Management of Electronic Learning (e-learning) and Knowledge; A Tool to Promote Higher Education

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Abstract

Knowledge as a mental capital is the only strategic resource, and compared to the traditional capital, it is highly mobile and versatile. The purpose of this paper was to introduce management of e-learning and knowledge and study their role in the development of higher education. The results indicate that the development of e-learning and virtual discussion environment produces significant opportunities for transferring and sharing of tacit and explicit knowledge, knowledge organization, and organizing information, and it is also a great base to create beneficial and destructive challenges for higher education.

Keywords: e-learning, development, higher education, knowledge management

Introduction

By succession of knowledge and it is getting to power, new environments were created where the chances of survival depend on superior speed and appropriateness of the response and its level is determined by management. Knowledge management is a systematic process that uses a right combination of information technology and human interaction to identify, manage and share information assets. These assets include informational bases, documents, policies and procedures. Moreover, it includes the explicit and implicit knowledge of the employees. And uses a wide variety of ways to capture, store and share knowledge within an organization (Babai, 2004). Petrash (1996) believes that "knowledge management is providing the right knowledge to the right people in the right places so that they can make the best decisions. Zomorodian

and Rostami (2010) define knowledge management as the process of discovering, acquiring, developing and creating, sharing and storing, evaluating and applying the right knowledge at the right time by the right person in the organization through the linking of human resources, technology information and communication, to create the appropriate framework for linking to accomplishment of corporate objectives. Afrazeh (2004) asserts that knowledge management makes organizational knowledge resources and capabilities in a way that provide an understanding of the conditions that can adapt itself with the changing environment. Knowledge management facilitates continuous learning process, reduces unlearning and minimizes the need for changes from top to bottom in the organization (Malhotra, 1998). E-Learning and knowledge management are not new concepts. Many organizations take advantage of e-learning to develop their employees. E-learning also promotes the organization's competitive advantage, boosts employee morale and improves communication between agents (Yen and Chou, 2001).

E-learning offers new ways to manage data, information, and knowledge (Kim, 2003). Reviewing research done suggests that e-learning is used as a tool to manage knowledge (Robinson, 1999; Durand, 2000). Higher education system is the most important factor in the development particularly human development and manpower training. Higher education is certainly not only to impart knowledge, but by advances in science and research, creates new knowledge and new this knowledge is due to creative thinking of human resources (Hashemi, 2001). If higher education can play an important role towards economic development, its place in society will become clearer (Tasnimi et al, 1997). It is clear that colleges can help society when they

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are coordinated with the development of science and technology (Farhangi et al, 1997). According to many experts, the creation of management science at universities, and institutes of higher education is essential to the create and maintain a framework that all members of the university use it to share and use knowledge for productivity, education, learning-teaching and the goals that enable them easily to get information at anytime and anywhere they need (Mahini, 2001). So accomplishment of current time requirements needs development of the field of knowledge management in organizations and universities so that they can change scientific and technical resources and services, and makes a new plans for the deployment of human and natural resources. The purpose of this paper is to introduce knowledge management and e-learning and examine its role in the development of higher education.

Definitions of knowledge management

In the definition produced about knowledge management the process of knowledge use is mentioned more than all the other items and creation of knowledge is not emphasized a lot. While knowledge management can play an important role in society it has only a crucial role in production and creation of knowledge. Turban sees knowledge management as knowledge creation, storage, and distribution in a way that organization can benefit from (Turban, 2003). Baron sees knowledge management as a systematic approach to understanding, using, sharing of experience and as statutory and non-statutory expertise in the organization (Baron, 2000). Gartner defines knowledge management as a discipline that makes the development of an integrated approach to identifying, acquiring, evaluating, retrieving and sharing all the information assets of an organization (Gartner, 2000). Shanhong identifies knowledge management as acquisition, development, analysis, use, storage, and share of knowledge effectively in order to create an approach to convert tacit knowledge to objective knowledge. (Shanhong, 2000). Therefore, knowledge management is visualization and crystallization of organizational processes, which makes the use of synergies, information, intelligence capacities possible, and helps the members of the organization to show their capabilities innovation and creativity.

Newman in 1999 suggested the knowledge management in a general knowledge

Model

In this model, knowledge is organized in four main areas:

1) Create and acquire knowledge: knowledge acquisition process, acquiring new knowledge is both within the and outside the organization.

2) Sharing Knowledge: The purpose of sharing can be creating new knowledge by combining multiple existing knowledge combinations or exploiting it better.

