The Role of Information and Communication Technology in Sport Change Management

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Abstract

The realization of Scientific and comprehensive attitude toward the development of sport requires a detailed analysis of all factors and issues at the highest level possible. Iran as one of the developing countries has been successful in terms of indices of communication and information technology application among developing countries. Recent attention paid on part of the policy makers in developing ICT indicators including increased mobile and fixed lines per capita, increasing the number of personal computers, automation of administrative affairs, increased number of Internet users has necessitated enhancement of standards in ICT development. Proper utilization of the above-mentioned facilities and indicators can be dramatic effects in sports and exercise and help us get away from the traditional sport system. The purpose of this study is to describe the status of information technology use among Physical Education students at University of Payam Noor. In addition, the Study is a descriptive survey type. The statistical population of this study was 250 students of whom 125 selected based on Krejice and Morgan tables.

**Key words: Information Technology; Student; Physical Education and Sport Sciences; University.**

Introduction

Generally, information technology means using information technology tools and management information including a set of tools and services for the production, storage, processing, distribution and exchange of information. In other words, IT refers to a wide range of information technology (IT) based - computer technology and Internet information and communication (Chung, 2007 & Landry, 1995). This concept widely includes related technologies such as radio, TV, video, CD player (CD) and DVD (DVD), telephone, mobile, computer, electronic journals and the Internet and all of them at the top databases (Dibrell & Miller, 2002). These mechanisms facilitates transfer of information forms, such as content, audio and
video. In addition, information technology meets demands of people through gathering, distributing, processing and analyzing of information (Dedrick, Gurbaxani & Kraemer, 2003).

Modern sports organizations have been complicated in the complex competitive environment due to environmental, organizational and technology changes. In fact, in this competitive environment and virtual organizations, sport authorities need to consider a variety of modifications in the organizations, and most of them probably need an overall review and redesign in their organizations’ structure (Chien, 2007).

Today, the status and usage of information technology students is considered as a challenge for universities, because they pursue information technology toward teaching and learning development and research processes. Of course, some contradictory facts have been reported. For example, Bad Peima found usage of information technology by students graduate degree in Agricultural Extension and Education at a low level (Dibrell & Miller, 2002). Landry conducted a study in 1995, in this regard. His results showed that Organization’s decision support systems (ODSSs) greatly increased recognition (Heysung, 2004). Dadryk et al. (2003) carried out a Review on the 55 researches, and concluded that further investment in information technology leads to an increase in productivity through Changes such as increased decentralization in decision-making as well as tasks and jobs restructuring and.... (Larena et al., 2008).

Glenda Gay & Sonia McMahon (2006) in a study on 166 students in the country found these results: over 90% of them had used the virtual courses (Green, 2001). Most students have a positive attitude towards ICT. Plus, Most of them had access to computers and the Internet. In this study, university administrators were recommended to pay more attention to the differences of gender and age of the students for greater use of information technology and creating a positive attitude towards (Larena et al., 2008).

1-1 National Sport Information System
It is believed that the application of information technology in the form of national information system leads to institutional restructuring and reducing country's leading executive in the organization. Of course, increasing in flexibility will, in turn, end up with increased internal efficiency and competitive power of the entire system and international cooperation.

1-2 Information
Information mission is to create a network by which any organization (or individual) quickly and easily receives the information they need. Of course, creating information resources (hardware / software) can’t work without the storage and organizing methods of information resources.

1-3 Databases
Information that flows in the network of information stored in databases and updating information stored is one of the main tasks of this section.
Databases are fed in three ways:
1. Extracting information from information sources like the information contained in the publications, bulletins and...
2. Getting Information through questionnaire about the organizations that their activities are carried out in non-mechanized fashion

3. Receiving information from operational systems (direct Download) regarding the organizations that their activities are carried out automatically.

