The Relationship between of technology (Support and Understanding ICT) with the deployment of knowledge management in selected sport organizations of Iran

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Abstract

Objective: The aim of this study was to investigate the relationship between technology and knowledge management in the selected sport organizations of Iran.

Methodology: This study was descriptive. The sample was 103 managers in sport organizations. Data was gathered by Questionnaires. Data was analyzed by Spearman's correlation coefficient, Pearson and regression in SPSS19 software.

Results: Results indicated a positive and significant relationship between ICT and knowledge management in sport organizations.

Conclusion: The results showed that the technology play a key role in knowledge management in sports organizations. It revealed that the more staff ability is in the information technology, the better knowledge management will be established. So, ability must be considered as effective tool to gather, store, transmit and disseminate knowledge in the organization managers' plans.

Keywords: Technology, knowledge management, establishment, selected sport organizations

INTRODUCTION

Toward of present transformations and changes, it is certain that is a clear difference between our societies with future.(Seyed Amery and colleagues, 2009). At present, economic has moved toward a knowledge-focused economics and it has challenge most of now equations of countries, and this is result of information technology (It) and communication. Present organization give more importance to understand, conformability and managing environmental changes and proceed to obtaining and applying updated knowledge in order to improve operations and providing more suitable productions and services to clients. (Sobhani and colleagues, 2014).Such organizations require to applying new style of management known as "knowledge management". Some organizations believe that knowledge can be managed through pure concentration on individuals, technology and technics. (Fazeli Dinan, 1392). Knowledge management includes wide spectrum of tool, technology and managerial methods increasingly cause to eliminating intra organizational managerial challenges in order to enhance organization profitability through applying intellectual capital and available information as well.(Norman and colleagues, 2007).

In spite of short-term life time of it and it's quick development, there is different definitions and understanding of it and with deep look, their discrepancies could be revealed. Technology has stepped to scientific and industrial area, nearly two century previously, and now it is known as intra-branch proficiency with mix of computer science, informative math, dispatch, and management knowledge and placed on the modern global list of technologies.(Rahmani 2010). Hisman Oghlu (2011) has interpreted "It" as a multimedia technology including computer, software, Internet, telephone, TV and also Internet business projects, e-mail, weblog, satellite and

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so on (Hisman Oghlu, 2011). Dika and Hamiti (2011) briefly have known it as a combination of communicative equipments and computer.(Dika and Hamiti 2011). In fact, information is an event created through applying computer systems in organizations and society widely, and its deep evolution.(Sobhani and colleagues, 2014).

In late years, various organizations and companies have started joining to knowledge force, knowledge management and knowledge organizations (knowledge-focused organization) report increase such trend.(Arze 2008). National sport organizations (NSO) don't focus on organizational profit, but they are responsible for developing special sports inside their country. Making efficient structures and facilities available for personnel, lead to successfully creating knowledge that are important to organization survival.(Norman and colleagues 2007). Undoubtly, knowledge is the most important tool to superiority and survival in present and future markets and play as a guideline role and a tool for strength and penetration for all organizations. (WU 2011).The most important property of information technology is that their technological capability continuously increase and cost for its utilization decrease. At present, investment in this section significantly increased, as cost of buying technological productions account for more than 50% of organization costs. (Gokalp, 2011).In spite of such surprising development in the technology field, still, human force is the most important and valuable source and original respondent (addressee) of it in each organization. Thus, it should be noted that, if, habitually, this force tolerate against changes due to technology, it is not possible to attain ideal results.(Moghli and colleagues 2012). Regardless of special complexities of technology, applying it is impossible if there is no skill, knowledge and positive look to it and communication.(Sobhani and colleagues 2012).

It's providing two major capabilities for knowledge management. Firstly, through revealing knowledge, they can create a smart system or decision support system, then they help to interacting individual with special skills together and as quickly as possible communicate to each other. (Judiet 2007).It should be noted that the major success factor of knowledge management at present century is capacities on which it creates.(Wang and colleagues 2007). Some authors believe that it is a part of knowledge management and has not capacity for increase organizational knowledge. (Sobhani & colleagues 2014).Some emphasize that it, just relates to explicit encoding of knowledge and overlooks implicit knowledge. Anyway, knowledge is one of most vital resource of organizational competitions and it is recognized that organizational knowledge may be more important than whole organizational assets.(Sharif & Xing 2006).

