ORGANIZATIONAL READINESS FOR ESTABLISHMENT OF KNOWLEDGE MANAGEMENT

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ABSTRACT

Today, an attitude toward knowledge has changed throughout the world, because the knowledge is the driving force of the countries' economy. Creating the strategic competitive advantage requires a new type of organizations which have the potential to create knowledge in order to maximize the competition and strategic success. Knowledge, like other important resources of the survival and success of an organization in the global market, is vital and decisive. Knowledge management is an important tool through which organizations can better manage the knowledge and information. Creating, storing and applying knowledge is one of the duties of knowledge management. This research studied the readiness of one university in Iran for establishing the knowledge management. The statistical population are professors and employees of Islamic Azad University, Science and Research Branch. Various effective factors for accepting knowledge management were considered in this study. The results of the study showed that the conditions of different factors for establishing knowledge management in this university are nor suitable.

Keywords: Knowledge, Knowledge Management, Organizational Readiness.

INTRODUCTION

Organizations equipped with the knowledge power can preserve their long-term superiorities in the competitive areas. Competitive landscape of organizations indicates the effects of this view in the strategic areas of the organizations and if an organization cannot detect the correct form of knowledge in its right place, they will encounter problem in the competitive fields. Based on the abovementioned view, and regarding the importance of educational organizations, the necessity of paying attention to the knowledge management is inevitable. This issue is so important today that many educational organizations measure their knowledge and reflect it in their reports as the intellectual capital of the organization and as an indicator for academic ranking. The presence of knowledge management system in the universities is vital.

This research tries to study the preparedness of Islamic Azad University, Science and Research Branch, for the establishment of the knowledge management. The question is whether this university has suitable condition for the establishment of knowledge management.

LITERATURE REVIEW

Knowledge
Knowledge is a multi-layered, complex, dynamic and abstract subject which is embedded in the human mind.

"Knowledge is the capacity to conduct effective act". This is a definition considered by organizational learning association.

Knowledge is a fluid combination of experiences, values and information related to a certain field and specific vision. The knowledge is a framework for evaluating and integrating new experiences and information, and forms in the mind of informed persons. This knowledge not only is available in the stored documents, but it can also be hidden in the procedures, processes, practices and organizational norms (Firestone & Roy, 2003: 20).

Knowledge can be considered as a distinct goal with the cognitive identity (Sarmento, 2005: 8).

Types of knowledge

- practical knowledge which is used in the works, actions and decision-makings by human. Political knowledge, professional knowledge, knowledge related to the business and empirical knowledge are other types of this knowledge.

- rational knowledge which meets the rational and reasonable curiosities of human. This knowledge is a part of humanistic knowledge.

- recreational knowledge which is opposite of the rational knowledge. This type of knowledge does not meet the rational curiosities of human, and it is desired due to its recreational and emotional nature, and includes rumors, news of events, stories, games and like (Chase, 1998: 22).

- spiritual knowledge (sacred): which is related to the religious knowledge of human and releases human from sin.

- unwanted knowledge is a knowledge out of human interests and it is kept without any certain goal.

- theoretical knowledge is a knowledge which originates from deep specialties of people. Characteristics of this knowledge is more similar to the hidden knowledge (Jorna, 2001:8).

- individual knowledge is embedded inside of an individual and its roots are in individual actions.

- group knowledge is hidden in the social and cultural systems of an organization (Alavi & Leidner, 2000: 115).

- hidden knowledge which divides into three groups:
  1. cultural knowledge: refers to the achievement of common perceptions. Processes like sociability and acculturation.
  2. mental knowledge: this knowledge depends on the conceptual concepts and cognitive competences, and it is an abstract knowledge embedded in the human mind.
  3. embodied knowledge: it depends upon the action of an individual. This knowledge relies on the physical presence of individuals and face to face interactions.

