
The relationship between information technology and employees' organizational agility in sports and youth departments of Kermanshah province

Bahieh Zarei^{1*}, Korosh Veisi²

^{1*}Department of Psychology, Kurdistan Science and Research branch, Islamic Azad university, Sanandaj, Iran. Email: bahiehzarei@yahoo.com, ²Assistant Professor Department of Physical Education, Sanandaj branch, Islamic Azad university, Sanandaj, Iran.

Received: 19th Jan 2017, Accepted: 25th Jan 2017, Published: 15th March 2017

Abstract

The main purpose of this study was to investigate the relationship between information technology and employees' organizational agility in sports and youth departments of Kermanshah province. This research is a correlation study has been conducted in the field. All employees of Kermanshah province sports and youth departments have established statistical population of research (N=228) that that sample size were equaled population. For collecting research data, two standard questionnaires including Moharram Zade (2011) information technology questionnaire and Sharifi & Zhang (2000) organizational agility questionnaire was used. For data analyses proper inferential statistics (K-S, Pearson Coefficient and Regression) were used. The findings showed that there is significant correlation among all dimensions of information technology with organizational agility of Kermanshah province sports And Type variables and the use of the Internet and the use of internet services have the ability to anticipate changing organizational agility . In this context, the IT capabilities of organizational agility and supports essential role in understanding and responding to the environment . IT organizations with information and how they change from within and outside the organization is prepared to deal with changes made

KeyWords: Information Technology organizational agility, Sports and Youth Departments, Kermanshah Province.

Introduction

Information Technology (IT) is a strategy, idea, thought and tool in the field of human with innovation. Identifying opportunities and facilities created by IT makes it similar to a strategy than a formula and practical version. Based on this approach, IT is a new strategy to have a different access to what an organization defines. Some considers IT a thought or idea for optimal and effective operation, an idea which uses optimum combination of hardware and software tools to establish and develop communications and optimal performance of goals and operation (Rahmani, 2011).

Information Technology is a strategy, idea, thought and tool in the field of human with innovation. With identifying opportunities and facilities created by IT can be not only similar to a formula and practical version but also a strategy (Moharrampour, 2011). IT components can be considered in 4 dimensions as: using computers, using computer software, the type and rate of using internet and the rate of use of Internet services. Based on this approach, IT is a new strategy to have a different access to what an organization defines. Some considers IT a thought or idea for optimal and effective operation, an idea which uses optimum combination of hardware and software tools to establish and develop communications and optimal performance of goals and operation (Torkiyan et al, 2013). Using information technology to share information between buyers and suppliers is creating a virtual supply chain which is based not on innovation but on information. The importance of technology and informational systems to support organizations current and future operations is known. Research conducted in this regard shows that IT is considered an important factor for today's organizations success (Lu & Ramamurthy, 2013).

Information technology supports timely programs, making informational connections and reducing costs in the organization. IT in addition to the positive influence on the organization function is effective on the potential function of the company and offers a mechanism to store, access and share information efficiently. Applying IT in the organization causes the exploitation of organization of the value chain flexibility and its agility in result and finally increases competitive advantage of the organization. Agility is a function of the integrity of IT of that organization (Safford et al, 2008).

Agility improves the ability to supply products and services of high quality, and therefore is an important factor for the productivity of the organization (Dowlatmodli, 2008). Sharifi and Zhanc (2000), define the organizational agility as: Agility is the ability to understand, respond and take advantage of anticipated or unexpected changes in the business environment. They know speed,

competence, responsiveness and flexibility as the elements of organizational agility. An agile organization won't tire simply with events and sudden changes. An agile organization is high-speed, adaptive and powerful and quickly response to the sudden changes, new market opportunities and customer requirements (Jafarnejad & Shahaei, 2007). Changes in the business environment derived from intense competition and diversity of customer needs lead organizations toward the acceptance of the concept of agility. For an organization agility is the ability to grow and succeed in an environment which is unpredictable with constant change and produce customer-specific services. Agility plays an undeniable role in the success of organizations in the current changeable markets (Zinn et al., 2003).

In this regard, Rahmani (2011) in a study showed organizations with new information technology have high organizational agility.

²Chen et al (2014) in a research concluded that there is a positive and significant relationship between the information technology and organizational agility.