Informative and communicative technologies enable the knowledge management and are known as collecting, storage, transfer, and distribution tool of knowledge. It's providing two major capabilities for knowledge management. Firstly, through revealing knowledge, they can create a smart system or decision support system, then, they help interacting individuals with special skills together and as quickly as possible communicate to each other.(Lee & Chwei 2003). Necessarily, in such condition, just organizations can act successfully which take advantage from knowledge as a comparative profit.

Study the theorical background and researchers' idea, on the other hand, show that the necessity of serving knowledge management in the organizations is undeniable. Factors, such as globalization, minimizing nations and citizen-focusing cause to more special pay attention to knowledge management.(Abtahi & salavati 2007).Knowledge management, regard to knowledge

importance imagine on individual mind, provide a field to easily transfer knowledge to who whole organization sections, in this way, processes and technology are helpful, processes are designed such that create a field to make, develop and transfer the knowledge. Also technology allows it's availability, retrieval, transfer and storage through facilating the process of knowledge processing in organization. (Ansari & colleagues 2012).Godarzi & Abutorabi (2009) studied, in their research, on the relationship between it and knowledge management of command management of physical training organization. Results showed that is no significant relationship between it and communications substructure with creating knowledge. But relationship between this substructure and knowledge transfer is significant. (Goodarzi & Abutorabi 2009).Sobhani and colleagues (2012) investigated, in their research, the relationship of it and knowledge management in the selected sport federation. Their results showed that there is a linear (positive) and significant relationship between it components and knowledge management in selected sport federation.(Sobhani & colleagues 2013).Shams Morkani and Zarei found that (2012) there is a significant relationship between technologies used in the organization (support and identification of ICT) with guidelines of knowledge management and this is linear. (Morkani & Zarei 2012).It is suggested that both ICT support and identification components can be effective to stability of knowledge management components in various organizations. Teseng (2008) in his study on Taivanian companies, investigated the relationship of it and knowledge management and found a significant relationship between them. (Teseng 2008).Vahedi and co-worker (2011) explains in his research named by "information technology against knowledge management" that combining both following factors is the best method to using it in the field of knowledge management: one is knowing the information technology restrictions and other is that fact that applying it, at any kind, is trivial regardless of global culture changes against knowledge value. Researchers, in this study, have emphasized that existence of it for support the organizational knowledge plays an important role (Vahedi & Farhangnejad, 2011). Neels concluded in study situation of knowledge management in South Africa industry that it can be effective to strengthen the knowledge management. (Neels 2010). Madadi and co-worker investigated the familiarity level and amount of using it and communications among experts and members of scientific board of Tehran University, agricultural branch. Results showed that familiarity level of statistical sample with it and a communication component is in the limit of known sites as Google and yahoo and Microsoft office world. (Madadi & co-worker 2011).Results of Ahmadpoor research (2010) showed that most superior managers of sport federation and command managers of young and sport ministry (88/6%), use computer more than 10 hours in week. Also soft wares power point and word is among the most widespread use of components and dimensions of it and communication in various sport organization by these managers. (Ahmadpoor, 2011).Wolf (1995) through a research showed that technology and continuous environmental variable influence on organization innovation and creativity. Also younis (1995) in his study concluded that more new the level of applied technology, the more provide services to student with high satisfaction will be. Regard to government approach to knowledge-based system and importance of knowledge issue. From Iron view evidence on 1404, paying attention to learner organizations in which creation and publication of knowledge has turned to public value and culture, is so important. Among this most organizations focused on how they can manage knowledge in organization.

Existing sport organizations continuously are changing. Interacting such organizations with various factors such as government, private sector, financial fans and other national and international sport organization and importantly social, economic, political and cultural factors

lead to they encounter with various demands. It's providing two major capabilities for knowledge management. Firstly through revealing knowledge, they can create a smart system or decision support system, then they help to interacting individuals with special skills together and as quickly as possible communicate to each other. (seyyed Amery and co-workers 2009). Informative and communicative technologies (ICT) due to their capabilities, play an important role in creating and transfer knowledge across the organization, existing ICT suitable substructures and understanding and knowing personals of how apply such technologies, will cause to facilating creation and transfer knowledge (Lee & choy 2003). Knowledge management gives more advantage to organizations such as improving work quality, having up-to-dated information, enhancing efficiency, improving effectiveness, improving make-decision, increasing ability to respond against customers demand, and possibility for change and conformability (Berdrow& Lane). Now, knowledge and information has become to determining factor to success and strength for organization comparability, for this reason, it is necessary to play seriously attention to knowledge management. To date, many studies and researches have been done concern to knowledge management across various organizations and institutes. But no researches have been performed related to successful stability of knowledge management across elite sport organization synchronously, here the necessity of research is revealed. Sport organizations, especially elite sport organization always were important. In one hand service quantity and its costs and in the other hand services quality and using modern knowledge was problematic for sport decision-makers. Also, developing a successful knowledge management is so difficult. Regardless performed studies on knowledge management, but still putting it down across organization is a burdensome task, but present study along with mentioned results of researches and with help of its data which were usable very much to make view horizon clear of researcher, can respond to this question:

"What is the relation of technology with successful stability of knowledge management across elite sport organizations?

