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DETERMINATION OF KNOWLEDGE MANAGEMENT (KM) IMPACT ON ORGANIZATIONAL EXCELLENCE OF PNU PERSONNEL IN WESTERN AZERBAIJAN PROVINCE (IRAN)

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ABSTRACT

With respect to importance of knowledge at present time and its unique role that is played in economic, social, and cultural thriving and flourishing of communities, addressing Knowledge Management (KM) necessitates in servicing organizations including universities. The current essay is purposed to determine the impact of KM establishment on organizational excellence among personnel of Payam-E-Noor (PNU) University at Western Azerbaijan Province in Iran. The statistical population includes all administrative and educational personnel of Western Azerbaijan PNU University. This investigation has been carried out by means of a surveying method and by the aid of standard questionnaire from the collected data. The results derived from testing hypotheses, which based on SPSS software, showed that all research hypotheses were confirmed and it indicated that KM establishment has affected on organizational excellence among personnel of Payam-E-Noor (PNU) University at Western Azerbaijan Province (in terms of knowledge identification, acquisition, application, sharing, development, and storing/maintenance) while knowledge sharing dimension has the maximum effect and knowledge application possesses the minimum impact on organizational excellence of personnel.

Keywords: *Knowledge Management (KM), European Foundation of Quality Management (EFQM) Model, Payam-E-Noor (PNU) University*

INTRODUCTION

Whereas Knowledge Management (KM) influences in flourishing and prosperity of several organizations and retention of their competitive advantage and organizations are exposed to the rising global competition and major and fast technological changes and development in the new millennium. Thus, in order to remain competitive these organizations should still think about lowering of costs and improving capabilities, developing of markets, and enhancing efficiency of auto-innovative processes (Atashak, 2007).

In modern economy, knowledge plays a key role in the society and knowledge workers are considered as the most valuable asset in the organization.

Therefore, to survive in a competitive business environment, organizations should be involved in a group of KM processes (Ghorbani, 2009).

With respect to importance of intellectual capitals in organizations as well as importance of universities in training of the needed human resources for the community and knowledge creation, it is tried in the present research to identify the impact of KM establishment on personnel of organizational excellence of Western Azerbaijan PNU University.

The KM model, which has been prepared by Alvani and Shahgholian (2005), was used and EFQM model from European Foundation for Quality Management was employed for evaluation of organizational excellence of the personnel.

A Review on Research Theoretical Literature

Knowledge Management (KM)

KM approach is a self-conscious combination of personnel, processes, and technology that are involved in design, attract, and execution of rational infrastructures in an organization and it not only consists of design and execution of information systems, but includes the necessary changes in administrative attitudes and organizational behavior and policy that the present personnel in the organization may

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develop the ability for information collection and sharing of what they know and this leads to an activity that improves services and results (Lisa, 2004).

Rastugy considers KM as a comprehensive and systematic process from organizational wide and coordinated activities for acquisition, creation, storing, sharing, publishing, development, and developing knowledge by individuals and groups to realize organizational main goals (Pham and Swierczek, 2006).

Hales (2001) deemed KM as a process thereby the organizations are enabled to convert data into information and information into knowledge and at the same time they will be able to employ the acquired knowledge effectively in their decision making. Since activity of organization may affect on the community thus the organization with organizational excellence, which possesses social responsibility and fulfills its duties versus the society and claims for organizational excellence, shall be superior to other organizations (Jelodari, 2005).

According to attitude of Mehdizadeh (2011), for the organizations which seek for progress and advancement, KM is purposed as a strategic necessity and it guarantees long run preferences for the organizations and communities and considered as the criterion to determine their exploitation from human intellectual and information capitals.

The properly management of this factor may cause acquiring competitive advantage for the organization and eventually its victory over rivals (Mehdizadeh, 2011). Through better management on ideas, rising capability and efficiency of personnel and KM effective management, KM may lead to increase organizational intelligence. Therefore, KM may contribute to organizational intelligence in process of decision making, and targeting by injecting of information and knowledge into organizations (Tahrri, 2010).

The model, which has been utilized by Alvani and Shahgholian to depict KM includes 6 components.

a) *Knowledge identification*: Anyone could not know anything but we should know that from where we can find what we need to know.

