

IT, Knowledge Management Substructure in Libraries (Case study: Sistan and Baloochestan Province)**¹Zahra Khaje Ali jahan Tighi, ²Masoomeh Abdollahi, ³T. Rigi**¹Coach of Payam Noor University, Tehran, Iran.²Responsible for the Public Library of Light, lecturer of Payam Noor University, Tehran, Iran.³Payam Noor University, Tehran, Iran.

Received: 23 April 2014; Revised: 19 May, 2014; Accepted: 26 May 2014

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ABSTRACT

Nowadays knowledge management is one of the challenges faced by public libraries. This study examines the role of IT as one of the knowledge management substructures in libraries and addresses the conditions of public libraries in Sistan and Baloochestan Province. The IT data for the study were collected from 49 public libraries by questionnaire made by the researcher. The questionnaire has good reliability and validity. The findings indicate the libraries of Sistan and Baloochestan Province benefit from primitive technologies, but they need more efforts to familiarize with newer technologies such as discussion groups, benefiting from others' experiences through remote training, familiarization with knowledge-centered systems, connecting all libraries to internet and entering into state libraries integrated system.

Keywords: IT, knowledge management in libraries, knowledge management substructure.

INTRODUCTION

In actual world different communities try to convert to information community. Information and IT have special importance. Public libraries are of the oldest organizations based on science and information and science is the most important asset of them. In technology and information era libraries and knowledge management are unavoidably intermingled with each other [1] because the rapid growth of available information and continuous changing technology have considerable effect on public libraries and their services. Public libraries should benefit from the formats due to IT development and communications and they have the formats to be available to informations world by electronic gate [2].

Having changed from printed and traditional information process to electronic methods it is necessary to use data by new methods to present services and keep the members and clients. Information and knowledge are changing, evolving and developing continuously in information sector. Information lifelong and efficiency are decreasing continuously and considering human has limited possibilities concerning place and time the search skills and more availability to information become more interested [3]. A successful organizational management needs the interaction between technology and human's skills and such interaction, skills discovery and knowledge in organization

members' mind are realized when there are exact designed programs benefiting from IT applied by IT specialists under good direction. One of important challenges of organizations including libraries is the retirement of their employees and leaving the organization. So the employees' knowledge abandons the organization when the employees leave or become retired so the valuable experiences and knowledge gained by spending a lot of energy in years leave the organization. Considering the public libraries are developing continuously and new librarians are employed every year the libraries should examine how they should direct the existent knowledge in the organization in a way that the newcomers be able to benefit from the work place knowledge and memory as soon as possible to serve the clients well. The knowledge beneficiaries are of different groups so it is difficult to provide knowledge for all of them because the knowledge producers have not much time and energy to search [4]. The most important element to gain knowledge management is to provide necessary substructures so if the IT substructure is ignored or is not applied properly and on time in public libraries in harmony with information amount and new technologies, it is a great obstacle in the path of knowledge management realization; by virtue of above facts and considering the undeniable role of libraries in community development knowledge management in community this study is to examine IT in the libraries of Sistan and Baloochestan Province.

Knowledge:

Francis Bacon believes knowledge is power and knowledge management focuses on 'Sharing Knowledge is Power'. Now by virtue of internet and web technologies it is possible to integrate separated parts of knowledge. Thoughts cooperation to create a new idea is not a new concept, but sharing knowledge in an electronic network is relatively a new phenomenon [5]. Nonaka-Takochi (1995) believes knowledge may be divided in two types: implicit and explicit; a researcher gains the former (Hidden) by experience and it is his(her) beliefs and values realization; such knowledge is the most important base to create new knowledge, but the explicit (Evident) knowledge may be documented and presented to others; it is shown by products such as deeds and films created in order to relate with others [6].

Scientific capital means a set of potentials and powers of a country to be taken into consideration for economic growth, to gain competitive advantages, human development and life quality [7]. Hassanzadeh mentions the features of scientific capital as follows: Infinity, transfer without ownership stop or stock decrease, scientific generative nature, transfer possibility through unofficial channels, conversion possibility (Flexibility) and not polluting and destroying environment. IT specialists should create technical substructures and software necessary to save, monitor, share and exchange knowledge in harmony with the needs defined in knowledge management program [8].