METHODOLOGY

This research method is survey correlation regard to issue and purpose of research. Data collected as field method and it is practical in the term of using results. Research statistical community includes whole managers and assistants of "young and sport ministry" Olympic national committee and administrative board of first class sport federation (N=130). Because no list of first class sport federation provided by young and sport ministry at 2013-2014, thus the selection criteria for federation is obtaining medal in Asian universal and Olympic competitions and includes wrestling, weighting, running, shooting, TeKvando, basketball and volleyball federations. Statistic sample is equal to under-researched statistical society due to limitation in the number of research statistical community. Among this number, 87 individuals have responded to send questionnaire, and participated on research. Collecting-data tool was a questionnaire. In general the questionnaire includes 36 questions and four sections:

1) Demographical properties (age, sex, education level, organizational post, type of organization, service back ground).

2) Questionnaire of knowledge management (Reisi, 2013) has 4 subscales: (knowledge attaining 5-language), (applying knowledge), (transferring knowledge), and (Recording knowledge with likert 5scale level.

3) Technology questionnaire: This questionnaire is followed by organizational factors questionnaire by Seyed Ameri and co-workers (2009), in which technology was one of its variables and have 2 subscales (ICT) identification 5-languages) and (supporting ICT) with likert 5-scale level. (Seyed Ameri. 2009). Opinions of 10 sport management experts and 3 knowledge management authorities have been used to determine questionnaire accuracy kronback alfa coefficient has been used in order to estimate the questionnaire reliability, so that technology questionnaire reliability coefficient and knowledge management, after performing calculations, accounted for 0/83 and 0/81 respectively.

In this research, descriptive statistic such as average, minimum, maximum, amplitude, percentage and standard deviation have been used to describe variables. At deductive statistic level, KS statistical technic was utilized to determine data situation. Regard to results of kalmograp-smirnoph test, Spirman and Pierson correlation coefficient used to test research hypothesis in %5 significant levels. Thus simple linear regression was used to predict criteria variable from predictor variables. Each research hypothesizes were test using software SPSS 19.

RESEARCH FINDINGS

Findings showed that among totally 86 managers of elite sport organizations, 35/6% (N=31) of command managers of young sport ministry, 13/8% (N=12) Olympic national committee, 18/4% (N=16) from Olympic national academy and 32/2% (N=28) from administrative of sport federations as an statistical sample, responded to questions, in which 73/6% were make & 26/4% were female. Age group of 41 to 50 years old (49/4%) have the most amplitude among different age groups, and the least amplitude was seen at 21 to 30 years old (3/4%). 29/9% have 10 years' service background, 47/1% of them 11 to 20 years, and 23% have more than 30 years' service background.

Most of respondents have bachelor degree (48/3%) followed by M.A degree (34/5%), doctorate (14/9%) and associate of art (2/3%).

According to table (1), among dimension of technology questionnaire, ICT support component have higher average compared with ICT identification component at sport organization. Also, result showed that the average both knowledge sharing and continuous learning components is a few higher than middle level.

Table 1. Descriptive statistic of technology questionnaire.

Maximum	Minimum	Standard deviation	Average	Number	Dimension of Technology questionnaire
5	1	0/705	3/29	80	ICT support
4	1	0/612	3/21	86	ICT identification

According to table (2), Pierson correlation coefficient has been used regard to normality of data distribution. Results showed that there is a positive (linear) and significant relationship between information technology (IT) and successful stability of knowledge across elite sport organization.

Table 2. Relationship between IT and successful stability of knowledge management.

Successful stability of knowledge management	Statistic	Variable
0/243	Pierson cooperation coefficient	Information Technology (IT)
0/039	Significance level	
77	Number	

Table 3. Relationship between information technology dimensions (ICT support & ICT identification) and knowledge management stability.

