WCLTA 2010

The capabilities of the educational organizations in making use of tacit knowledge

Fatma Ozmen a, *

*Firat University, Faculty of Education, 23119 Elazig, Turkey

Abstract

Educational organizations are inherently knowledge intensive organizations. The importance and management of tacit knowledge should have been understood and should have been applied in every process of the organizations. However, the researches done on knowledge management capabilities of the educational organizations have revealed unsatisfactory consequences. From the aspect of making use of tacit knowledge, this study, based on the literature review, aimed to determine the current situation of the educational organizations in general, and to clarify the obstacles faced in explicating and sharing of tacit knowledge. In the lights of implemented strategies reached through literature review, some recommendations were made.

© 2010 Published by Elsevier Ltd. Open access under CC BY-NC-ND license.

Keywords: Knowledge management, tacit knowledge, educational organizations, competitive advantage;

1. Introduction

Knowledge management is the core subject of organizations in today's challenging world. And a major focus of knowledge management is on transforming tacit knowledge into explicit one. Since knowledge is constituted in individuals and depends on individual experiences, intuitions, insights and personal judgment, is difficult to capture. If it is extracting, it may be codified and becomes tangible form of knowledge. Otherwise it is called as tacit knowledge. Since codified knowledge is easy to be shared and used, it is emphasized that the knowledge which provide competitive advantage is tacit one. And tacit knowledge is seen as a strategic asset for competitive advantage and sustainability of the organizations.

The concepts related to knowledge are well explained by Bellinger et al (2004) who quoting Russell Ackoff, explains the classification of human mind into five categories such as data, information, knowledge, understanding and wisdom. Data is defined as symbols. It is raw and has no significance beyond its existence. If it is used to provide answers to “who”, “what”, “where” and “when” questions, it forms information. When the data is used to answer “how” question, it becomes knowledge. And the “why” questions related to knowledge constitute understanding. And, as the last point, the evaluation of understanding leads to wisdom. It is stated that achieving wisdom is not easy and entails moving successively through the other categories. In an organization, examples of explicit knowledge are indicated such as strategies, methodologies, processes, patents, products, and services.
Whereas, examples of tacit knowledge are skills and competencies, experiences, relationships, individual beliefs, values, and ideas (Kidwell et al., 2000, p. 29).

The aim of this study is, based on the review of literature, to determine the current situation of the educational organizations for their capabilities in making use of tacit knowledge in general, and in the lights of implemented strategies and practices, making some recommendations for better utilization of tacit knowledge.

2. The problem related to management of tacit knowledge

Educational institutions are knowledge intensive organizations. In the daily educational activities, schools have to obtain, store, share, utilize, and generate knowledge; in other words have to capable of managing knowledge management (KM) so as to train and educate the students effectively. On the other hand, today’s global economy and societal needs lay great challenges on schools for educating knowledgeable and skillful students who will meet the expectations. However, a wide range of literature reveals that educational organizations are not ready to embrace knowledge management and not aware of the crucial importance of tacit knowledge. Fullan (2002), drawing attention to the success of business organizations, states that despite the business organizations, schools are poor knowledge sharers, and their structural and normative characteristics have hindered knowledge sharing. In Turkey, the results of a research reveals that the constitution of the knowledge resource centers, well-catalogued libraries, knowledge maps, were never or rarely realized at primary schools (Ozmen and Muratoglu, 2010, p. 5375).

Meanwhile, higher education institutions are the paramount organizations for holding, sharing, and creating knowledge as their most tasks are related to R-D activities. Kidwell, et al. (2000), argue that if sharing knowledge is the “raison d'être” of higher education institutions, they should leverage knowledge to spur innovation and achieve operational excellence. And, they insist that seldom organization can convey these capabilities. In a similar way, Norris et al. (2003), point out that few colleges and universities feel need to use their knowledge assets to achieve strategic differentiation. And the knowledge generated by research activities often stays within a laboratory or research team and rarely crosses disciplinary boundaries. Kumar (2005, p. 27) also draws attention to the impact of today’s fast-paced economy on the higher learning institutions for achieving rapid advancement and new areas of knowledge. He also emphasizes the societal needs which have urged higher learning institutions to get ready for an immense increase in the demand for educational services. And, Celep (2004), related to the research done in twelve universities, clarifies that academic staff at universities are reluctant in sharing their knowledge, and has not yet developed adequate level of organizational culture that triggers learning. On the other hand, in Gürsoy (2010, p. 193)’s, research about explicating tacit knowledge in a higher education institution, it has been seen that the informal communication has not been found so demanding by the administrators; there has not been a well-planned reward system to encourage knowledge sharing; and the people who participated in international conferences, courses etc., have not been motivated to share their knowledge. Depending on the recent reports Gürbüz (2008, p.1313) informs that only some of the educational organizations are pioneering knowledge management by creating necessary infrastructure, and support systems.

OECD deputy secretary-general Asgeirsdottr, (10-11 Jan., 2005), in his speech emphasizes the role of the universities in fostering innovation saying that “The importance of innovation as a key competitive factor has forced a faster cycle time and meant that firms had to experiment with new ways to acquire innovations either through links to universities, alliances with each other or mergers and acquisitions”.

