interaction and so fulfilling the need for social interaction, in which they know they are communicating with living persons [12]. With ICT support in learning more employees can be involved and also geographical distance conquered. Mentors increasingly exploit quality and effectiveness of distance learning.

Also, the "*technology enables personalization and as such carries direct responsibility for learning*" [16, 273]. Videoconference can also be used in the transmission of such knowledge and learning. For example, *India, China & America (ICA) Institute* uses a various types of technology in their efforts to collect, create and disseminate knowledge. One of such technologies is *GoToWebinar.com* which is a website that allows users online meetings and document sharing [38]. It allows members of organizations from around the world to be present in one place and exchange ideas, experiences and future plans.

ICT in support of sharing knowledge and learning can contribute through long-distance communication (video conferencing and online meetings), when employees cannot meet face to face, also in sharing experiences and ideas through networking and chat. Information technology can assist in business communication, data collection, acquisition and reutilization through database, *Customer Relationship Management* (CRM), *Supply Chain Management* (SCM), *Marketing Information System* (MIS), *Event - Driven Architecture* (EDA), extranet and so on. Larger part of organizational knowledge is implicit (tacit) and that can only be shared through direct interactions. For such KM, organizations have to generate desired culture and environment based on learning, trust, commitment and participation and encourages direct interactions.

6. Conclusion

This paper points out that tacit knowledge should be viewed in comparison with the explicit knowledge, but not the way to classify knowledge exclusively into explicit and tacit, but allowing then consideration in the continuum. This means that tacit knowledge partially contains explicit part of knowledge and the question that rises is whether fully tacit knowledge exists at all. All this leads to the conclusion that when there is such division tacit knowledge can have subtypes. Dinur's tacit knowledge typology is appropriate and useful to consider the transfer of such knowledge and learning.

This paper stresses out the importance of knowledge management and presents a summary of literature on the knowledge sharing, explicitly tacit knowledge. Achieving competitive advantage, improving organizational effectiveness and innovation are positively correlated with KM and transfer of knowledge as an element of the concept, whereby it is important to emphasize the social dimension, without which it is not feasible.

In this paper, channels of transmission and ways of learning tacit knowledge are presented as the two sides of the same coin. Tacit knowledge transfer channels, such as apprenticeships, training and face to face interaction, in fact, are ways in which tacit knowledge can be learned. Finally, the transfer and learning of tacit knowledge with ICT support, can also contribute.

Human resources systems have to be directed toward creating and promotion of a learning environment. HRM has a critical role in knowledge economy in creating people-centric partnership [42]. The contribution of HRM to KM and therefore to knowledge transfer is at the high end of value chain as it is primarily used to create and sustain a culture that fosters innovation, creation, creativity and learning.

Tacit knowledge, because of its characteristics, is difficult to transmit. ICT supports partially the transfer of tacit knowledge. In this paper Intranets were mentioned, which are commonly used for information exchange, cooperation and participation in management, educational activities and for informal chat, sharing experiences, tips and storytelling through networking. Knowledge storage systems help in coding and storing tacit knowledge which can be more or less explicit. Mentoring and coaching can support distance learning. ICT as the support in transfer of knowledge and learning of tacit knowledge can contribute in long-distance communication – video conference and online meetings. Nevertheless further development of ICT will offer different solutions and support for the transfer of knowledge and learning of tacit knowledge as well as overcoming the present deficiencies.

Nevertheless, the debate about the boundaries separating tacit and explicit knowledge is still sketchy – and mostly in terms of sharing knowledge, identifying differences between them, conversion of tacit into explicit knowledge (for ease of transfer).

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