The Relationship Between Information Technology Component Application (using hardware and software) And Organizational Innovation in Physical Education Department in Esfahan province.

Rezvan Dadkhah, Elahe Atefi Borojeni, Zahra Heidari, Yashar Hormati

1Young Researchers Club, Khorasgan Branch, Islamic Azad University, Isfahan, Iran
2Young Researchers Club, Mobarakeh Branch, Islamic Azad University, Isfahan, Iran
3Young Researchers Club, Khoram Abad Branch, Islamic Azad University, Khoram Abad, Iran
4Department of Physical Education,Ardestan Branch, Islamic Azad University, Ardestan, Iran

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ABSTRACT

The main objective of this study in investigation the information technology relationship (hardware and software use) and organizational innovation in Esfahan province physical education headquarters. The present study is applied in correlation method. The statistical population include 221 samples of employees in this office in Esfahan province in 2011 academic year. From that population 132 samples were selected by using stratified random sampling method and appropriate volume. In other to collect data, information technology questionnaire consisted of 10 multiple-choice questions based on the likert rating scale with reliability coefficient 0/90 and organizational innovation questionnaire included 20 multiple-choice questions based on the likert scale with reliability coefficient 0/88 data analysis was performed based on inferential statistics (pearson correlation coefficient). The statues of test subject using kolomogrof-smirnof was normal and homogeneity of variance was also established. The level of significance in this study was p<0/05 The findings revealed that there is a significant relationship between information technology hardware and software use and individual's organizational innovation in Esfahan province physical Education. Applying IT hardware and software use components in the organization individuals creativity or innovation become more and more, the staff cooperate in organization objectives and staff motivation for implementing activities would increase.

Key words: software, software using, information technology, organization relativity, Esfahan province

Introduction

In today’s world the information age, IT development in offices with the purpose of creating a change in administrative system and producing knowledge with manager and staff effort, would establish a base and foundation for the system existence. The most crucial part in this change is the manager and staff’s point of view of information sources and also their knowledge and skill of IT. Therefore it can be said that all human’s activities are aimed toward providing more welfare in life, from the time he came to existence. All discoveries and invention served human being to some extend. Human motivation toward development, science and technology has been pursuing this goal. The main condition in providing and supplying well-being, is having a healthy and strong body for life and work. While there is an action and reaction between mankind and his environment continually, and this connection or relationship is constantly fluctuating, an increasing attention and necessity can be felt toward using computer at work and daily activity using information technology in communication causes cost reduction for services such as publication and mailing expenses increase work speed and feedback efficiency, speed up individuals communication provide special areas for employment gross national products (GNP) in our society because of the ruling economic, social and cultural conditions and its particular limitation and people pressing need to computer as a valuable tool in meeting the needs, to varying degrees it must be pointed out that computer has a specific status during the life and leisure activities for the staff in headquarters[11]. According to extensive and various researches about organization creativity and IT in different organizations in the society level, there has not been a study in relation to IT and organization Creativity due
to this time while applying IT in organizations is associated with basic changes. Organizations should be careful about using IT and should move with understanding, knowledge, and design. Objectives or purposeful planning since only having financial ability for successfully implementing an IT project in the organization is not sufficient. There are various factors having a role in IT implementation and neglecting them can lead to the project failure and loss of capital. These factors include managers aware of variation in relation to organization variables such as creativity and IT application in enterprise level. The underlying motivation to achieve the research question answer was the main aim of the present study. The study also attempts to investigate what role as IT consists of various advantages and applications in today's organizations and enterprises as a crucial role for decision-making support systems, whether the application rate of the technology in sports organizations has an affection on organization creativity. It is evident not paying attention to these basic variables in organization level can lead to failure and play a trick due to variables in organizational level of development.

**Hardware and software using usage:**

Hardware is the basic and accessory parts of a computer. With assembling and aligning these parts activities based on computer manufacturing company maps, a machine which pursue specific objectives is built. In order to apply these motion less parts on operation system is used. In other words an operation system animates a computer.

Hence, computer can be used for specific purpose if it is related program for that purpose is in stalled on computer operating system.