Knowledge Management:

Knowledge management includes all methods by which organization directs its knowledge set including how to collect, save, transfer, apply, up-to-date and create knowledge [9]. By virtue of another definition knowledge management is a set of processes attributed in an organization or company to create, save, exchange and apply knowledge; such processes are realized by increasing organization's potential in collecting knowledge from environment and applying it in related organization [10]. Knowledge management is used in an organization such as library in the process to gain and produce data and process and change them to useful and integrated data to be used in special conditions in order to take decision, program and execute programs; so knowledge management is to benefit from knowledge in a special situation and concept in line with organization's goals [11].

IT and knowledge management in public libraries:

IT includes technologies help us save, process, monitor, receive and transfer data; such data include new technologies such as computer, transfer by fax and other mass media and even older technologies such as archives, mechanical calculator, print and gravure [12].

It is necessary to identify and create the substructures of knowledge management. Hassanzadeh (2008) believes the knowledge management benefits are in two levels in libraries: individual and organizational. In the individual level knowledge management enables the employees to promote their skills and experience by sharing their knowledge and cooperating with each other to become professional and in organizational level knowledge management promotes organization's operation by increasing efficiency, utility, quality and innovation. Technology specially IT is one of the most important factors to relate different departments of organization and creates the filed for knowledge transfer. Also Zuboff (1988) believes operational skills (work knowledge) are complemented with computer technologies (Encoded knowledge) [7].

Study purpose:

Present study is descriptive and applied and states the IT role as one of the substructures of knowledge management in libraries and examines the conditions of public libraries in Sistan and Baloochestan Province to create some background for programs in line with knowledge management goals in libraries.

Essential questions:

- 1 – How much IT is used in hardware sector of public libraries of Sistan and Baloochestan Province?
- 2 - How much IT is used in software sector of public libraries of Sistan and Baloochestan Province?
- 3 – What are the outputs of knowledge management in the public libraries of Sistan and Baloochestan Province?

The study universe and methodology:

The universe includes all public libraries of Sistan and Baloochestan Province (Affiliated with state public libraries organization). The data were collected by the questionnaire including 26 questions designed by the researcher. The questionnaire reliability was confirmed by related specialists and the validity was defined 0.82 according to Cronbach alpha.

Question:

1 – How much IT is used in hardware sector of public libraries of Sistan and Baloochestan Province?

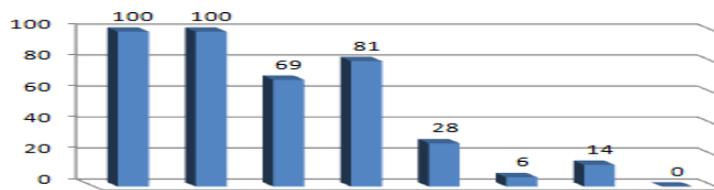


Fig. 1: The percent of using IT in hardware sector:

As you see in Figure 1 most of the responses indicate that computer is used to do the libraries affairs and all of them have scanner, too. 81 percent have fax and 69 percent have copier and only six percent have multipurpose machine; 14 percent have UPS and none of them have RFID technology so

most of the authorities have no familiarization with it and even have not heard its name.

2 - How much IT is used in software sector of public libraries of Sistan and Baloochestan Province?

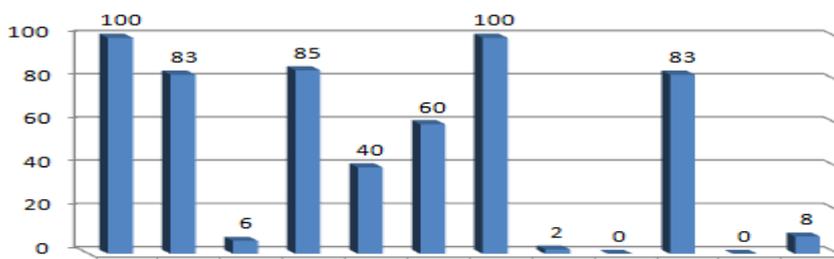


Fig. 2: The percent of using IT in software sector:

As you see in Figure 2 most of the responses indicate that all libraries' computers have proper antivirus and email to communicate with colleagues and public libraries office.

