

Study of Knowledge Management Efficiency on Employees Performance in Kerman Sport and Youth Offices

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ABSTRACT

The purpose of this paper is to measure the efficiency of knowledge management in Kerman Sport and Youth Office and also measure the relationship of organizational structure variables, organizational culture, technology, strategy, efficiency, knowledge interaction, keeping knowledge, knowledge application, and knowledge acquisition with the efficiency of knowledge management. The statistical society contains of employees of the above mentioned office (110 individuals) and 100 questionnaires Trevor(2006) were distributed and 82 of them were relapsed, Validity of this questionnaire was confirmed by the specialists and its reliability was measured by *Alpha* cronbakh (97%). For data analysis, *Pearson*, *Freidman* ranking test was used. The obtained results show that the efficiency of knowledge management in this office is in the average level and there is a significant relationship between organizational structure and the efficiency of knowledge management. And also there is a significant relationship between field factors such as organizational culture, technology, strategy, creating the efficiency fields and process of knowledge management such as acquisition of knowledge management, efficiency, knowledge interaction, keeping knowledge, knowledge application, and efficiency of knowledge management.

KEYWORDS: Efficiency of knowledge, management, knowledge application, organizational culture, organizational structure, keeping knowledge.

INTRODUCTION

Nowadays, knowledge is a basic stimulant force for achieving success in businesses. Organizations are knowledge-oriented and paying more attention to the minds instead of hand forces. Need to promoting knowledge is increasing and we behave it as the other intangible sources, systematically and the searching in the domain of knowledge management is being used in improving and reinforcing the competition [28].

The metaphor of transferring knowledge from hands into brain and changing information into knowledge and finally, into works or a determined output with added value means that variety, creativity, technology and knowledge-oriented of organization is an inevitable choice for the organizations in 21st century [16].

Organizational knowledge means that each person of organizations has knowledge about processes, productions, services, customers, markets and organizational rivals. Organizational knowledge is a mobile composition of values, experiences, field information and especial knowledge which provides a framework for evaluating and obtaining new information and experiences in the organizations.

The main purpose of this paper is to study the relationship between knowledge management elements and the effectiveness of knowledge management. In fact, we answer these questions:

- 1-What is the level of knowledge management effectiveness in Kerman Sport and the Youth Offices?
- 2-Is there a significant relationship between organizational structure and knowledge management effectiveness in the organization?
- 3-Is there a significant relationship between organizational culture and knowledge management effectiveness in the organization?
- 4-Is there a significant relationship between knowledge acquisition and knowledge management effectiveness in the organization?
- 5-Is there a significant relationship between technology and knowledge management effectiveness in the organization?
- 6-Is there a significant relationship between knowledge interaction and knowledge management effectiveness in the organization?
- 7-Is there a significant relationship between knowledge maintenance and knowledge management effectiveness in the organization?

8-Is there a significant relationship between knowledge acquisition and knowledge management effectiveness in the organization?

9-Is there a significant relationship between effectiveness as an element and knowledge management effectiveness?

10-Is there a significant relationship between strategy and knowledge management effectiveness in the organization?

11-Which of the above mentioned elements has the highest effect on the knowledge management effectiveness in the organizations?

LITERATURE REVIEW

This knowledge emerges from the minds of employees and used by them. *Davenport & Prusak (1998)*, & *Li Yuan* presented a similar definition of organizational knowledge. He, who believed that the human element is the main element in creating and using knowledge in the organizations, said that knowledge is being formed via its movement among individuals of an organization and the communications' interactions among them [6][13].

Malhorta (2005) said that knowledge management means doing the suitable works until doing works and he focused on the efficiency [15] and he said knowledge management is effective in improving the quality of works, increasing the efficiency, accessing update information, increasing efficiency, customer's satisfaction, and improving in decision making [31].

The aim of knowledge activities in the organization is to ensuring the growth, maintaining the activities in keeping the vital knowledge in all levels, using the available knowledge in all cycles, combining knowledge for sinergy accessing the related knowledge, developing the new knowledge via continuous learning which is being created by internal experiences and external knowledge [16][19][4].