- obvious knowledge: two types of knowledge are in this class:
  1. systematic knowledge: a type of knowledge that can be analyzed systematically in the relationship between technology, roles and formal procedures. This type of knowledge refers to the collective and common knowledge among human.

2. regular knowledge which is in the form of signs and symptoms and can be found in the form of book or information received electronically (Blackler, 1995: 1031).

- organized knowledge: knowledge is valuable when it is applied. The continuance of values in the confidence space and motivation of individual and use of knowledge occurs during knowledge creation and its processes. Knowledge management encompasses significant and purposive methods. The understanding and application of knowledge is for achieving the goals of organization. Organized knowledge creates value with reducing time, cost and error (Cong& Pandya, 2003: 27).

Explicit knowledge

Explicit knowledge make the activity facilitating information relying on the documents which is expressed by the formal language. The instances of explicit knowledge are formulas, regulations, equations and practices. This type of knowledge includes registered cases, educational structures, recorded actions and methods, procedures, activities and research findings (Cong& Pandya, 2003:27).

Tacit knowledge

Tacit knowledge is in the mind of individuals and it is distinct from explicit knowledge in the documents or databases (Koenig, 1998: 227).

Tacit knowledge can mean know-how and learning through the mind (Kidwell, 2009: 29).

This is the knowledge of unexpressed concepts about a subject which is recorded with difficulty (Cong & Pandya, 2003: 27).

Exchange of this knowledge is done through social mechanisms like lecture, story-telling, communication in practice and etc. (Massa, 2009:131).

Knowledge management

Knowledge management includes planning and control processes in order to achieve organizational goals (Macintosh, 1997: 2).

Knowledge management is the effective knowledge process for meeting the internal needs to identify and study the asset of acquired knowledge for developing new opportunities (Poins & Vagenas, 2008: 3).

Knowledge management is a process by which organizations are able to convert the data to information and information to knowledge; they can also apply the acquired knowledge effectively in their decision-makings (Sooknanan, 2001: 25).

Knowledge management is a solution and increasing valuable endeavors to improve the effects of organization on the social changes and business environment (He & Qiao, 2009: 175).

Knowledge management process is based on 4 elements:

1. content: it relates to the type of knowledge (overt or covert);
2. skill: achieving skills for knowledge extraction.
3. culture: culture should encourage organizations for knowledge distribution.
4. organizing: organizing existing knowledge (Haines, 2001: 12).

Knowledge management definitions

Knowledge management is developing required processes for identifying and attracting data, information and required knowledge of organization from inside and outside, and transferring them into the decisions and actions of organizations and individuals (Davenport, 1997: 149).

Knowledge management is formalization and access to the experience, knowledge and professional views which targets new capabilities, higher efficiency, promotion, innovation and increasing the customer value (Wig, 1999)

Knowledge management is a combination of processes for management, control, creativity, coding, dissemination and imposing knowledge power in an organization, and its major goal is ensuring that an individual receives required knowledge in the due time such that the ability for timely and correct decision-making provides for him (Alemtabriz & Mohammadrahimi, 2008: 47)

Knowledge management is a system which manages the collective knowledge asset in the organization (explicit and tacit knowledge). It is a spiral process for identifying, validating, storing and refining knowledge for users' access. It has following results:

1. Reuse of knowledge by others for similar needs.
2. elimiating invalid knowledge
3. changing the form of knowledge and creating it in a new form.

Knowledge management refers to the process of acquiring collective expertise and applying smartness in the organization and using them for innovation through continued organizational learning.