3) Organization store of knowledge: the purpose of organizing and storing knowledge is creating the ability to retrieve access and use the knowledge.

4) Knowledge Application: The application of knowledge or power of knowledge is the last process of knowledge management (Akbarpour and Kazemi, 1986).

Concept of e-learning

Until a few years ago, people had to learn at a specific time and place by coming together. But nowadays as computer technology improves somewhat the need is gone and soon everyone will be able to learn anything at any time and place. This happens due to a new system of education called e-learning (Horton, 2000). E-learning as an interactive learning system is delivered through electronic technology and mostly by the Internet. E-learning is a method of learning based on the application of information and communication technologies and computer networks (Amin Pour, 2005). Distance learning is a new method taken into consideration due to the increasing proliferation of information communication technology (ICT) in national and international level. In this regard, by more participation of students, it is tried to take advantage of new technologies, media and broader communications and media training services to provide high level of education for enthusiasts. In this process a greater proportion of the duty of teaching-learning process is on the student. (Ebraham, 2009).

Managing e-learning and knowledge

Due to the increasing use of e-learning in organizations its use in knowledge management has increased too. What is important in information technology is "Information-oriented thinking" or

thinking that is composed of informative and authoritative information. Therefore, what produces information is the smart human mind and not tools. E-learning has had the greatest part in knowledge management. This is in a way that in all the activities of knowledge .

Management e-learning has a role. In knowledge-based era, knowledge has become the strategic resource in many organizations (Barney, 1999). According to Nonaka at unstable present conditions, the only reliable source of artifacts for sustainable advantage is knowledge (Monavrian, 2007). Therefore, knowledge management has become one of the important tasks for organizations looking to develop and utilize their valuable assets (Monavrian, 2009). Haldane Hargan (2000) suggests that much of the explicit knowledge can be distributed through the dissemination of information. But tacit knowledge diffusion in terms of technology is difficult. Perhaps today, and in the future, advanced technology will facilitate distributing synthetic face to face interaction and different types and forms of meetings with the image (Mohammed21, 2006). The focus of information technology in knowledge management initiatives is to convert implicit knowledge into explicit knowledge. Again it is IT that provides the abilities for information communication during the decades (Rading, 2004).

The role of knowledge management in higher education development

Today, in the new world of the importance of knowledge and its use in sustainable development and increasing prosperity, the importance of human capital and investment on it is emphasized. The most important investment on humans is their education, especially formal training. Although in the beginning of development, basic education is far more important and has more output, in the later stages of development, higher education is of particular importance. In this context, investment in higher education and how to access its distribution rate must also be considered (Ebrahimi., 2009). In the third millennium, higher education has begun to join the knowledge process and new concepts such as vocational knowledge, knowledge processors, knowledge management and knowledge organizations that strongly attest the strengthening of the process (Abtahi and Salvaty, 2006). Higher education is one of the most important centers of pro-

duction and dissemination of knowledge. Innovation and creating new knowledge have long been the most important functions of academic institutions. And in this regard, academic community has had the greatest dedication to strengthen the knowledge and intellectual capital by the resources available. These resources include both the intellectual and human resources that need to be utilized by applying correct identification management practices in an organized fashion (Hawkins22, 2000). Though universities as centers of production and dissemination of knowledge require implementing knowledge management more than any other organization, so far enough attention has not been paid to knowledge and intellectual capital produced by the academic community. Thus, to date no proper control over unwritten knowledge - Tacit and codified knowledge- has been granted and integrated systematic knowledge collection has rarely been collected and managed in the framework of a system. Thus, poor management has led many valuable resources unavailable and stays unknown forever and many existing gaps still remain intact. On the other hand, lack of attention to the knowledge generated inside and lack of a business approach, has financially damaged the universities and caused a lot of knowledge, literature and science of professors published by private publishers and go back to the universities are in the form of information sources (Hazeri et al, 2007).