In the field of efficiency of knowledge management, some researches were done by researchers and some of them are presented at the following table (with their criteria):

Table 1: Searches in the field of efficiency criteria of knowledge management	
Authors	Presented indexes in the model
Tseng[25]	Technology, structure, culture, knowledge transfer, application, security, new competitive productions, studying the market forces, marketing units, exports, rate of successful research and development in delivering new productions, amount of innovation in the productions, searching, searching per capita, cooperation among employees, cooperation, innovation prediction
Fan Zhi Ping[8]	Technology, structure, culture, knowledge acquisition, knowledge transfer, knowledge application and security of knowledge
Chang Tsung[5]	Strategy, properties of employees and superior manager, marketing and auditing, culture, operational aspects, IT
Ping Jung Hsieh[20]	Strategy, promotion, evaluating, knowledge capitals, classification, cooperation, knowledge acquisition, knowledge saving, knowledge application, innovation in knowledge, knowledge keeping or protection, knowledge learning, infrastructures of IT
Wen[28]	Human forces, data, information, knowledge and wisdom
Oltra[19]	Motivation, cooperation, human forces, infrastructures of IT, customer orientation, past experiences

In contrast to the newness of this research, more attention was paid to other scientific domains in particular theoretical aspects and concepts of knowledge management but in the field of efficiency of knowledge management in the sport organizations, the sources are rare. *Andrew et al.*, in a research "knowledge management: an organizational capabilities perspective" refer to a vision which introduces the foundations of knowledge from structure, technology and culture associated with accessing, transfer associated with maintain as prerequisites for effective knowledge in organization [2].

Moherman (2001) done a research about relationship between knowledge management and organizational efficiency and also organizational factors such as organizational culture, structure, leadership and maintenance and the results of his study indicated that there is a positive and significant relationship between knowledge management and organizational efficiency [1].

In the other research, *Ribiere (2001)* believed that organizational culture is a basis for organizational optimization; determines the effective and non effective performance, determines patterns for interrelations of people, and provides the coordination for organization and its people [21].

Dianne (2002), in a research about "processes and strategies of knowledge management", concluded that factors such as technology, motivation for getting and transferring knowledge, leadership and management are the factors which increase the efficiency of knowledge management and he said that none of the organizations which are accomplishing the knowledge management did not use it effectively [7].

In the other research by *Zheng in 2005*, he showed that strategy, structure and culture of organizations affect the efficiency of knowledge management and in this case, 3 factors of organizational culture have the highest positive effect on the efficiency of knowledge management [32].

Smith and Mike (2010) were done a research about the success of knowledge management by focusing on the efficiency of knowledge management and their results showed that individual sources such as organizational structure has a different relationship with organizational efficiency [24].

The other research about “effectiveness of knowledge management sources in the organizational efficiency of restaurant industry” by *Joong Kim and Hancer (2010)* and they concluded that the sources of IT, motivation and culture of knowledge cooperation were effective in the efficiency. IT associated with motivation and cultures of knowledge cooperation are important for improving the organizational effectiveness [32].

Wei Zheng et al (2010), in a research about “relationship of organizational culture, structure, organizational strategy and effectiveness: in the role of knowledge management”, were done this study for determining a relationship between knowledge management and organizational culture, structure, organizational strategy and effectiveness and shown that the knowledge management has a relationship with organizational culture and effectiveness and also with strategy and organizational structure [29].

Hartnell et al., done a research about organizational culture and effectiveness in 2011 and studied them in the assumptions of effectiveness such as operational performance, financial performance and employees' attitude and they shown that there is a significant relationship with the organizational culture [10].

The other study was done by *Annette and Trevor* which was about “knowledge management and organizational performance” with the aim of showing the positive effect of knowledge management on the organizational performance and their results showed that some of knowledge sources such as organizational structure and knowledge application have a direct relationship with organizational performance whereas technology and knowledge change have not a direct relationship with performance and one of the limitations is that the findings of this study do not measure the organizational performance, completely [3].