Establishing an organizational culture that enhances organizational learning is seen crucial for achieving effectiveness of educational institutions. Kumar (2005) insists that “Although many successful and imaginative elements of learning already occurring in higher learning institutions, these do not yet add up to a genuine learning culture. Radical changes are seen necessary to construct a culture of learning”.

The drawbacks in the implementation of KM, referring Dyen and McDonough survey, are stated by Milam (2001) as the following:
- Employees have no time for KM
- Current culture does not encourage sharing
- Lack of understanding of KM and its benefits.
- Inability to measure financial benefits of KM
- Lack of skill in KM techniques
- Poor designed organizational processes
- Lack of funding for KM
- Lack of incentives, rewards
- Lack of initiatives for implementing KM
- Lack of appropriate technology
- Lack of commitment from senior management
- No challenges encountered

While mentioning about the factors affecting the success of knowledge management initiatives in schools, culture and management issues are stated in a great extent (The Corner, 2006). The challenge for providing sustainable improvement and efficacy is to capture the tacit knowledge in the individuals and make it widely and easily available to any faculty member, staff person, or other constituent (Kidwell et al., 2000, p. 31). However, the individuals are not so willing to participate in knowledge sharing interactions (May, 2008).

3. The functionality of tacit knowledge

In recent years, great attention is devoted to the management of tacit knowledge. Referring to Nonaka and his colleagues, May (2008), informs that without tacit knowing, knowledge would not evolve. Tacit knowing is the glue that holds all knowledge together and makes sense of it.

The growing recognition on the importance of KM in education and research and understanding the role of tacit knowledge in knowledge creation is seen fundamental (Gürbüz, 2008, p.1312). Referring to Spender (1996), Leiponen (2006, p. 241) argues that since tacit and collectively held knowledge is difficult to imitate and even to communicate, it most likely spur sustainable strategic advantage. Milam (2001) draws attention to the report of Microsoft (2000) which set forth the successfulness rate of two universities with identical numbers of faculty, degree programs, expenditures, and enrollment. The difference is shown in intangible value that is added by effective knowledge management.

Effective knowledge management is seen vital in higher education as it is in the corporate sector. It can lead to better decision-making capabilities, reduced “product” development cycle time (for example, curriculum development and research), improved academic and administrative services, and reduced cost. Capturing the tacit knowledge in the individuals and make it widely and easily available to the faculty members and other constituent bears great importance. The ability to manage tacit knowledge promises to deliver huge returns for organizations (Kidwell et al. 2000, p. 31).

4. The ways of capturing tacit knowledge

The principle way of capturing tacit knowledge is sharing it through various vehicles. However, it is not easy to share knowledge due to various factors. Some individual, organizational, and technological factors have been seen important roles in knowledge sharing. The individual factors have been stated such as lack of trust, fear of loss of power, lack of social network; and organizational factors as lack of leadership, lack of appropriate reward system, and lack of sharing opportunities; and technological factors as inappropriate technology systems, and lack of training. Beside these, the nature of knowledge may influence people’s motivation to share, as well (Gagne, 2009, p. 572).

Leiponen (2006, p. 241), who sees the management challenge as enabling knowledge sharing and integration through the establishment of organizational linkages and communication channels among units and individuals, emphasizes on learning in teams, since the teams can collectively control and utilize skills. Kidwell et al., (2000, p. 29) draw attention to the fact also that knowledge originates in individuals, but is embodied in teams and organizations. Norris et al. (2003, p.16), emphasizing the importance of e-knowledge in creating a knowledge economy based on creating, distributing, and adding value to knowledge. In this context, they far front the role of
institutional leadership, especially for achieving understanding and sharing tacit knowledge. Through interaction with individuals and groups, in a networked world, e-knowledge commerce, can involve Exchange of digital content/context and/or tacit knowledge through interactivity. They envisage that transactable e-knowledge and knowledge net-working will become the lifeblood of knowledge sharing which sparks innovation, and changes in organizational dynamics, creating a difference in academia and e-learning. They also argued that the knowledge networks and communities of practice of tacit knowledge will most certainly be the epicenters of the knowledge economy.

Knowledge may be shared through e-mailed best practices memos or even sticky notes on a cubicle wall (Kidwell et al., 2000, p. 29). Knowledge management systems utilize technologies such as telecommunication tools (internet, search engines, portals), data storage mechanisms (databases, document management systems), expert systems and decision support systems. Some of these may be used in capturing and sharing tacit knowledge; some others can be applied to transforming tacit knowledge into explicit knowledge; and still some others may be used acquiring, codifying, storing, and disseminating explicit knowledge (Mitri, 2003, p. 4).

Milam, J.H. (2001), suggests that e-learning is one of the most important KM practices which create an advantage. And in a Delphi Group study it is understood that two-thirds of the 700 companies use online resources for training employees. Data warehouses, data mining, and virtual reality modeling are used as new ways to visualize and transcend extraordinarily complex, transaction-based data. And digital dashboards are used to focus on critical information, integrate information from a variety of sources, and use company knowledge fully.