83 percent of the libraries have internet but have not more advanced technology like remote training and science centered systems and most of them do not know the latter. Only 2 percent of the respondents are member of discussion groups and use it to consult, train, learn and up-to-date their knowledge concerning libraries and data and science. Six percent have Bluetooth and 85 percent have publications index software in their system and 8 percent of them have lock and index under web, Iran Nemayeh, too. 60 percent use Payam Mashregh

software(Integrated management system for state public libraries) to do all administrative affairs including registering, listing, borrowing, renewing, adding the members, etc. and 20 percent use the card index as before. Recently special interest expressed to weblog in the libraries. Most of public libraries with internet of Sistan and Baloochestan Province have private weblog to present their reports and subject to others

question 3:

What are the outputs of knowledge management in the public libraries of Sistan and Baloochestan Province?

Table 1: Knowledge management outputs in libraries:

Percentage Answers	Major interests of knowledge management
45	Increase creativity and innovations in libraries
60	Improve and enhance the performance level
73	Increase Customer consent
70	Librarians staff learning enhance the ability of
90	Improving of reports and response to investigations
65	Distribution of new knowledge between the of library staff

The percent of the public libraries' responses presented in Table 1 indicates how much they agree with the outputs of knowledge management and how

much they consider it effective in library operation and services. The findings indicate 90 percent of the libraries believe knowledge management promotes

their reports; 70 percent of the responses accept that it promotes librarians' and employees' potential and learning and 73 percent believe knowledge management realization is effective in the clients' satisfaction increase. More than 50 percent agree with improving and increasing employees' and libraries' operation level and distributing knowledge among them. The least viewpoint (45 percent) related to creativity and innovation increase in the libraries.

9 – Most of the librarians believed IT had increased in the libraries of Sistan and Baloochestan Province in recent years, but such increase does not make them needless to new technologies. In relation to hardware few percent of them have copier and multipurpose machine while these are important to serve the clients well and accelerate facilities; it is necessary to examine the libraries in view of regional population and types of their needs. RFID technologies which are used in different companies and libraries including libraries today may increase sources security and accelerate different affairs including shelf reading and decrease considerably the time necessary to do such affairs. Because of regional conditions and lack of appropriate substructure some of the libraries in the province have not been able to have access to internet yet. Considering we are in information era and libraries need internet in all affairs if IT is ignored, the knowledge management encounter with problems in goals achievement; so in this regard it is necessary to examine exactly the regional conditions and provide necessities to install internet. Public libraries of Sistan and Baloochestan Province are very weak in fields of membership in discussion groups, remote training and knowledge-centered systems. We need the personnel familiarized with software technologies in order to have dynamic libraries so we should have classes and workshops to train the librarians and have IT during programming. Software application and database ender web such as Iran Namayeh are becoming general appropriately. More than one third of the public libraries of Sistan and Baloochestan Province use previous librarianship index software and have not shared network with other libraries. If a comprehensive integrated system becomes possible in state public libraries, they can manage, share and transfer data together. The librarians of public libraries of Sistan and Baloochestan Province are not familiarized with knowledge management and essential concepts of it. Knowledge management and its applications were described somehow in the libraries for the librarians and then they were asked to state their views about the effects of knowledge management; so approximately all of them considered IT very important in line with knowledge management realization. They state that knowledge management goals are effective in libraries and also state that it is necessary to train the librarian about knowledge management, its process and execution steps.

Conclusion:

Knowledge is the most valuable capital of humans and organizations. One of the primary goals of libraries foundation is knowledge management and IT application is very important in knowledge management realization. Public libraries of Sistan and Baloochestan Province use primary technologies but try to familiarize with newer technologies such as discussion group, benefiting from others' experiences through remote training and science-centered systems, linking other libraries by internet and state integrated public libraries system.

Acknowledgement

We continue to be indebted to public libraries of Sistan and Baloochestan Province due to their sincere cooperation to have necessary data.

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