Godarzi et al., (2009), in a research “*organizational culture relationship with the knowledge management of managers of physical education organization*”, studied the way of how to determine a relationship between organizational culture with the knowledge management of managers of physical education organization and they came to a conclusion that sharing knowledge and continuous learning is an effective step in creating and transferring knowledge and using the knowledge management [9].

Salavati and HaghNazar (2009), in a research named “*effective field factors on deploying the knowledge management in the units of Iran Oil National Company*”, come to this conclusion that organizational structure and culture have less preparation for using knowledge management to the IT in these units [22].

Naghavi et al., (2010) in a study named “*culture, strategy and its effect on the organizational effectiveness: by looking at knowledge management*” were studied the mediatory role of knowledge management in relationship with culture and leadership with the organizational effectiveness. Their findings were shown that knowledge management plays a role between culture, organizational effectiveness and also leadership [18]. *Honary (2011)* in a study “*designing the structural equations of social capital and knowledge management in the sports' organization*” answered this questions; what is the situation of knowledge management in the sports' organizations? And he concluded that the situation of knowledge management in the organizational groups is not desirable [11].

Therefore, based on the above mentioned studies, the researcher tries to study the effectiveness of knowledge management and its elements and also studies which of them (elements), based on the perspectives of employees and experts of Sports and the Youth Organization, is important.

METHODOLOGY

The method of this study is descriptive; if it studies the current situation and the demographical features, it will be as a measuring one but if it studies the existence or non existence of relationship between variables, it will be as a correlation method. The collected information in this study are into 2 groups.

The first category of information related to the personal information of queue employees of this organization, predicting variables of knowledge management effectiveness and the criterion variable of factors such as structure, knowledge acquisition, technology, knowledge interaction, knowledge usage, knowledge maintenance, strategy and effectiveness. The validity and reliability of this questionnaire was obtained by using a standard questionnaire from *Moghimi Book*[26] that its validity was measured by a group of university professor in the domain of physical education group and its reliability was determined by a researcher and by using the *Alpha cronbakh*, ($r = 0.97$).

This information was collected from the census of Kerman Sport and the Youth Offices' queue employees and 100 questionnaires were distributed but 82 of them were relapsed and were analyzed ($n=82$).

Employees and experts were selected in the different parts of this organization except managers and deputies. The results are reported in two sections.

- Descriptive statistics in which the tendency indexes to center for presenting the demographical proprieties were defined and

- Testing these research assumptions by using Pearson Correlation Coefficient Test and Friedman Ranking Test for determining the most important factors of knowledge management effectiveness in these organizations.

For management effectiveness, 175-250 score shows the high effectiveness of knowledge management but 100-175 shows that the knowledge management is at least effective and the score under 100 shows the less effectiveness.

Zero assumption indicates the lack of relationship and opposite/contrary assumption means the existence of relationship between variables in which a significant relationship equals to 0/01 is used. In analyzing the findings, SPSS Software is used. And based on the aim of this study, this research model in figure1 is shown.

Figure 1: Research model (Elements of knowledge management effectiveness)

