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The effect of Knowledge Management on creativity and Innovation

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ABSTRACT

Knowledge Management (KM) is required in any organization to accumulate and develop organizational information and it's Excellency since KM affects the organizational development and makes the various parts of that organization progress. The aim of this paper was to survey the effect of KM on creativity and innovation of Blusher city Education Organization. It was a descriptive-surveying research and its statistical population consisted of 200 staff working in Bushehr city education organization among which 132 persons were randomly selected based on clustering sampling method. Data were obtained via a researcher-structured questionnaire from the 132 selected persons. Findings, based on Pearson's Correlation Coefficient, showed that there would be a significant relationship between staffs' acquisition, accumulation and knowledge distribution with creativity and innovation whereas there would be no relationship between creating and keeping knowledge with creation and innovation. Also, the most mean of scales related to the creating of knowledge while the least one related to the accumulation of knowledge.

KEYWORDS: Knowledge Management (KM), Creativity, Innovation, Education Organization.

1. INTRODUCTION

Knowledge has been recognized as a resource for competitive preference to make value and generally, it is known as a main factor for sustainable development which is a determiner for companies or global ideas. Furthermore, that knowledge is a dynamic resource which must be concerned through an exact management (Suberamaniam, 2005).

As organizations ignore their knowledge-based evaluation, KM cannot approve the organization's performance improvement or development (Lunguotum, 2001).

Yarbi and Taylor (2000) believed that KM would support innovation while creating new ideas as increasing organizational productivity. Their research showed that KM played a vital role in organizational culture leading to innovation process. They also emphasized on the role of KM in the creativity and innovation of internal workplace. They concluded that innovation performance could help organizations' product innovations (Xu, 2009).

Hasanzadeh (2007) stated that European companies have allocated 55 percent of their income for KM since 2000 and it represented the significance of Knowledge and Management during 21st century.

Today KM insists on the thoughtful individuals having ability to analyze problems rationally rather than physically, so the staff must be let think to state their ideas about their workplace and the way of doing their duties.

Identifying the knowledge as an organizational resource and using new theories contribute managers to make a new field of KM and Information systems.

These progresses show that knowledge is a human capital and asset by which any investment can directly lead to the increase of items, products, services and high technology (Okunoye, 2001:21).

2. LITERATURE REVIEW

Watson (2003) believes that KM parts are classified as following:

- Leadership/management showing the contextual process, strategy and decision making of the organization concluding values, goals, needs, preferences, allocation of resources, and assets;
- Organization showing operational aspects of knowledge assets including duties, processes, official and in official structures, indices, controlling measures, process improvement and reengineering;

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-Technology showing IT specifically those used for logistics and empowerment of KM strategies;

-Learning showing organization behaviors and social aspects of engineering for making sure about the participation of staff towards organizational learning;

Sunasse and Sewary (2003) could present a model in which KM concluded a subsystem which would be related to each other and the organization should make a balance among them.

To do any work, it is required to gather accurate information and explicit knowledge which is started by the process of knowledge acquisition through KM infrastructure. Two processes by which organizations can get knowledge and information are organizational learning and inquiry.

Organizational learning has a critical role in knowledge acquisition which is led to a dynamic learning through the whole organization (Argyris, 1996).

Organizations are daily getting some information which must be classified, divided and distributed (Engan, 1999). Based on Davenport, organizing and classifying of knowledge must bring up a main capability for future organizations and management of human resources must consider decision making, creating a new knowledge – based dictionary, creating some tools for inquiry, and continuous monitoring of knowledge (Suliman and Spooner, 2000).

Organizations cannot achieve a competitive preference unless they use the best knowledge, so it is compulsory to use the best knowledge totally through making, distributing and sharing that knowledge process.

If the knowledge is distributed through the whole organization, individuals can access new strategies rather than keeping them. Some researchers have been done by Aplard by which some transitional patterns of knowledge among various nations and industries. In addition, Buck and Kim could have surveyed the effect of motivational factors about knowledge in organization (Mohammadi, 2006).

The path of creativity and innovation is followed by planning. Managers are trying to define the mission and organizational strategic goals somehow they bring up the creativity and innovation of the organization; therefore, they consider some main factors such as organizational culture, organizational structure, and human resources.

Shomiker and Roger (2004) claimed that some conditions should be considered for any successful change and innovation including profitability, capability, lacking of any complexity, having congruence with users' value system, justification and having tangible results.

Innovation has a sever tendency towards knowledge, specialty, and commitments as key entries in the process of value creation. Companies having higher innovation will be more successful to response the contextual changes, so companies are pictured as knowledge storage and competency. Theory of innovation can facilitate the integrity of development and knowledge application.