Some channels which are necessary for identifying the needed items are expert essays, notes, participation in conferences, and access to databases, internet, and technical reports.

b) *Knowledge acquisition*: Organizations provide their backing of knowledge by collection of data from domestic and foreign sources. Education is one of the original and classic methods of knowledge acquisitions. Professions, memories and logbooks, ideas, and assumptions of personnel are the main internal sources of knowledge. Personnel's external knowledge includes knowledge from other enterprises, beneficiaries' knowledge like customers from knowledge acquisition channels are the external sources.

c) *Knowledge application*: In the case of application of knowledge and experiences in the new situations, those experiences are surveyed and adjusted and a new group will be acquired. The last step that is taken in KM process is to capture the best experiences and adding them to KM applications.

d) *Knowledge sharing*: Sharing of knowledge is a social and administrative process for transfer, attraction, and reusing of the existing knowledge in order to achieve organizational goals or in other words sharing of knowledge is the organizational move and shift and concerning IT, data, and knowledge and the capacity of an organization to transfer knowledge or in fact organizational capacity to transfer power and sharing it.

e) *Knowledge development*: Developing of knowledge comprises of those administrative efforts which are made by an organization to acquire some capabilities that it lacks or to create some capabilities, which do not exist inside and outside the enterprise.

f) *Knowledge storing (maintenance)*: To store knowledge it should be known first what type of knowledge is important for storing and then how to maintain it with best efforts (Park and Kim, 2006).

Organizational Excellence

Organizational excellence is to achieve some conditions which guarantee activities for growth in three dimensions of quality, innovation, and system improvement to provide and promote the level of interests for the internal and external beneficiaries of the organization including customers, investors, personnel, and community.

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Excellence models are focused on Total Quality Management (TQM) and they are aimed at realization of constant improvement in the organization. Purposing of excellence models are aimed at achieving an integrated broad-based system to realize TQM so that as it discerned for any criterion and parameter, it may employ the current tools in this sector and use them for this purpose.

EFQM model has been introduced as the primary framework for evaluation and improvement of organizations; a model that reflects stable advantages, which an excellent organization should achieve it (Najmi and Hosseini, 2006).

The Impact of KM on Organizational Excellence

1) *Knowledge identification and organizational excellence:* With assigning their own mission and or responsibility, which presents the organizational long run goals and orientations as well as through establishing relationship with the customers (students), and through acquiring knowledge about their requirements, the organizations identify their own knowledge- related needs and they cause excellence in personnel by clarifying the quality of knowledge application.

2) *Knowledge acquisition and organizational excellence:* By involvement of personnel in business and through encouraging of them to innovation and creating motive for knowledge acquisition and developing skills and capabilities, organizations can receive the information from internal and external environment with interpretation to use appropriate opportunity and to cause excellence for the personnel of the organization.

3) *Knowledge application and organizational excellence:* In the organizations with culture coordination and integration at high level and various organizational units and districts with which they can cooperate to achieve knowledge and modern technology as well in the organizations in which the personnel highly involve in work and invest to promote skills in their personnel, knowledge application may lead to organizational excellence of the personnel.

4) *Knowledge sharing and organizational knowledge:* With implementation of KM and involvement and encouragement of personnel to teamwork, organization can extract the accumulated knowledge in the mind and memory of organizational members so this may cause rising personnel's capability in doing of tasks and eventually lead to improve efficiency in members of the organization. Increasing capability of personnel based on information and knowledge may be very effective in tackling against environmental threats.

Sharing of knowledge may lead to subsumption and knowledge regeneration; of course, knowledge sharing is a function of motives, culture, structure, and technology etc in the organizations (Alavi and Leidner, 2001).

5) *Knowledge development and organizational excellence:* The pressures exerted by surroundings, modern technologies, and socio-economic changes require the necessity for knowledge development and through developing adaptability culture and expanding their own exiting capabilities and acquiring of what they lack and through combination and sharing of tacit and explicit knowledge in the personnel who operate some activities in the organization as well as providing the needed infrastructures to access to partners' knowledge (customers, suppliers, rivals) the organization may react to the current derives and acquire competitive advantage and organizational excellence for the personnel with riding on wave of global changes (Adenfelt and Lagerstorm, 2006).