Sport organizations as well as non-sport organizations need to use various methods to improve their employees' organizational agility and in the field IT can lead to the success of their organizations. On the other hand IT and its effect on other institutional variables have been on less attention by researchers on the sport fields. Thus, according to what mentioned above, the researcher seeks to answer to the question what is the relationship between information technology and employees' organizational agility in the Departments of Youth and Sports of Kermanshah province?

Methodology

The present study was a descriptive - correlational research in which data collection was conducted through field studies. The statistical population of the research included all employees of the Departments of Youth and Sports of Kermanshah 228 persons in 2005 that due to the low volume of population, the full enumeration method was used and all employees participated in the research process and responded to the questionnaires. For data collection we used Moharrampour (2010) information technology standard questionnaire which has 28 multiple-choice items in four dimensions (the type and rate of using computer, using computer software, the type and frequency of Internet use and the rate of using online services) and Sharifi and Zhanc (2000) organizational agility questionnaire which has 29 questions with 5-point scale in four dimensions (speed, competence,

responsiveness and flexibility). The validity of the questionnaire was approved by 5 professors of physical education (sports management orientation). The reliability using Cronbach alpha for information technology was %89 and job performance was calculated %79. Descriptive statistics was used to analyze the findings of this research and for the Kolmogorov-Smirnov test was used to measure the natural distribution and inferential statistics (Pearson correlation coefficient and regression). Data were analyzed by SPSS 20 software. In addition, all statistical

Results

According to the demographic results of the research, 53/5% of respondents were 31 to 40 years, 26/55% had bachelor degree, 22/41% had 1 to 5 years of work experience, 55/7% was in the field of human sciences and art and 75 percent was in organizational employees rank. The mean and standard deviation of variable were in the type and the rate of computer use 19/08 and 4/7, using computer software 13/03 and 3/93, the type and the frequency of internet use 16/1 and 4/74, the rate of online services use 20/4 and 5/2, IT 68/22 and 15/68, speed 19/03 and 3/91, competency 22/13 and 4/51, responsiveness 22/62 and 4/55, flexibility 28/41 and 6/03, organizational agility 92/2 and 16/57.

tests were put on test of significance level ($\alpha=0/001$).

Table 1. Correlation coefficients and dimensions of IT in the employees' organizational agility of the department of sport and youth of Kermanshah

	Organizational Agility(OA)	Significance Level
Computer Use Rate (UR)	0/20**	0/000
Software Use (SW)	0/20**	0/000
Internet Use (IU)	0/27**	0/000
Internet Services (IS)	0/31**	0/000
Information Technology (IT)	0/29**	0/000
**P<0/001		

As the Table (1) shows the results of Pearson correlation coefficient showed that there is a positive and significant correlation between the dimension of IT and the general scale of organizational agility (P<0/001). These results mean that with increasing the knowledge of use of computer, software and

internet service among employees, their organizational agility increase.

The stepwise regression is used to show to what extent any of the information technology dimensions have ability to predict the organizational agility variable. Results were as follow.

Table 2: the results of the model estimation to predict the organizational agility

Explanatory Variable	Dependent Variables: organizational agility			
	Coefficient	Beta coefficient	T-statistic	P-value
Constant	0/012	-	0/612	0/225
UR	0/103	0/067	1/122	0/132
SW	0/059	0/022	0/87	0/167
IU	0/221	0/215	3/62	0/006
IS	0/368	0/269	4/27	0/000
F-statistic			472/699	
P-value			0/000	
R ²			0/169	
Justified R ²			0/166	
Camera - Watson			1/749	

According to table (2) the coefficient of the type and rate of internet use was 0/215, use of online services 0/269 was positive and significant at 95%. As a result, they had positive and direct correlation. Based on the results, the determination coefficient for the dependent variable of the employees ‘organizational agility was 0/169; this value indicated that the 16/9 percentage of employee`s organizational agile changes are explained by the changes in the type and rate of internet use and the use of the internet service. Since the Camera-Watson statistic was the standard distance of 1/5 to 2/5 thus the independency of the remaining can be concluded. According to the above table significant level calculated for the F-statistic was 0/000 and highlighted the significance of the regression at 95%. According to the metrics mentioned the model has the necessary efficiency and variables of the type and use of the internet and the use of internet services have the ability to anticipate the variable of the employee`s organizational agility. The regression equation for employee`s organizational agility using coefficients column can be wrote as follow:

$$Y = 0/221 (\text{type and the internet use rate}) + 0/368 (\text{internet services use rate})$$

Conclusion

The results of the study showed that there was a significant correlations between the IT and the

employee`s organizational agility of the Departments of Youth and Sports of Kermanshah province. These findings were matched with the results of Rahmani (2011), Chen et al (2014), Turkiyan et al (2013), Lu and Ramamurthy (2011) and Talon Books (2008).