3. Research Hypotheses

- 1) Creating of knowledge has an effect on staffs' creativity and innovation;
- 2) Acquisition of knowledge has an effect on staffs' creativity and innovation;
- 3) Accumulation of knowledge has an effect on staffs' creativity and innovation;
- 4) Distribution of knowledge has an effect on staffs' creativity and innovation;
- 5) Keeping of knowledge has an effect on staffs' creativity and innovation;

4. METHODOLOGY

This research is a descriptive-correlation research in which the relation among the variables has been investigated without making any changes in them. The research is a field study and the data were gathered by means of a questionnaire

5. Instrument

In order to measure, we first studied the literature regarding and listening the views of the representatives, and then prepared a questionnaire, which was first used tentatively and underwent some corrections and reforms; after which it was presented to the research. The questionnaire consists of 42 questions about the different aspects of participation. The results of this research showed that the questionnaire has six dimensions: Acquisition of knowledge, Creating of Knowledge, Accumulation of knowledge, Distribution of knowledge, keeping of knowledge, Creativity and innovation. As a whole, the validity-related evidence seemed to be satisfactory. Table 1 shows the results of Factor Analysis for the questionnaire.

Table1. Cronbach's Alpha Coefficients for Participation Questionnaire

Feature	Number of Questions	Cronbach's Alpha Coefficient
Acquisition of knowledge	6	0.68
Creating of Knowledge	6	0.81
Accumulation of knowledge	10	0.76
Distribution of knowledge	11	0.86
Keeping of knowledge	4	0.74
Creativity and innovation	5	0.86
Total Participation	42	0.78

6. DATA ANALYSIS METHOD

This is a descriptive-surveying research trying to identify and survey the effect of KM on creativity and innovation of Blusher city Education Organization. It was a descriptive-surveying research and its statistical population consisted of 200 staff working in Bushehr city education organization among which 132 persons were randomly selected based on clustering sampling method. Data were obtained via a researcher-structured questionnaire having 42 items given to the 132 selected persons. The questionnaire was formed based on a five-rated scale having started from very little agree to very highly agree completed by the participants (staffs).

Content validity and Chronbach's Alpha ($\alpha=0.84$) were used to measure the questionnaire validity and reliability. To analyze the gathered data, descriptive and inferential statistical indices were used such as frequency, mean, standard deviation, and Kolmogrov-Smirnov test.

7. RESULTS

Table-2 shows the amount of correlation between the variables. So at 95% Level of confidence can be said to create a knowledge and knowledge maintenance staff has no effect on creativity and innovation, but Acquisition of knowledge, Accumulation of knowledge, Distribution of knowledge are the effects on staff Creativity and innovation.

Table 2.Correlation Coefficient among five variables and staff's creativity and innovation

Variable	Index	Pearson's Correlation Coefficient	Sig.
Creating of Knowledge – Creativity and innovation		0.134	0.168
Acquisition of knowledge – Creativity and innovation		0.406	0.000
Accumulation of knowledge – Creativity and innovation		0.281	0.003
Distribution of knowledge – Creativity and innovation		0.259	0.007
Keeping of knowledge – Creativity and innovation		0.114	0.241

8. DISCUSSION AND CONCLUSION

According to the above-mentioned findings, the first and fifth hypotheses were not supported while the rest of hypotheses were supported.

The first hypothec was not supported and it showed that creating of knowledge would be a continuous process and individuals working in any organization have been trying to make an organizational capability continually.

The second hypothesis was supported and it showed that acquisition of knowledge could lead the new knowledge to enter any organization and it made individuals solve problems and ultimately use creativity and innovation.

The third hypothesis was supported and it showed that the created or acquired knowledge should be congruent with organizational needs and therefore they should be prepared appropriately to be used in an exact time and place. The recognition of the appropriate time and place could cause the teachers become innovative and creative.

The forth hypothesis was supported and it showed that flat structure of any organization could empower the knowledge flow in the organization and staff using computers could help the distribution of knowledge among the whole parts of the organization and individuals could exchange their various ideas. Distribution of knowledge for higher performance and creativity requires a suitable culture by which members respect each other's and trust on them and finally try to communicate organizational learning.

The fifth hypothesis was not supported and it showed that keeping staff would be a critical action since it would be a fact that he or she might leave the organization someday, so in order to prevent staffs' turn over, it would be

significant to keep organizational staff knowledge however, it could cause the lower creativity and innovation in the organization finally.

Generally, the key conclusions obtained from this paper are:

- 1) knowledge strategies taken by organizations can be classified based on some dimensions such as organizational tendency to accumulate of knowledge by organization people or technology, tendency of the organization to activate or inactivate the inquiry, gathering and developing the knowledge and finally the range and depth through which the organization is to look for knowledge;
- 2) A recognizable relationship between organization strategy and knowledge strategy traits.

9. Suggestions

Based on the findings and results of the study, the following recommendations are:

- The use of information technology and identify resources and knowledge bases in the offices and even the office, to solve problems and make better business decisions.
- Review the goals and programs of human resource management and employee performance evaluation. Especially rewarding system performance evaluation and reward employees should be based on the assessment and management team and specialized knowledge.
- In order to improve the structure of knowledge and promoting creativity and entrepreneurship in individuals in the workplace.
- Set the control system and evaluate employees based management system based on knowledge management.
- Putting knowledge management goals and objectives of knowledge management as a process of looking at the whole organization has provided.

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