Effective factors for knowledge management establishment

1. leadership: supporting knowledge management activities by management or leadership of the organization is one of the effective factors in the formation of knowledge management (Rezaeeian, 2001: 118).
2. culture: knowledge management cannot be implemented successfully without a suitable and reliable cultural platform. In contrary with information management, knowledge management relates to the values and beliefs in the communication, and because these factors are encompassed by these factors, it can play an important role in the knowledge management.
3. technology: technology, in the form of suitable tool and mechanism, can play an important role in the knowledge storing in the organization.
4. knowledge measurement: knowledge management helps us to find that how much we have moved toward knowledge management goal. On the other hand, by measuring and evaluating the knowledge, we can remove the obsolete and old knowledge from the organization (Hosapple & Joshi, 1992: 2).
5. organizational structure: organization expresses that how duties allocated, who reports to whom, and what are the formal coordination mechanisms and organizational interaction models. Helping information flow is another facility provided by the structure for the organization. The structure also refers to the internal relationships model, authority and communication of an organization (Robins, 1983: 87).
6. processes: knowledge management processes are:
   - creation: knowledge can be created with different methods.
   - identification: identifying useful knowledge in the processes, work procedures and organization actions;
   - collection: after identifying useful knowledge, the next step is to gather this knowledge.

- evaluation and adjustment: this model recommends that before applying knowledge, it is evaluated and adjusted in terms of accuracy. This should be done by professional individuals in the organization.
- organizing: organizing knowledge encompasses the knowledge processing activities. In this step, knowledge converts to suitable form.
- applying knowledge: when the knowledge is not used, it does not increase. In this step, knowledge flows in the work processes and current organization decisions.
- distribution: knowledge should be distributed with different methods among individuals. In this step, suitable tool and mechanisms should be provided for those who need it.

7. human resource: knowledge is managed and circulated through the informed employees; therefore, all employees of the organization should be familiar with knowledge management concepts (Alavi, 2000: 211).

Statistical population and sample size

Statistical population is all professors and employees of Islamic Azad University, Science and Research Branch. This university is selected because of it is one of the most important and largest high education institution in the country and plays essential role in the science development. 384 persons were selected randomly from among the professors and employees of this university to complete the questionnaire.

Data collection tool

Regarding the types of variables for measuring the preparedness of Science and Research Branch, a questionnaire was used which designed for this purpose.

Questionnaire design steps

1. effective factors on knowledge management establishment were listed according to the literature review. These factors are structure, organizational process, technology, organizational culture, measurement, human resource and leadership.
2. items which indicated the factors, were extracted.

Regarding the extracted items, 38 questions obtained which indicate the preparedness of Science and Research Branch for knowledge management establishment.

Questions are:

1. how much current work division (organizational chart) facilitates information exchange in the organization?
2. how much current organizational regulations and directives emphasize on knowledge transfer?
3. does people have automatic freedom to transfer knowledge in the organization?
4. How much does it matter to enhance the self-confidence of individuals to implement their ideas?
5. Is it easy to coordinate projects in different parts of the organization?
6. How much your colleagues in the organization today tend to exchange information and knowledge with each other?
7. how much do you use specific publications which contain updated information and knowledge?
8. To what extent are people's suggestions and personal opinions in the organization welcomed?

9. to what extent managers and authorities encourage employees for research?
10. To what extent the learning indicators and knowledge are used continuously and as a starting point for knowledge development process?
11. to what extent the written knowledge is kept in written form and can be transferred in your organization?
12. to what extent the decisions taken in the organization rely on updated knowledge.
13. to what extent the knowledge of experts in your organization has the suitable form and is provided for all members of organization?
14. how much cooperation and commitment exists in your organization for the creation and development of the technology infrastructures like internet, weblogs, software and etc. for storing, transferring and exchanging knowledge?
15. to what extent knowledge exchange occurs in informal communication in your organization?
16. how is the quality of supporting systems and networks in your organization?
17. to what extent the software system can conform to new systems?
18. How long does it take to get the knowledge you need to solve problems within the organization?
19. to what extent there is suitable organizational atmosphere and culture (mutual trust, patience against mistakes, respecting the opinions of experts) for exchanging and transferring the organizational knowledge?
20. to what extent the governance of creative and critical thinking in the organizational culture exists as a high value in the organization?
21. to what extent an organization respects those who share the knowledge and considers special place (material and spiritual) for them?
22. to what extent there is a suitable cultural platform for scientific exchange of coworkers with each other in a desired form (through desire)?
23. To what extent the governing culture of an organization encourages the creativity and innovation?
24. to what extent the current organizational culture encourages and supports institutionalizing the knowledge-sharing culture?
25. to what extent the employees of the organization have enough skill for classification, use and maintaining knowledge?
26. to what extent there is a certain program for developing ideas and new knowledge?
27. to what extent the solutions obtained or developed in the knowledge production and dissemination have used in correcting previous mistakes?
28. to what extent has been the increasing academic achievements of organization relative to the past (publishing research articles, innovation)?
29. To what extent managers and individuals are judged on the basis of performance, not on the basis of relationships and appearances?
30. To what extent the employees of organization act, train and lead in an updated manner?
31. To what extent human resources (individuals in the organization) have found the flexibility and adaptability with new and updated universal conditions?

