

A Study on the Extent of the Application of Knowledge Management Factors According to the Academic Staff at Islamic Azad University, Tabriz Branch

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ABSTRACT

The present study was carried out to examine the extent of the application of the knowledge management factors at Islamic Azad University, Tabriz Branch. The population for this descriptive survey study included 469 members of the academic staff from among which 214 individuals were randomly selected using Morgan's table. The instrument for collecting the data was a researcher-made questionnaire the reliability of which was measured 0.89 using Cronbach's Alpha. The results of the study indicate that the factor of organizational culture is at an optimal level, but the other three factors of 'organizational structure', 'information technology' and 'strategy and conduction' are not at desirable level. Furthermore, the results show that there is no significant difference among the members of the academic staffs' views in terms of their gender, educational level, age, job experience and their affiliated faculty.

KEY WORDS: knowledge management, organizational culture, organizational structure, information technology, strategy and conduction

INTRODUCTION

Having experienced the growing efforts of human beings to improve their scientific stand in all dimensions in the last century, we are entering the third millennium (Javdani, 2008). In addition, the significance of knowledge as a determining factor in achieving personal, organizational, social, national and international endeavors is undeniable (Asgari, 2005). Thus, in the competitive and information age of today 'knowledge management' (hereafter KM) is one of the most important tools to achieve organizational success. And since universities are considered as the pioneers of development in any society, achieving new scientific and research developments and the institutionalization of KM has double priority (Shirvani et al., 2009). Showing innovation in managing knowledge could have an important role in coordinating organizational resources and regulating job related resources, reviving the culture of organizational learning and strengthening the organizational, social capitals (Yuan hung et al, 2009). In knowledge management, thinking, wisdom-centeredness and people-centeredness replace capital-centeredness where the knowledge and experience sharing act as the pivot (Holdt, 2007). Because knowledge management is a cross-disciplinary field which has been the concern of different scientific fields, management theorists like Draker and Arggis are considered as the key figures in dealing with the issues of knowledge era. Piter Sench refers to the key role of educational organizations in producing knowledge. Druoi Ionard discusses the creativity quality to ensure that basic knowledge activities do not turn into basic inflexibility. Nonaka and Takeuchi focus on knowledge spirals that explains the transformation of tacit knowledge into explicit knowledge Thomas Devenport opines that KM as an important part of coordinate activities must be given priority to the information processing management in any organization (Rahimi and Najafi, 2007).

LITERATURE REVIEW

Apparently, knowledge and knowledge management have given priority in organizations in 21st century. However, the important question is that who are responsible for prioritizing them in organizations? (Akbari and Tahmasebi Ashtiani, 2007). Given the fact that education, research and services are three major goals of organizations (Mohayidin, 2007), Bolino believes that the response of universities to the unstable and insecure surrounding environment would be the training of professional and capable manpower with up-to-date knowledge and information which is needed for the society (Nemati Jamshidi, 2007).

Therefore, an optimal university is a university that is not only able to teach sciences and up-to-date knowledge and expand students' academic capabilities and abilities but also improve their belief and attitudes towards their scientific capabilities. This will help students solve their complicated professional and job-related as well as everyday problems. This cognitive mechanism helps people develop high self-confidence in order to use their academic capabilities and play constructive, effective roles in the society (Chinying, 2006). The universities have

understood that they need to integrate both tacit and explicit knowledge for the effective performance. Thus, they are making new ways to turn the tacit knowledge into explicit one that could be saved, stored and transferred to all members of the organization. In fact, the main purpose of KM is to turn the tacit knowledge to explicit knowledge and the proper dissipation and application of it (Hosseini, 2007).

Generally, in higher education KM is considered as a process of freeing the power of knowledge and the instrument of using this invaluable capital among the students and the members of academic staff. The application of the principles of KM in universities is impossible without paying attention to organizational culture because culture is located in the center of a successful knowledge-centered university.

To apply the principles of KM, the universities should understand the necessity of creating the knowledge sharing culture among the workers via its institutionalization which in the first step would help the employees revise their understanding of KM. Second, it would help them to understand the advantages of the knowledge sharing in organization. The results of the study by Cheng Ming You (2005) indicates that the main hindrance in the effective application of KM in an organization is the lack of the culture of the knowledge sharing and lack of understanding the numerous advantages of knowledge management in organizations.