Agility as a production philosophy (next generation of production systems) said welcome to the companies competes in all economic parts. As Talon (2008) stated, agility is achieved only by the integrity of the hierarchy of customers' needs within a framework of internal and external organizational environment. This was achieved due to having a holistic view toward the organizational advanced production technologies along with the internal capabilities processing them and through the application of technology / information systems (Lu & Ramamuthy, 2011). IT was a major factor in advancing business agility and a critical ability to stimulate or impede business agility. Literature review in three waves of different studies about the relationship between IT capability and business agility showed that; the first wave of research showed that IT not only didn't help to improve business agility but also in some cased damage. The second wave of research showed that IT led to a high degree of business agility. The third wave of information technology research showed that although the capabilities of IT led to a high degree of business agility, this relationship was affected by the reliability conditions and events. The first wave of research cited the reason of lack of the positive relationship between IT capabilities with the organizational agility in several reasons, including IT units in the large organizations because of the complexity of IT architecture, lack of the coherence and alignment between IT and business strategies, lack of the adequate support by senior executives and the lack of timely response to business needs was unable to strengthen and accelerate businesses agility. The second and the third wave of research defined the reason of the positive relationship between IT capabilities and organizational agility as innovations and new technologies in different architectural layers of IT enabled the access to agility (Turkiyan et al, 2013). In this regard, the IT capabilities supported the organizational agility and had an essential role in understanding and responding to the environment. IT by gathering information from within and outside the organization prepared them to deal with the changes. Thus agile organizations by having information and communication technology systems can sync theirs with changes and achieve greater competitive advantage than competitors. Therefore use of

software applications for personnel affairs, senior managers' support from the use of information and communication technology systems in the Departments of Youth and Sports, encouraging employees to use the new information in their work, and communication with colleagues and clients via email, chat and social networks was suggested.

It is also suggested the relationship between IT with other organizational elements such as job satisfaction and organizational performance and other factors affecting organizational agility of the employees of the Department of the Sport and Youth in Kermanshah such as organizational learning and empower employees to be investigated too.

References

1. Chen, J., Yang, K. F., & Tang, F. I. (2014), Applying the technology acceptance model to explore public health nurses' intentions towards web based learning: A cross-sectional questionnaire survey. *International Journal of Nursing Studies*, 45, pp. 869–878
2. dowlatmodeli, Mahshid. (2008). Strategies to achieve organizational agility. *Web Magazine*, Issue 72.
3. Jafarnejhad, Ahmad & Shahaei, Behnam. (2007). Introduction to organizational agility and agile manufacturing. Mehraban publication, Tehran.
4. Lu, Y., & Ramamurthy, K. (2011) Understanding the link between information technology capability and organizational agility: an empirical examination. *MIS Quarterly*, 35 (4), pp.
5. Moharrampour, Akram. (2011). "The effects of information technology to increase productivity in the food industry of Zanjan". Faculty of Management, Islamic Azad University of Abhar.
6. Rahmani, Giti. (2011). "The relationship between adoption of information technology and agility of the organization from the perspective of senior managers of government agencies in Hamadan". Master thesis, Faculty of Management, University of Hamedan.
7. Sharifi, H. , Zhang, Z. , "A Methodology For Achieving Agility In Manufacturing Organisation: An Introduction" , *International Journal of Industrial Ergonomics*, pp. 7- 22, 1999.
8. Tallon, P. P. (2008). Inside the adaptive enterprise: an information technology capabilities perspective on business process agility. *Information Technology and Management* 9(1), pp. 21-36.
9. Torkiyan, K., Khorvash, M., & Tabaeiyan, A. (2013). On the Relationship of Applying Information Technology with Organizational Agility in Youth Sports Organizations of Esfahan Province. *International Journal of Sport Studies*, 4 (12), 1546-1550.
10. Zain, M., Kassim, N. M., & Mokhtar, E. (2003). Using information technology and information systems for organizational agility in Malaysian

firms. *Singapore Management Review*, 25 (1), pp. 69-83.