32. To what extent employees of an organization have the potential to enrich the stored and documented knowledge?
33. to what extent the individuals in the organization were able to develop trust and mutual acceptance in the organization for personal communication in the workplace?
34. to what extent the information, knowledge and skill of people is considered during recruitment?
35. how much does the top management commits to the creating, sharing and applying knowledge in the organization?
36. to what extent the top management has supported brainstorming and teamwork for solving the problems of the organizations and presenting new ideas?
37. To what extent the managers of organization give importance to receiving feedback during knowledge creation and dissemination?
38. to what extent senior managers of the organization have the required knowledge for guiding people to identify, produce, share and apply updated knowledge for organizational success.

Reliability and validity

Cronbach alpha for this questionnaire was .92 and for structural factors, organizational process, technology, organizational culture, measurement, human resource and leadership is 0.089, 0.98, 0.84, 0.81, 0.66, 0.66, and 0.62, respectively which indicates high reliability of this questionnaire.

Generally, the measures taken to study the validity of research instrument are:
a. using questionnaires which have been used in various researchers
b. consulting with expert professors of Islamic Azad University, Science and Research Branch.

FINDINGS

T-test was used to measure the seven factors of knowledge management in order to determine the preparedness of Islamic Azad University, Science and Research Branch for knowledge management establishment. Results are shown in table 1:

Table 1: t-test for different factors of knowledge management

Factor	mean	Mean difference	t	df	95% confidence interval of the difference		Sig. (2 tailed)
					lower	Upper	
Structure	2.39	0.82	-14.482	383	-0.69	-0.52	0.000
Process	2.53	0.95	-9.759	383	-0.57	-0.38	0.000
Technology	2.30	0.75	-18.171	383	-0.77	0.62	0.000
Culture	2.42	0.64	-17.773	383	-0.64	-0.52	0.000
Measurement	2.20	0.63	-24.909	383	-0.87	-0.74	0.000
Employees	2.25	0.64	-23.053	383	-0.59	-0.49	0.000
Leadership	2.25	0.64	-23.053	383	-0.81	-0.68	0.000

CONCLUSION

Measuring the structure, organizational process, technology, culture, measurement, human resources and leadership, we concluded that none of these factors are in the acceptable level for

implementation of a knowledge management model in the Islamic Azad University, Science and Research Branch; therefore, this organization is not prepared to implement the proposed knowledge management model.

Suggestions

1. organizational structure should be flat and flexible in order to transfer knowledge to different levels, easily.
2. different steps of knowledge management process should be revised carefully including creating, storing, organizing and sharing.
3. using new technologies like web pages, support system and videoconferences can help the correct establishment of knowledge management.
4. by creating a value-based culture, employees can be encouraged to share their experiences and knowledge with others.
5. a comprehensive performance evaluation system should be established in the organization to inform the condition of knowledge in the organization.
6. continous training and development of human resources should be prioritized.
7. organization management should support the knowledge management establishment in the organization and act to resolve the barriers in this way.

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