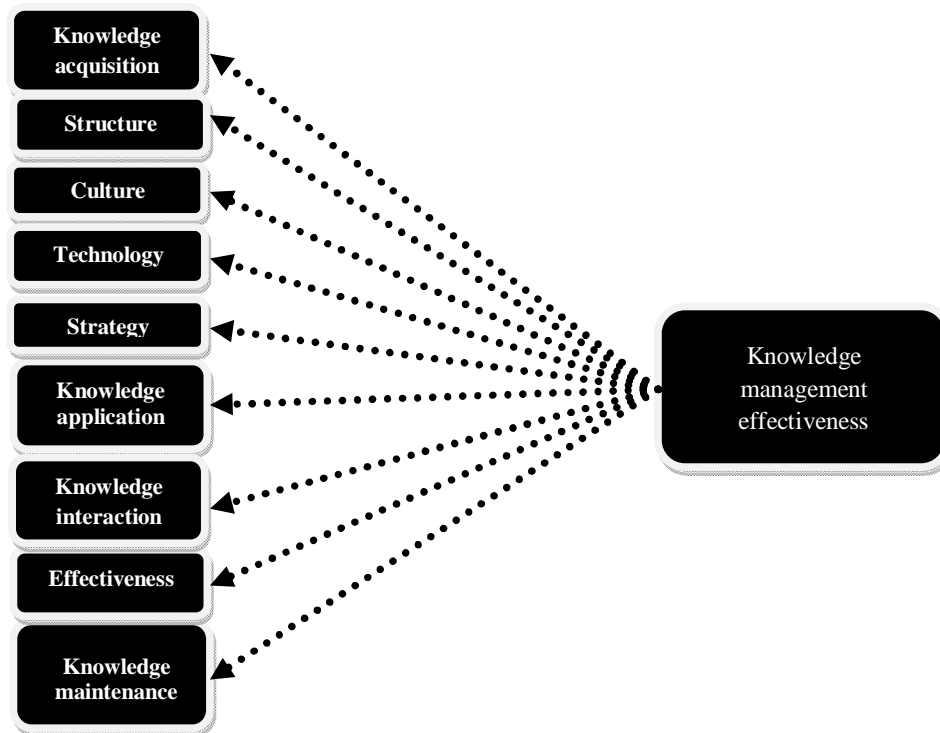


Table 2: Results of demographic part

Age	Age range: 25 – 47(average: 31.7)
Gender	Male: 68.3% Female: 31.7%
Educational level	Course of studies for associate of arts diploma: 22% B.A.: 53.7% M.A.: 19.5%
Educational major	Physical education: 48.8% Non physical education: 36.6% Management: 9.8%
Information about knowledge	Having information: 56.6% Lack of information: 41.5%

The findings show that employees and experts of Kerman Sport and the Youth Offices underestimated the effectiveness of available knowledge management and the obtained average means 142.19 indicates the average level of knowledge management effectiveness.

Table 3: Variable average of knowledge management effectiveness

Average	Variable
142.19	knowledge management effectiveness

Table 4: Correlation coefficient results between knowledge management elements and knowledge management effectiveness

Variable	R	Significant level	$H_0: P \neq 0$ $H_1: P = 0$
Organizational structure		0.001	
knowledge management effectiveness	0.71	0.001	
Organizational culture		0.001	
knowledge management effectiveness	0.66	0.001	
knowledge acquisition		0.001	
knowledge management effectiveness	0.92	0.001	
Technology		0.001	
knowledge management effectiveness	0.78	0.001	
knowledge interaction		0.001	
knowledge management effectiveness	0.86	0.001	
knowledge application		0.001	
knowledge management effectiveness	0.92	0.001	
knowledge maintenance		0.001	
knowledge management effectiveness	0.90	0.001	
Effectiveness		0.001	
knowledge management effectiveness	0.86	0.001	
Strategy		0.001	
knowledge management effectiveness	0.89	0.001	

The analysis of this question indicates that correlation coefficient between structure and knowledge management effectiveness among employees and the experts of Kerman Sport and the Youth Offices was significant ($p < 0.01$). A relationship between two variables of organizational structure and knowledge management effectiveness ($r = 0.71$) indicates a high correlation coefficient among these two variables.

The correlation coefficient between organizational culture and knowledge management effectiveness among employees and the experts of Kerman Sport and the Youth Offices was significant ($p < 0.01$). A relationship between two variables of organizational culture and knowledge management effectiveness ($r = 0.66$) indicates an average correlation coefficient among these two variables.

The correlation coefficient between knowledge acquisition and knowledge management effectiveness among employees and the experts of Kerman Sport and the Youth Offices was significant ($p < 0.01$). A relationship between two variables of knowledge acquisition and knowledge management effectiveness ($r = 0.92$) indicates a high correlation coefficient among these two variables.