Since standardized tests in education usually fail to capture higher order learning objectives such as application, analysis, synthesis, and evaluation, Mitri (2003, p. 5), lays emphasis on applying tacit knowledge management techniques for performance assessment, especially for the skills requires intuition, judgment and feeling. For enabling educators and students to assess higher order skills, she recommends to utilize some technologies such as semantic networks, frame representations, and rule-bases techniques. Through unstructured tacit assessments (written paragraphs or text) the relationships between individual objects and concepts is described and an inference may be made by some electronic qualitative techniques.

Gagne (2009, p. 572) stating the case that individuals can use knowledge to obtain status, power, and rewards, suggest two theories to enhance individual motivation. Planned behavior theory and self-determination theory are seen appropriate to be used to enhance knowledge sharing. She also insists that, intrinsically motivated people can share knowledge for an expression of themselves and for their passion to work. However the people who force to share knowledge through promising of a reward or a threat of punishment may not share the tacit knowledge efficiently. Therefore, through HRM practices as job design, performance appraisal, compensation systems, managerial styles and training, some basic psychological needs such as autonomy, competence, and relatedness should be met in a norm sharing organizational setting (Gagne, 2009, p. 574). On the other hand, Gürbüz (2008), arguing the felt need for more qualified people in education and research areas towards managing knowledge effectively, states that the expectations in the future can be developed only by means of qualified people. Hargraves (2001, p. 2), suggests that by promoting a high investment, high capacity educational system in which highly skilled teachers are able to generate knowledge, teaching and teachers will reach far beyond the technical tasks of producing acceptable test results, to pursuing teaching as a life shaping, world changing social mission.

Based on the recommendation of Leonard and Swift, Levinson (2010), mentions of joint problem-solving by expert and novice, as a sound approach for capturing tacit knowledge. With joint problem-solving, the "expert" and the "novice" work hand-in-hand on a task. McLeod, et al. (2006), through their study have observed also that expert clinician-educators intuitively understand several areas of cognitive psychology without knowing about the body of science underlying their intuition. On the other hand, Wong (2008), in his research, discusses the roles of developing reflective skills and the processes employed in conduction Critical Institutional Professional Research (CIPR). Depending on the views of many authors, Wong defines reflective skills as the process of looking back in a critical way at what has occurred and then using the results of this process, together with professional knowledge to tackle new situations. Meanwhile, storytelling is seen one of effective ways of capturing knowledge. Milam (2001), referring Gill (2001), clarifies that storytelling serve two purposes. It can quickly disseminate information and convey meaning at a high level of understanding. The greatest benefit of using storytelling in KM is seen from its
ability to capture tacit knowledge. Some key points to remember for the institutions which launch knowledge management are indicated by Kidwell et al., (2000, p. 31) as in the following:

- Start with strategy - Determine what you want to accomplish with KM
- Organizational infrastructure-Human resources, financial measurements of success, and information technology, should support knowledge management.
- Seek a high-level champion for the initiative - Someone who believes in its benefits and who can advocate as needed.
- Select a pilot project for knowledge management- Ideally one with high impact on the organization but of low risk.
- Develop a detailed action plan for the pilot- The IT infrastructure, and the roles and incentives of the pilot project team.
- Assess the results-Trying to refine the action plan.

5. Conclusions and recommendations

Today’s fast growing and competitive socio-economic environment, urge educational institutions to effectively utilize tacit knowledge which is seen key in achieving breakthrough competitive advantage. Tacit knowledge management which is the prominent issue for making change and improvement of the organizations is imperative for educational institutions, especially for higher educational institutions to pursue effective research and development and to lead the society. However, the review of the literature proves that most educational institutions are not capable in utilizing tacit knowledge and in general knowledge management. In the lights of the literature, these recommendations are made for enhancing the management of tacit knowledge at educational institutions:

1. The culture of the organization should support the learning and improvement. A strong leadership at schools should be disseminated for constituting an organizational culture which welcomes organizational learning. In this scope, cooperation and collaboration should be maintained for providing opportunities of organizational learning.
2. A strategy and an action plan accompanying to it, should be generated together with the staff, for effective implementation of knowledge management, and in this scope developing the ways of explicating tacit knowledge should be sought.
3. To facilitate sharing tacit knowledge throughout the organization, the opportunities the dialogues between the educators on academic subjects should be encouraged.
4. The ways of capturing, sharing and generating knowledge should be enhanced and strengthened through formal or informal meetings, excursions, exhibitions, panels, discussions; and beside them through some others like joint problem-solving, expert-novice cooperation, reflective evaluation, storytelling.
5. The electronic infrastructure of the organization should become appropriate for effective management of knowledge in general. Tele-communication tools (internet, portals etc.), data storage mechanism (databases, document management systems), and some expert systems facilitating knowledge management should be maintained. The technology should be provided and effective use of it should be assured. The use of internet for E-learning, virtual conferences, and the like should be enhanced.

References