Organizational structure, as one of the factors of KM, indicates job relationships, systems and operational processes as well as the people and groups who strive to achieve their goals. It also includes ways of dividing jobs into specific duties and coordinating them. The first studies on organizational structure paid attention to three dimensions to describe the different types of organizational structure. Robins (1987) classifies the dimensions of organizational structure into three factors, i.e., 'authoritativeness', 'concentration' and 'complexity'. Shain (1998) refers to the three dimensions of structure as 'hierarchical', 'duty-bound' and 'centralization' (Monavarian *et al.*, 2007).

According to Nanonka Takuchi and Davenport, nowadays the main challenge in universities is the gap between traditional, classical structure of the organization and the structure of information age. Knowledge-oriented universities need new structure to be able to adapt themselves to the knowledgeable societies; they need multifaceted communication channels to help them in decision making. The new structure of university provides communication among the members of academic staff in educational groups and faculties as well as the administrative employees and students so that they could learn and grow (Rahimi and Najafi, 2007).

Another important aspect of KM is information technology (hereafter IT). IT has positive effects on the operations inside organization. However, it causes modifications in the responsibilities of the managers who deal with human resources. Technology contributes to the removal of the limitations of physical borders thus the workers are able to fulfill their duties in place and time far away from the organization's head quarter (Dayveda and Rabinz, 2009). In the literature of KM and organizational knowledge, technology is considered as the focal issue. In the recent three or five years, some researchers have noticed the relationship between KM and IT. They have estimated that about 70% of publications on KM have focused on designing IT (Franco and Mariana, 2007).

More than 80% of KM deficiency in organizations has been attributed to the lack of managerial support (Nezafati, 2001). An important feature of successful organizations is the existence of a dynamic and effective leadership. Peter Draker notes that the major part of the unsuccessful leadership may be attributed to an ineffective leadership (Hersey and Blanchard, 2009). The application of KM hinges upon an effective leadership, and the necessary condition to achieve satisfactory results in the application of KM is the fact that academic managers should be motivated to take pioneering steps in organizing the affairs. They should be able to create active and innovative organizational processes and contribute to the growth of knowledge. In such a situation, KM would prevail all over the university and would affect all processes, functions, culture and values and would incorporate the members at all levels and parts (Hosseini, 2007).

One of the challenges that organizations face today is the use of organizational knowledge and its application through managerial tools such as KM which would empower the organization in today's competitive world and pave the path for success if it is used properly (Shirvani *et al.*, 2009). Moreover, the universities should pioneer to take competitive advantage of KM and establish its systems; the prerequisite for which is to assess the extent of the organization's readiness to apply KM because there are no prospects for success without estimating and then eliminating the weaknesses (Abbasi, 2009). AArabi and Musavi (2009) conclude that the more coordinated a research center in the selection of knowledge management system and subsystem strategies, the higher its rank and value.

Similarly, the studies by Tseng, 2010; Tahir, 2010; Duglass, 2008, Laie and Lee, 2007; Bozbura, 2007) indicate that organizational culture has a positive effect on the fulfillment of KM (Sadate Alavi, 2010). According to Young, Zheng and Woor (2009), most of the present models define knowledge from the conceptual and perceptual perspective and consider KM as a linear or circular process.

Jalaleddin *et al* (2009) in their research project offer a model in which the bases of KM are organizational culture, organizational structure and information technology. They believe that this model evaluates both personal and organizational factors, indicating the overall readiness of the organizations to adapt KM.

The present study is an attempt to answer the following questions:

1. What is the state of the factors of KM in Islamic Azad University of Tabriz according to the academic staff's view?
2. To what extent KM factors are compatible with the optimal state?

METHODOLOGY

The present study is a descriptive survey. The total 469 members of the academic staff constitute the population from among which 214 were selected as sample population using Morgan table through random sampling procedures. A researcher- made questionnaire of five-level Lickert scale was prepared , the grading of which is as follows; very little: 1, little: 2, average: 3, much: 4 and very much: 5. The questionnaire includes such factors as; 1) organizational culture (17 items), 2) information technology (19 items) and 3)strategy and leadership (6 items) all in all 53 items. Using Cronbach's α , the reliability of the questionnaire was estimated (0.089).