Successful stability of knowledge management	Statistic	Variable
0/022	Pierson coordination coefficient	ICT support
0/852	Significance level	
77	Number	
0/380	Spirman coordination coefficient	ICT identification
0/001	Significance level	
72	Number	

To study the prediction of "successful stability of knowledge management" variable from ICT identification variable, simple linear regression was used. According to following table, F= 4/77 for regression equation is significant. (p=0/011).

To explain predictor subscale, t value was significant for ICT identification "component". ICT identification component with Beta coefficient 0/370, can predict the knowledge management stability across selected sport organization. (Table 4)

Also, regression results show that predictor variable of "ICT identification" is capable to explain variance in the dependent variable of successful stability of knowledge management. ($r^2 = 0/122$).

Table 4. Predict the knowledge management stability from ICT identification using simple linear regression.

Significance level	T value	B coefficient	Beta coefficient	Variable
0/0001	6/55	2/29	-	Fix coefficient
0/003	3/09	0/304	0/370	ICT identification

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DISCUSSION AND CONCLUSIONS

Knowledge management and related strategic concepts have been regarded as an important component for organization survival and preserve its comparative situation. (Fazeli Diran 2013). For example, Shahbazi 2008 in his research, quoted by Malekalravi, suggested that knowledge and scientific personnel's are known as key factors to obtain an stable development and identified as the most basic future comparative resources of organizations. In addition, Martenson claims that knowledge management is a definite prerequisite to efficacy and flexibility of private and public organization, thus managers and administrative showed regard to it. (Shahbazi, 2008).This question is important that which factor cause to successful stability of knowledge management across organization, to which researchers paid attention. They studied on cases such as organizational structure, information technology and organization relationship with outside environment. (Restochi 2000, Patric 2001).In this case, such study performed through ask questions concern to technology and its relation with successful stability of knowledge management across selected sport organizations findings that there is a significant relationship between it and successful stability of knowledge management. Regard to Pierson coordination coefficients and significance level, there is no significant relationship between ICT support dimension of IT and knowledge management stability. But this relationship between ICT identification dimension of IT and knowledge management is significant.

In this research, meaning of technologies used in elite sport organizations of country is informative. Communicative technologies which study on relationship between existences of a suitable ICT substructure across organization and capability level of personals to identifying and applying ICT for successful stability of knowledge management. Results showed that there is a significant relationship between ICT identification and stability of knowledge management across elite sport organizations which explained that the more capability of personals to using information technology, the more speed is stability.

Results obtained concern to existence of a positive relationship with knowledge dimension contradicts with results of Seyed Amery (2009), such apposite seemingly is due to individual development of information related to it across the time. Results of this research conform to Sobhani research (2013). Also findings of research match with Teseng (2008), Neels (2010), Vahedi & co-worker (2011) and Goodarzi & Abutorabi (2009) research.

Sobhani (2013) claimed that accurate interaction between individuals, technology and organizational process, lead to success of knowledge management. (Sobhani & co-worker 2013).At present, organizations are faced with mass of information and knowledge which its management and operation become changed to a major challenge. On the other hand, recently speed changes have been faced organizations with various problems (Goodarzi & Abutorabi 2009). This it could be said that the important factor for success of third millennium organizations in the competitive scenario is movement toward knowledge management and knowledge focusing.

The supporting role of information technology has facilitated knowledge management and converted it to competitive advantage. (Vahedi 2011).Among researches laniary related to this hypothesis, it could pointed to research by Seyed Omar Sharifodin and Seyed Ehsan (2004), that is conform with result of performed research.

Research by Asgari (2006), Seyed Omar Sharifodin and Seyed Ehsan (2004), Ebrahimi Nasab (2001), Gholamzade (2002), Hamat Abedi (2006), Wolf (1995), and Yunis (1999) in addition to conformity with performed results, have emphasized on the importance of information technology for establishing new strategy in the organization. These results show that technology plays an important role in successful stability of knowledge management in the organization, and should be considered as an effective tools to collecting, storage, transfer and distribute knowledge. It seems that existence of ICT identification in organization and personals ability to taking advantage from these technologies, allow personals to play an effective role to knowledge stability. Results show that successful stability of knowledge management will establish through providing sufficient enteral education in the field of computer and its software and also spreading technological facilities. Thus organization managers should try to invest continuously for ICT identification in the organization and also success of knowledge management in the organization.

Researchers are recommended the following suggestions:

1) Relationship of knowledge management with various communicative networkers in the sport organization.

2) Relationship of information technology with productivity level in the sport organization.

3) Influence or IT on enhancing knowledge-based purposes in the sport organizations.

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