The correlation coefficient between technology and knowledge management effectiveness among employees and the experts of Kerman Sport and the Youth Offices was significant ($p < 0.01$). A relationship between two variables of technology and knowledge management effectiveness ($r = 0.78$) indicates an average correlation coefficient among these two variables.

The correlation coefficient between knowledge interaction and knowledge management effectiveness among employees and the experts of Kerman Sport and the Youth Offices was significant ($p < 0.01$). A relationship between two variables of knowledge interaction and knowledge management effectiveness ($r = 0.93$) indicates the highest correlation coefficient among these two variables.

The correlation coefficient between knowledge application and knowledge management effectiveness among employees and the experts of Kerman Sport and the Youth Offices was significant ($p < 0.01$). A relationship between two variables of knowledge application and knowledge management effectiveness ($r = 0.92$) indicates the highest correlation coefficient among these two variables.

The correlation coefficient between knowledge maintenance and knowledge management effectiveness among employees and the experts of Kerman Sport and the Youth Offices was significant ($p < 0.01$). A relationship between two variables of knowledge maintenance and knowledge management effectiveness ($r = 0.90$) indicates the highest correlation coefficient among these two variables.

The correlation coefficient between effectiveness and knowledge management effectiveness among employees and the experts of Kerman Sport and the Youth Offices was significant ($p < 0.01$). A relationship between two variables of effectiveness and knowledge management effectiveness ($r = 0.86$) indicates a high correlation coefficient among these two variables.

The correlation coefficient between strategy and knowledge management effectiveness among employees and the experts of Kerman Sport and the Youth Offices was significant ($p < 0.01$). A relationship between two variables of strategy and knowledge management effectiveness ($r = 0.89$) indicates a high correlation coefficient among these two variables.

For answering this question; which of these elements has the highest effect on the knowledge management effectiveness in Kerman Sport and the Youth Offices, Freidman ranking test was used and its results are as the following:

Table 5: Ranking the elements of knowledge management effectiveness

Rank	1	2	3	4	5	6	7	8	9
Title	Organizational structure	knowledge application	Organizational culture	knowledge interaction	knowledge acquisition	knowledge maintenance	Strategy	Technology	Effectiveness
Variable	7.98	6.47	6.39	5.78	5.47	4.85	4.05	2.79	1.24

By considering the obtained results from this ranking, the most important factors in this field means knowledge management effectiveness are knowledge application, organizational culture, knowledge interaction, knowledge acquisition, knowledge maintenance, strategy, technology, and effectiveness.

Conclusion

Knowledge management is a leadership commitment for improving the organizational effectiveness via increasing its chances or opportunities. The aim of knowledge management is not controlling its costs but is improving the ability of organizations in doing the main processes as a character.

The findings show that knowledge management effectiveness in the considered organization is in the middle level and these factors are effective in the effectiveness of knowledge management such as organizational structure, knowledge application, organizational culture, knowledge interaction, knowledge acquisition, knowledge maintenance, strategy, and technology and the most important factor is organizational structure and after that, some of them are as (in turn): knowledge application, organizational culture, knowledge interaction, knowledge acquisition, knowledge maintenance, strategy, technology, and effectiveness but effectiveness is the most important factor in the effectiveness of knowledge management in these organizations.

All these results show that Kerman Sport and the Youth Organization does not pay attention to the main infrastructures which are mentioned in this study such as technology, knowledge storage, etc. And based on the mentioned descriptive results, inconsistency of educational major of employees with their work and also experts and in the other hand, their unfamiliarity with this domain decreases the knowledge management effectiveness in this field. Therefore, these solutions are ebbing suggested in this field:

- Holding educational workshops
- Assigning some places for meetings and transferring the information among employees and experts
- Using the financial awards for encouraging the employees for information transfer
- Determining the non formal groups and reinforcing them
- Using the non formal group meetings
- Establishing the work teams
- Creating culture for knowledge transfer in these organizations via increasing the effectiveness of knowledge management.

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