The usage rate application installation and deployment computer hard wares (such as, printer, scanner and 3 Diss-reader), and also usage rate of basic computer for evaluation, windows installation and other software and using virtual libraries are called hardware and software usage[5].

**Organization creativity:**

Organization creativity and innovation is a crucial secret and mystery for Organization professionals. Most managers agree with this fact that innovation is a valuable, desirable, and the most popular features and abilities in Organization lifecycle [14].

Despite this agreement, there are some unsolved persistent and vague questions related to creativity for Organizations. For most individuals Organization innovation means employing the greatest number of creative individuals who proved having that quality for Organization. However, on Organization is not established by the sum of on individual effort. It is built by collective abilities an qualification of a group in a higher and more prominent way.

**The necessity of Organization creativity:**

Organization effectiveness depends largely on creativity and innovation in the 21st century. The innovation idea and imagination in the form of a certain set of skills, especially in the form of a change or transformation is consisted of personal characteristics in a small group of elite and qualified workers who have a various behavior and trait from others. In addition, the innovation and imagination can be defined in the form of group or mass ability and qualification that the total parts often Organization can benefit[2].

The concept of joint capabilities was introduced for the first time by two researchers called Gary and Ham from London school of business administration — and his colleague C.K. Prahalad from Michigan university in the so-called book "competition for future" (1994). According to Ham, innovation is a collective or mass characteristic and Organization culture, it is rooted in how an Organization function or in away it communicates its ideas and thoughts to other, not in creative skills of a few senior staff. The successful companies are those which understand the strength to acquire individuality or "reinforcing access possibility" by using "equation value fundamental statement".

The most important issue that could be observed from this new approach is the emergence of this notion that Organization creative capability is formed by working of the entire group of workforce and their feeling toward the Organization. The most important factors providing innovation and creativity background in an Organization are: structural factors, cultural factors, management factors and human resources.

1. Organizational structure factors: Organizational relationships containing the lowest regulation and labor division based on specialization resources allow managers to purchase innovation and institutionalize expenses of innovation and also bear the failure open and convenient communication between units allow to remove potential and probable barriers by reactions.

2. Cultural factors: Cultural factors affecting innovation are:

   A) Accepting ambiguity or uncertainty: too much emphasis on being clear creating limitation for innovation. There fore accepting little vagueness can provide a context for creativity.

   B) Reward: some researchers and scholars due to the reward system and innovation relation consider some aspects of reward system can be effective on blooming of creativity.

   C) Low external control: low usage of certain instruction, regulation and policies allow more creativity.
between effective organization factors on innovation and there is a significant relationship have more effect on faculty board member obtained results showed that organization factors and suggesting alternatives for it is promotion. The titled"effective factors on faculty board innovation structural barrier against innovation and creativity. recognition would eliminate a crucial section of full –time job .It was believed that reducing creativity is the organization recognition or having a structural factors opposing to innovation and organizational structure. the results revealed that there is a significant relationship between IT and full –time job and recognition concentration complexity. In fact the findings indicated that there is a relationship between most of the organization factors and creativity and have an impact on it .It also revealed that one of the most important factors among structural factors opposing to innovation and creativity is the organization recognition or having a full –time job .It was believed that reducing recognition would eliminate a crucial section of structural barrier against innovation and creativity.

MasumehHosseini (2010) performed a research titled"effective factors on faculty board innovation and suggesting alternatives for it is promotion .The obtained results showed that organization factors have more effect on faculty board member innovation and there is a significant relationship between effective organization factors on innovation among different schools.

Whait and Whaizler (2001) concluded in a study that IT has the highest impact on middle management , it was also stated that IT allowed focus and more concentration on decision –making, it was believed that computerized plans made concentration easier and more information is organized in a simpler way. This mean organization high level have more access to lower level in the organization, also there is a significant relationship between IT and complexity. Akkermans and Vavderhorest.H [1] stated that there is a less relationship between IT, decentralization and increase managers capability for administering organization complexity and provide rapid and coherence feedback related to performance. This facility entrusting or turning over position to lower levels the results revealed that there is a significant relationship between IT and organizational structure also there is a significant and inverted relationship between IT and communication centralization and thee is a significant relationship between IT and recognition.

