

## **INVESTIGATING THE RELATION BETWEEN KNOWLEDGE MANAGEMENT AND ORGANIZATIONAL INNOVATION IN ISLAMIC AZAD UNIVERSITY OF SHOSHTAR**

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### **ABSTRACT**

The present world is the world of changes in which changes occurred in strange form. Become several branches of science and appearance the new science, technology changes and their life methods come from changes. Innovation is one of the important challenges of principle and employees of universities, preparing suitable environment for growth and train talents that enter universities. Knowledge also has strategic importance to individuals and organizations as an entity and source of power. Long term success of organization depends to obtain. Save, and share of knowledge. Strategies that are designed based on accumulation of knowledge of manpower are the key of comparative advantages. Therefore successful management of knowledge is the main characteristics of survival of organization. We are looking for answer of this question in the research that does knowledge management make organizational innovation in employees of Azad University? In terms of aim the present research is an applied one, in terms of scale, it is a sectional research and in terms of implementation it is a survey one. Population of the research is all employees in Azad University of shoushtar. 100 employees are selected as sample through cocharan formula. Collecting tool of data in the research is a questionnaire that based on cronbachs alpha is 0.86. it shows that a questionnaire has suitable stability. Data of varizbles is analyzed by using descriptive statistics, and hypo theses are analyzed by using kolmogrov-smirnov test, pearson correlation test and muti-variables regression. The results showed that there is a positive, significant relationship between knowledge management and innovation. Also we can claim that when knowledge management increases, the level of innovation is higher too and vice versa.

**KEY WORDS:** knowledge management, Innovation of organization.

### **INTRODUCTION**

Today, with the competition complexity, innovation is considered as one of the main advantages to survive the company. The emergence of knowledge innovation not only enables organizations to gain competitive advantage but also it provides a useful tool for improving organizational performance. In fact, managers and policy makers have found that a successful innovation is a knowledge-based innovation. Amidon defines knowledge innovation such as creation, development, conversion and application of new ideas into marketable goods and services that lead to organization's success and credit economy development and progress of a nation and society. Each organization attempts to use the opportunities provided by knowledge management such as acquiring, replication and information sharing at innovation. The Innovation term can be used in an

extensive concept as a process to use knowledge or related information to create or introduce new and appropriate things. In other words, innovation is creating something new that follows a target and run it. The emergence of knowledge innovation not only enables organization to gain competitive advantage, but it also provides a useful tool for improving the performance of organizations. Knowledge as a main source for innovation and organization productivity has a paramount importance. The main aim of knowledge management is to create and organize an environment that people extends themselves and exchange the knowledge and combine the other's knowledge with their knowledge and ultimately use it [Davenport and Grover, 2001]. One of the important challenges of officials and employees of universities is to preparing a perfect environment to grow and nurture talents which are entering to this university. Science as an institution and as a source of power, have a strategic importance for organizations and peoples. Knowledge is the way of creating welfare for an individual and to reach this goal, it affects an organization or even a nation. Long term success of an organization depends to knowledge acquisition, storage and sharing. Strategies that should be design based on accumulated knowledge of human resources and they are the key of competitive advantage. So, the main characteristic of an organization's survival is the successful knowledge management. Innovations are the results of knowledge management. By facing with a changing environment, innovation equipped organizations with the flexibility against the change and they are the key of survival and success. Knowledge management is related to creation and development of knowledge assets and to go beyond the organization's goals and it needs activities that are related with identifying, sharing and creating the knowledge. This requires systems such as knowledge maintenance, training and facilitating and organizational learning. Today, knowledge become so important in organizations and successful knowledge management is the main characteristic of an organization survival. There are obstacles to the success way and effective knowledge management, in this study, the barriers of knowledge management are provided and we want to analyze these problems and evaluate the ways to dealing with them [Nilmini and Dag Von, 2007]. And we want to conclude that whether knowledge management will lead to organizational innovation, the knowledge infrastructure is a mechanism that manages organization through it and peoples in different parts will share their knowledge through these infrastructures. The main aim of this infrastructure is to process knowledge in the vessels of organization working processes. To implementing the knowledge management at the universities, due to their characteristics and regardless of risk factors, creating appropriate conditions is not possible and will face with fail. To success in this condition, universities require a working environment that in these places, knowledge and experience is shared and process and information technology should be provide for this purpose. Also, the behavior of peoples in universities should be regarded so, to merge their information and knowledge and reach to peoples in an appropriate time to peoples who need to them and they can act with a higher productivity. Undoubtedly what makes up the quality of universities outcomes Is the wise and knowledgeable manager in universities that in addition to consistency with changes, it makes changes. The foundations pf knowledge management infrastructure includes organizational culture, information technology and knowledge process. To improve the knowledge management in an organizations, the changes that lead to knowledge reconstruction or engage, should be encouraged systematically. All organizations need new ideas and innovations to being survive. New ideas and innovations are blown as a spirit in the organization's spirit and save it from destruction [Madhavm and Grover, 1998]. The emergence of knowledge innovation not only

enables organizations to gain competitive advantage, but it also provide a useful tool for improving the organizational performance. Knowledge as a main source of innovation and organizational efficiency is of paramount importance. The main purpose of knowledge management is to create and organizing the environment which people extend their knowledge and exchange it with each other and combine the other's knowledge with their knowledge and ultimately use it. the application of knowledge management in turn will lead to innovations in the organizations and so that knowledge management is known as a reference source of innovation and it is considered as the most important requirement in an organization in a dynamic and complex environment which is necessary to peoples to capture the new knowledge as an application and validate knowledge in products and services. So the organization management should rely on knowledge and superior knowledge and reasonable decisions in important issues and improve the knowledge –based functions so the knowledge management is considered as a more important category of knowledge management [Wickramasinghe, 2005]. According to the provided contents in this research we want to answer this question whether the knowledge management led to organizational innovation among azad university employees?