The role of e-learning in development of higher education

Dramatic developments towards the end of the twentieth century and prediction of scientific, information and management revolution in twenty-first century, represents the uncertainty of humanity facing the future, which leads to fundamental changes in the processes and products of higher education. The explosion of information, communication development, changes in the system of governance and political developments has revolutionized the need for higher education (Kharrazi December, 2009). Globalization, the need to adapt to new areas of knowledge management, financial and human resources and the need to improve the quality of education to meet the needs are just one part the issues facing universities (Mormolejo, 2006). Higher education system is one of society's most important intellectual devices (Valimaa &Hoffman, 2008) and is one of the familiar social

institutions of knowledge production and creation of skilled manpower (John, 2011). It is also the most productive source of progress for each country communities and the most effective mechanisms for dealing with the challenges of this century. E-learning is an important part of educational system. This educational system with this capability and capacity can present knowledge to students in long run and quench the need of adults for higher education. E-learning can be presented by higher education institutions or by new institutions that are specialized for non-attendance education (The World Bank, 2000). Distance education can be an effective way for permanent education and boosting the skills the way it is used for reeducating the staff. On the other hand, e-learning is much less expensive than in person education (World Bank, 1994). E-learning is one way that countries can provide flexible learning opportunities. Distance education has had a successful history in education and which is comparable or even better than the performance of in person higher education institutions in all countries. Currently, many students in developed and developing countries use distance education institutions for education (World Bank, 2003). Today, there is much evidence that lack of knowledge is not the problem of sustainability in higher education institutions, but the problem is the gap between knowing and act (Pfeiffer, 1998). In this regard, Bouman (2005) concludes that higher education institutions have not yet learned while organizing the data used in their internal decision to take effective action.

Knowledge management, knowledge capital in organizations

The current era is called the era of knowledge and knowledge workers and organizations are the foundations for sustained community development. Now, thanks to the ability to apply knowledge and capabilities like intelligence and the creation of new solutions for the global system, knowledge has a prominent place in meeting human needs-based creation of knowledge and progress in the world (Bell, 1987). Competitive advantage of organizations and communities is ' knowledge 'and knowledge and countries wining over each other happens by knowledge (Baumard, 1996). In Stewart's view, wisdom and knowledge capital are the real capital in the organizations and management of the organization is crucial, perhaps after this organizations

will succeed, not due to their wealth but due to more advanced knowledge capital requirements (Stewart, 1997). Roos, et al with a definition of knowledge capital arrive at knowledge management. In Roos's idea knowledge capital is a forum for thinking, dialog, and action taking about the future. Only it is with the help of this capital that organizations can be organized in the future and stays powerful in the competition (Roos et al, 1997). Knowledge is an investment with whose help exploiting other exploitable assets will be optimized. Knowledge capital is through human intelligence and separating characteristics with whatsoever creatures. Knowledge is indivisible and when published others will no longer be deprived of it, in other words we can say that knowledge will be valuable when spread and exploited (Maise, 2000). Skyrme sees knowledge capital as a latent asset of organizations that can give a great competitive advantage if managed (Skyrme, 1997). In short, effective knowledge management is the sustainable source of development.

Pivotal role of human in knowledge creation

Human capital represents the knowledge stock of an organization (Bontis, 2001). Despite the accelerated development of information and communication technologies, still human role is the main element in quality of knowledge (Maise, 2000). Therefore point to talk about science is the human role in creating knowledge. There are several theories regarding knowledge creation. According to this theory, the knowledge exchange between different levels of epistemology and ontology is created. This exchange which is a social process has four styles of changing knowledge: implicit knowledge to hidden knowledge or socialization, implicit knowledge into explicit knowledge, explicit knowledge to explicit knowledge, or a combination of explicit knowledge and implicit knowledge or internalization. In this process, the role of the organization is empowering (Von Krogh et al, 2000). Human capital, to a great extent, has caused the organizations to depend on knowledge and the abilities of their staff for creating revenue and also depends on them for improving efficiency and productivity (Westephalen, 1999).

Conclusion

Organizational development and growth of technology has led humans to enrich their infor-

mation and knowledge and skills to have a rational principle to deal with the complexities and run organizations more effectively. Therefore, to keep up with these changes, managers and staff should have the necessary knowledge and willingness to acquire and maintain the competitive advantage for the business in the global economy. So today organizations need to move towards a knowledge resource. And by development of e-learning and virtual discussion environment, significant opportunities for transfer and sharing of implicit and explicit knowledge, knowledge organization, and organizing information are produced. And there is also a great base to create beneficial and destructive challenges for higher education. Therefore, organizational knowledge is created by interaction among humans and with the help of technologies. So for creating knowledge, we should organize a human group and should focus on universities and scientific groups that are the bed for scholars and scholars of knowledge creation. This goal will be realized by combining and integrating best virtual peer groups of different universities and research centers. By knowledge creating, networks we will get to the fluid source which will help developing of the country.

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