Saadatmandi [12] in a paper under the title "investigating the relationship between IT and organizational structure" the results revealed that the average mean of physical education organization complexity structure is at the middle level and there is a significant relationship between IT and full –time job and recognition concentration complexity.

Hamidi[7] in a study investigated"the relationship between ITand organizational structure" the results revealed that the average mean of physical education organization complexity structure is at the middle level and there is a significant relationship between IT and full –time job and recognition concentration complexity.

Fakhrian [3] in a study under the title "investigation the relationship between innovation and creativity of headquarters experts and organization factors" pointed out that the sample of this study is 677 of melat bank headquarters experts. The findings indicated that there is a relationship between most of the organization factors and creativity and have an impact on it .It also revealed that one of the most important factors among structural factors opposing to innovation and creativity is the organization recognition or having a full –time job .It was believed that reducing recognition would eliminate a crucial section of structural barrier against innovation and creativity.

Jalan, R. and Cliner. D in a study titled"new success in innovation development" pointed out that some people analyze more alternatives with higher possible risk than others (in other organizations or in other units in the same organization). In fact the organization IT component (ion allows them to express creative ideas in their jabs with higher risks.

Methodology:

In other to investigate and describe the relationship between IT component(hardware and software use) and organization innovation in Esfahan province physical Education headquarters, descriptive research method type and correlation
method are used-statistical population in the present study consists of all Esfahan province physical Education staff which according to the suggested statistics from personal office in that head quarters in 2011 were 221 employers.Due to the fact that all managers and staff were included in statistical population, a stratified random sampling is used.Based on jersymorgan table for 221 population 132 sample are selected.The sample number is allocated considering society improper level proportion.For data analysis inferential statistics and pearson correlation coefficient were used. Also a software SPSS18 for analyzing data was used.(level of significance p<0/05 was considered).To collect data two types of question were applied as a tool which included =1-IT component questionnaire and 2-organization innovation questionnaire Cybernetic model questionnaire reliability coefficient is obtained as 90% and88%.

Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level ofsignificance</th>
<th>Pearson correlation (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>hardware and software use and organization creativity</td>
<td>0/03</td>
<td>0/24</td>
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</tbody>
</table>

As it is observed from table-1 in level ofsignificance p<0/05 due to test statistics (r=0/24) and (p=0/03), there is a significant relationship between software and hard ware use component and organization innovation.

Discussion and conclusion:

According to the obtained results from Esfahan province physical Education headquarters and based on analysis of findings related to IT application rate and organizational innovation level of the samples, there is a positive and significant relationship between ITapplication and organizational innovation based on the findings the more the staff level of organizational innovation is the higherITapplication rate will be.

The research findings are consistent with fefer (2002) and wielsing [17] results.

This part of finding confirms that there relationship between organization innovation and IT application (hardware and software use). More over often analyzing data on organizational innovation the most crucial factor related to organizational innovation in Esfahan province physical Education headquarters is organizational structure factor,these finding are consistent with Hosseini [8], Fakhriyan [3] and Jalan (2008).

Information technology cause decentralization in decision-making and enhnance managers capability in data processing more complex structure coordination s having more separation .In addition to ITplaysan important role in creating flexible structures .According to the present study. IT lessens complexity in an organization and prevent bureaucracy.

It seem that creative organization offer innovation solution and adapt or harmonize very rapidly to their enviroment suchorganizations even when develop their strategy and long –term goals relyon individual decision –making with their high risk –acceptance power, as a result,turning over the position and authority and organizational decentralization increase creativity among individual in organization in comparison with noncreativity organizations which don’t permit their individuals to do like this.

It sounds that there is a relationship between innovation development and satisfy curiosity sense in the samples and creat a backgrand for acquiring new experiences and even the staff personality structure.

There fore,individuals who have a higher levels of organization innovation, considering individual demographic characteristics himself,take action to apply this type novel technology more then the past.

References

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