## **Mythology**

The present study is a descriptive survey research and practical purpose. The statistical population consisted of all employees working at the Azad University of Shoshtar. The statistical sample consisted of 100 employees from Azad University of Shoshtar that fifty of them are women and 50 of them are men. Selecting the sample is based on Cochran formula. Data gathering device includes two questionnaire.

1. The researcher questionnaire constructed by knowledge management: it consists of 36 questions that assess process such as knowledge creation, knowledge sharing and knowledge application.
2. Organizational innovation organization consisted of 17 questions.

The validity of two questionnaires was confirmed by supervisors. To investigate the questionnaire reliability, Cronbach alpha was used for the knowledge management, it was obtained about 0.76 and for organization innovation questionnaire, and it was obtained about 0.86. To analyze the test data, Kolmogorov – Smirnov test was used (to determine how to distribute data) and Pearson's correlation and multivariate regression were used (to analyze hypothesis).

## **Researches findings**

The analyzing of hypothesis are presented in Table 1.

**Table 1: analysis of hypothesis**

Significant level	Determination coefficient	Correlation amount	Standard deviation and mean	variable
./.0001	.72	.80	2.6 ± .00	Knowledge management
			2.17 ± .40	Organizational innovations
./.0001	.72	.80	2.98 ± .07	Knowledge creation
			2.76 ± .71	Knowledge sharing
			2.1 ± .66	Knowledge acquisition
			2.19 ± .62	Knowledge storage
./.0001	.74	.86	2.18 ± .74	Product innovation
			2.16 ± .73	Process innovation
			2.18 ± .8	Office innovation

The results showed that: there is a significant relation between knowledge management and organizational innovation (P<=0.0001)

-there is a significant relation between knowledge management and hard and soft aspects of it and organizational innovation.

-there is a relation between knowledge management and three dimensions of organizational innovation.

-knowledge management and its dimensions is a good predictor of organizational innovation.

**Table 2: Multivariate regression analysis to predict organizational innovation indicators based on knowledge management**

R <sup>2</sup>	R	Significant level	F	Mean square	Freedom degree	Total squares	Variance source
.80	.89	.0001	94/1	11.03	4	44/1	regression
<b>Predicting variables:</b>				.12	90	11/1	reminder
<b>organizational innovation</b>				-----	99	00/2	total
<b>Criteria variable: dimensions of knowledge management</b>							

Significant level	t	Beta	Standard error	B	Prediction variable
0.19	-1/33	-----	0.21	-0.27	Constant
0.68	-0.41	0.3	0.1	-0.04	Knowledge creation
0.08	1/7	0.14	0.08	0.10	Knowledge sharing
0.86	-0.17	0.01	0.08	-0.01	Knowledge application
0.0001	12/8	0.83	0.08	1.01	Knowledge storage

## DISCUSSION AND CONCLUSION

Based on the results of correlation analysis of this assumption, we can say that there is a significant relation between knowledge management and innovation. Furthermore, based on statistical results and regression analysis we can argue that when the knowledge is more, the level on innovation is higher, the opposite view can also be claimed. The similar results with the findings of this research are stated by Lin Fan that knowledge management influence on innovation process [Cohen and Leviathan, 1990]. On that research, the effect of individual factors, organizational and technological factors are investigated on knowledge management and the effectiveness on knowledge management was evaluated on innovation process. Also, in another study the effect of knowledge management was investigated on the innovation networks between academia, government and industry and its positive and significant effect was confirmed. In addition, in a research by Kamsak and Boultera in the level of senior and middle managers, the relation between knowledge management and innovation process was measured and the results have shown that amount increasing of knowledge sharing, increase the organizational innovation. In a study which was done by Sinez et al, the effect of different mechanisms was evaluated on knowledge management on the organizational innovation capacity. The results show that knowledge management is a key issue and essential issue to promoting the innovation capabilities [Nonaka and Takeuc, 1995]. Today with the complexity of today's competition, innovation is considered as one of the main advantages of the companies to survive. All organizations, to survive need new ideas and innovative ideas. Knowledge as a main source for innovation and organization productivity has a paramount importance. The main aim of knowledge management is to create and organize an environment that people extends themselves and exchange the knowledge and combine the other's knowledge with their knowledge and ultimately use it. One of the important challenges of officials and employees of universities is to preparing a perfect environment to grow and nurture talents which are entering to this university [Wickramasinghe et al. 2003]. From the authority's perspective, the management, innovation knowledge is the most important and major factor of competitive advantage. So promoted organizations by investing in the knowledge management sector and navigating the researches to the innovation, acquire significant success [Wilcox, 1997]. But the requirement of knowledge creation is the existence of knowledge (including knowledge management) in person/organization. The knowledge is a necessary factor to create innovation, so managing the knowledge in order to create innovation is an important factor and organizations should navigate the aims of knowledge management to create and make the innovation. In this

research, it was stated that there is a direct and tangible relation between knowledge management and innovation and this two factors are their casual and if the knowledge management do better and innovation is created, previously. To confirm the relation by jane and Tryandys view, we consider the below factors: Idea creation depends on people and environment, they believe that any creative environment has following characteristics:

- it allows to people to be active in their interested field.
- it encourages employees to have an extensive and active relation with others.
- it provides the ability to cover risk.
- it tolerate some mistakes and compliance.
- it provides appropriate rewards and incentives.

The last point is the most important strategy for improving the performance of knowledge management, develop and motivate staff to strengthen the prosperity of individual and organizational knowledge.

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