6) *Knowledge maintenance (storing) and organizational excellence:* Retention or storage of information in an organization causes the personnel to be able to use the information necessarily all the times and the stored information to be converted into a usable source in this system and to provide stable competitive advantage for the organization and to lead to improving personnel's organizational performance and excellence.

One could witness the improvement in personnel's capability and excellence and eventually organizational excellence and rising of the rate of its competitiveness by enhancing KM in the organization.

Reviewing this literature indicates that few empirical studies have been conducted regarding the impact of KM on organizational excellence of personnel so in this investigation it has been tried to indicate this

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point with 6 hypotheses that establishment of KM is effective on personnel's organizational excellence in terms of identification, acquisition, application, sharing, development and storing of knowledge. The research conceptual model is shown in Figure 1.

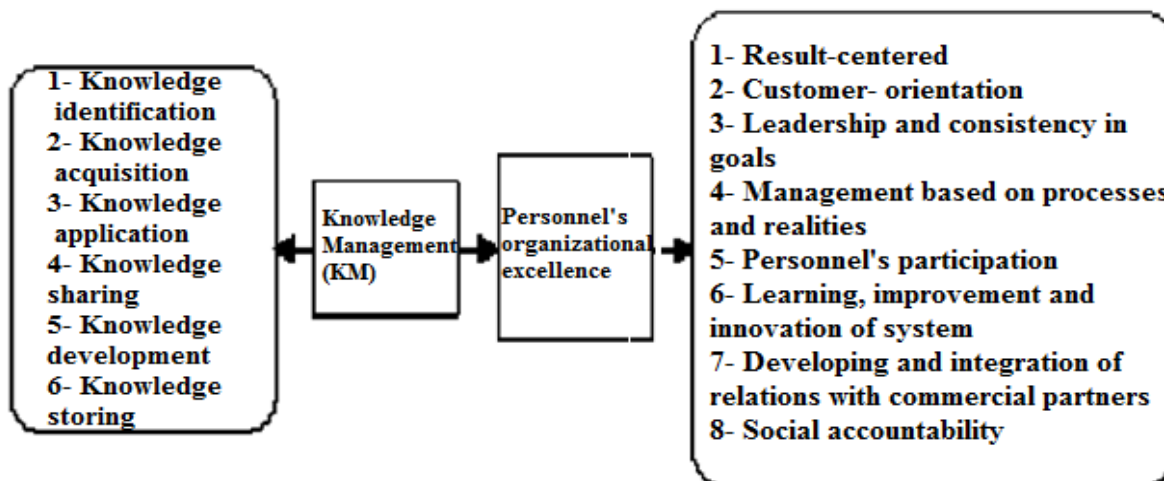


Figure 1: The Research Conceptual Model

MATERIALS AND METHODS

Methodology

The present research has been carried out by surveying methodology. The statistical population includes administrative and educational personnel in Payam-E-Noor (PNU) University at Western Azerbaijan Province, which were totally 340 participants.

The sample was prepared by means of classified random sampling technique and based on the given formula; sample quantity was estimated to 180 respondents and data were gathered by a questionnaire with 5 general questions and 59 questions to measure independent and dependent variables. All questions were designed based on Likert five- scale spectrum.

The questions in this inventory for KM variables have been extracted from the standard questionnaire designed by Gregory (1990) where their validity has been approved.

The reliability of questionnaire was also verified by distribution of primary questionnaire among 30 respondents with Cronbach Alpha Coefficient as 0.959 and all calculations were done by means of SPSS software.

RESULTS AND DISCUSSION

Research Findings

The results indicated that among 180 respondents, 62.8% were males and 37.2% were females. In terms of age, age group (25-35) has allocated the maximum members of the sample group with approximately 50%.

About 46.1% of respondents had 5-10 years' work background while 60% of them had BA degree. Similarly, the results of descriptive parameters showed that KM and organizational excellence variables have allocated mean values of 3.37 and 3.25 respectively.

Table 1 indicates general condition of research main factors based on single- sample t-test. As it seen, significance level is lesser than 5%.