1-4 Creation of information infrastructure
If sectorial and national systems want to exchange information, it is necessary for them to use a common language of information across the board. Creating a common information language implies identifying the assigned unit identification number (unique) to the basic attributes. This gives rise to collecting information produced by the different system [7]. For example, using a number for a city at all systems will cause the information in different fields of educational, health, manufacturing, and consumer finance for the city to be collected and exchanged easily.

2-Information and communication technology in sports
Currently, sport enjoys economic, social and political importance in such a way that Mass media, political and sports authorities always discuss the good or bad results gained in different sport fields. For example, soccer has a special place in the world today and the results of its competitions have effect on a wide range of people, [3]. In addition, private soccer clubs and national teams practice every tool possible, to enhance their athletic teams. Of course, Information and Communication Technology is considered as the Most effective tool in our time. So it seems very logical that in the near future, Sports experts apply IT to increase capacity and improve results. Even in the next five years, we will hear in the second decade of this century some widespread expressions like E-soccer and E-sport.

Methodology
The Study is a descriptive survey type. The statistical population of this study was 250 students of whom 125 selected based on Krejcie and Morgan tables. The research tool: A researcher-made questionnaire whose reliability attained through Cronbach alpha. Data were analyzed through descriptive and inferential statistics using SPSS software.

Findings
- 86% of students would work with personal computer at home or at work on the daily basis.
- 28% of students would use virtual libraries and databases on a weekly basis such as: Science Direct PROQUEST
- 91% of respondents would completely agree that "Due to the process of rapid development of new information technologies, it is necessary for students to use it".
- 95% of respondents were opposed to the option that "learning to use computers and the Internet and digital devices are difficult for the students".
- The respondents felt Amount of training required for e-commerce learning was very much obvious.
- 32% of respondents referred to lack of easy access to some sites and scientific databases as a factor hindering IT use.
Conclusions

Based on the findings, 86% of students were using a personal computer at home or dorm on a daily basis. Of course, using a personal computer can be used as the main criterion to assess information technology usage. Also, the percentage of users refers to a high index of information technology application among students graduate degree in Physical Education and Sport Sciences. This result is consistent with that of Dovrap (2004) who performed a study on medical students in Denmark and declared that the majority of students had access to PCs and also results of Zayd and Lamys Rajab (2005) confirmed the fact that that 64% of Jordanian students used personal computers. 32% of students used the Internet search engine in connection with educational activities and research.

Also based on the results, the use of virtual university courses, participation in electronic courses, distance learning, chat related educational and research activities and the use of multimedia software ranked the lowest uses of information technology by students of Graduate Course of Physical Education and Sport Science. The reasons for this problem may include lack of sufficient knowledge for using these facilities, lack of knowledge about their advantages and cultural and scientific problems for using these tools among students graduate of Physical Education and Sport Science.

Considering the results of this study, virtual courses and university courses and electronic distance education had a minimum room among students and the importance of E-learning, on the other hand, we propose that the respective authorities hold seminars and e-learning workshops to increase awareness of students regarding educational advantages of this system and motivate them to use it effectively and efficiently.

Authorized and unauthorized application of Information and communication technology in sports and expressed willingness to use methods of Authorized technology and fair play signifies the high technology capabilities in Unauthorized manipulation of the results of football matches and this is What that can be a serious alarm for authorities in World Cup (FIFA) in the future. Interestingly, in the next few years, official tournament organizers should deal with both chemical doping as well as electronic doping of the players. E-doping refers to unauthorized tiny communications equipment connected to players’ body. The modern communication encompass a Combination of several Technologies including mass media, informatics and remote communications. The technology triangle can help People in the recording, storage, processing, retrieval, transfer and receiving the data at any Time and place. Of course, the modern High-tech communication facilities complement previously developed communications equipment. These technologies have unique features distinguishing them from the old communications equipment. Certainly, information and communication technology has affected every aspect of human life more than before, but this technology is very evident in the field of sports. Nevertheless, authorities should heed to their positive and negative aspects and have a deeper and more accurate look at it because on one hand, they are responsible for the community health, and on the other hand, there are athletes who may use new technologies for achieving medals at any cost.
References


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