RESULTS

Table 1: Test Result

One-Sample Test						
Variables	The state of the organizational culture of KM according to the members of the academic staff					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Organizational culture	-2.602	213	0.01	-3.5607	-5.3711	-0.7411

The state of the organizational structure of knowledge management according to members of academic staff						
Organizational Structure	0.127	213	0.899	-0.16355	0.6994	2.3723
The state of information technology in management knowledge according to members of academic staff						
Information Technology	0.607	213	0.545	0.64953	1.4600	2.7590
The state of strategy and the leadership of knowledge management according to members of academic staff						
Strategy and Leadership	0.314	213	0.754	0.2289	-1.6645	0.20661

As table 1 shows, according to the academic staffs' views at Islamic Azad University- Tabriz branch, the effect of the organizational culture factor in KM is higher than average.

DISCUSSION AND CONCLUSION

The results of the study indicate that organizational culture, as the heart of an organization, enjoys a favorable state. Moreover, the more optimal the state of organizational culture, the better we are able to apply and establish the principles of KM. In other words, the factor of organizational culture of knowledge management in Islamic Azad University of Tabriz is higher than average. The findings of this study validates the results of the researches by Azadeh Shahraki (2009), Asgari (2009), Zare (2008), Asgari (2008), Holt et al (2007) and Akbarpur and Kazemi Ashtiani (2007). Thus, the organizational culture that was investigated in the present study along with organizational open atmosphere, trust, cooperation, creativity and innovation facilitates the applicability of KM strategies. The organizational culture including aforementioned indexes creates proper grounds for the discussion and exchange of ideas among high rank managers and members as well as other organizational members in which they are able to express their ideas and opinions without any bias. Furthermore, mutual trust in organizations in terms of sharing knowledge and other activities lead to the cooperation in organizational teams which in turn contributes to the creativity and innovation especially in scientific organizations like universities.

Another reading of the data show that the value for organizational structure in KM is lower than average in Islamic Azad University of Tabriz indicating the fact that the performance of the university is not optimal on this factor which requires necessary measures to be taken to eliminate this problem. This confirms the findings of Hosseini (2007), Babazadeh (2007), Shirvani et al (2009), Zare (2008), Rafati Shaldehi et al. (2008), Canale and Zheng (2009), Walton and Gowaisko (2007) and Akbarpur and Kazemi Ashtiani (2007). In terms of information technology, the performance of the university is lower than average indicating the fact that the university's performance on this factor is not optimal and fundamental measures should be taken to improve it. This backs up the findings of Hosseini (2007), Shirvani et al (2009), Azadeh Shahraki (2009), Zare (2008) and Akbarpur and Kazemi Ashtiani (2007).

Strategy and leadership component of KM in Islamic Azad University is lower than average indicating low performance of the university in this regard which necessitates basic measures. Hosseini (2007), Shirvani et al (2009), Han and Wang (2009), and Akbarpur and Kazemi Ashtiani (2007) have already found the same results. Generally, the results from the present study show that the use of organizational knowledge and applying it with modern management tools like KM is one of the most important challenges that organizations especially universities face. The application of the already mentioned factors empowers organizations in this competitive situation and paves the way for their success. A vital issue in the application of KM is an awareness of the extent of readiness or the application of KM factors in the organization to accept and apply it.

The existence of optimal state for KM factors in an organization implies changing or accepting organizational culture in order to facilitate, support, motivate and strengthen the sharing of trust, open-atmosphere organization, cooperation, creativity and innovation and the application and production of knowledge. Organizational structure with its decentralization, informality, and team structure might be a suitable infrastructure for sharing knowledge and activation. Similarly, information technology including communication technology, cooperation technology, storage and retrieval technology, flexibility and IT workers may play the same role. The availability of KM to all organizational sectors, the architecture of KM in organizations, web-based programs and the portable tools of data analysis are all prerequisites for supporting KM. Knowledge strategies, support and help from high rank managers, congruity of views, trust and motivation are major elements of the culture of KM. The constant attention to the mentioned elements leads to the success of KM. Therefore, none of KM factors are by themselves sufficient for its successful implementation. To expand KM in universities all changes that cause interference, interaction or restructuring of knowledge should be systematically reinforced and supported. Moreover, indexes show that a long-term systematic approach is needed to implement the comprehensive system of KM. However, the mentioned system may be applied at university level to some extent using the available facilities since the application of KM decreases the costs and improves the quality of productivity and profitability.

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