On the other hand, with respect to positive sign of t-statistic, it can be implied that their resultant mean is greater than 3 and this condition may reflect the selection of effective and very effective choices in the related parameters to these variables in the questionnaire done by personnel.

Thus, most of personnel from PNU University at Western Azerbaijan Province have evaluated the impact of above-said variables on PNU personnel's organizational excellence higher than average level.

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Table 1: Single Sample T- Test of Hypotheses

	Test Value = 3					
	t	d.f	Significance Level	Standard Deviation	95% Confidence Level in Means Difference	
					Lower	Upper
Knowledge Identification	12.278	179	0.000	0.59286	0.4976	0.6881
Knowledge Acquisition	5.089	179	0.000	0.21250	0.1301	0.2949
Knowledge Application	4.363	179	0.000	0.20778	0.1138	0.3017
Knowledge Sharing	11.885	179	0.000	0.57130	0.4764	0.6661
Knowledge Development	7.903	179	0.000	0.31759	0.2383	0.3969
Knowledge Storing	5.472	179	0.000	0.28000	0.1790	0.3810

To verify the given results from single sample t-test, Pearson correlation coefficient test has been adapted where with respect to Table 2; the significance level of sample for all studied variables is smaller than 5% error level. Thus, there is certainly a significant difference between the results and mean values of the choices. In other words, with respect to ratio of answers, it can be implied with confidence at 95% level that variables of KM effect on organizational excellence in PNU personnel.

Table 2: Analysis of Variables with Pearson Test

Variables	Pearson's Formula	Significance Level	Quantity
Knowledge Identification	0.263	000	180
Knowledge Acquisition	0.160	0.32	180
Knowledge Application	0.40	0.047	180
Knowledge Sharing	0.283	000	180
Knowledge Development	0.176	0.018	180
Knowledge Storing	0.405	00	180

Likewise, by implementation of Freidman Test, the research variables have been ranked so that to the rate of effect to be identified for any variable. As it observed in Tables 3 and 4, the significance level is less than 5% error level. Therefore, there is certainly significant difference between each of research variables. These results may show that the impact of outputs for each of dimensions differs from personnel's viewpoint and accordingly knowledge sharing dimension has the maximum effect and knowledge application variable has the minimum impact of organizational excellence among personnel.

Table 3: Friedman Test for Ranking the Effective Factors on Dependent Variable

Knowledge Identification	18.4
Knowledge Acquisition	3.01
Knowledge Application	3.00
Knowledge Sharing	4.264
Knowledge Development	3.93
Knowledge Storing	3.17

Table 4: Friedman Test

Quantity	180
Chi-2	86.249
Degree of Freedom (d.f)	5
Significance Level	0.000

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Discussion and Conclusion

With respect to the resultant statistical outcomes, it can be said that KM may integrate scientific capitals of PNU University and directly effect on excellence variables including customer- orientation, leadership, intellectual decision making, redesign of processes, learning and improvement and innovation, and also the relations with rivals and social accountability regarding enhancement of personnel's performance and it is eventually followed by improvement and upgrading organizational performance.

Finally, it should be noted that with respect to macro policies which are made in this country in order to support creation of new science and knowledge and upgrading knowledge level, the expertise and skills of manpower as well as making administrative system of KM as knowledge based may be crucially important in distribution of knowledge and making it more applied in the university. This indicates that empowerment of human resources is very important in knowledge base organizations since those changes, which necessitate consistent improvement, may require for exertion of deep impacts on mind of human resources and personnel's participation requires maximizing of personnel's capability in learning and their pioneer effort for this change. Top managers may achieve this objective by making these activities purposeful and effective and through training mental, intellectual, attitudinal, and scientific capabilities of personnel.

This may show that empowerment of human resources in knowledge base organizations is crucially important since changes require constant improvement and also it needs to exertion of deep effects on mentality of human resources and personnel's participation requires the maximization of personnel's capability for learning and their pioneering in these changes. The successful organizations have been often converted into the pioneer organization by providing an environment for development of the personnel and indentifying key personnel to increase their portion of intellectual capitals (Lisa, 2004).

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