Methods of Knowledge Management Practices in Pakistani Universities' Libraries

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Abstract:

The developments in the information communication technologies (ICT) have not only enhanced the capacity of information storage and its flow, but also changed the nature of library and information services. In the midst of these changes, knowledge management (KM) has emerged as a significant tool to further influence the practices of library and information science. The purpose of this research paper is to explore the methods used for knowledge management practices in university libraries of Pakistan. It proposes the methodologies of knowledge management among library and information science professionals in university libraries. The research also aims at expanding the effective use of ICT in libraries. The study was conducted by using a semi-structured questionnaire. The population of the study was head librarians, working and supervising all activities of the library at the university. The survey showed that the methods of attending conferences, training, and seminars are very useful. It also helps to gain the knowledge and skills from senior Library and Information Sciences (LIS) professionals. LIS professionals believe that knowledge sharing is very important for project collaboration. In the library, professionals share knowledge about technological development and advancement in the library services.

Keywords: Knowledge management, practices, university libraries, Pakistan

1. INTRODUCTION

Knowledge management (KM) in an organization does not just organize the information and its users, but also links the users with the available information [Yang and Liu (2009)]. The management of information was regarded as the area of concern for librarians and libraries. Although to some degree, the number of firms recognized by knowledge management companies typically uses practices of

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knowledge management in libraries and information centers, but these practices are required at advances bases [Marouf (2004)]. With these practices and development in technology, information science professionals were qualified to become experts in the fields of information searching techniques, selecting, acquiring, preserving, organizing, repackaging, and disseminating of the required information. Therefore, librarian and information professionals had to learn to use technological methods for the management of information. A broad body of literature argues that librarians became chief information officers/Information Services Directors [Suurla, et al. (2002)]. The research of Le (2016) provided an alternative solution for creating and contributing the knowledge also presented the analytical framework for enterprises. With this Aming'a (2015) suggested the mechanism of acquiring and capturing the knowledge to improve the performance and the memory of the organization. Jain (2013) conducted a research to know the practices of KM in university libraries. These bases provide a reason for why the practices of KM have been implimented with the different use of methodologies in organizations.

Problem Statement

The literature review helps us to know the method of knowledge management practices. On one hand the developed countries have the practices and application of knowledge management; but on the other, many resource persons from library service departments in the developing world, particularly from Pakistan, are still using conventional methods of knowledge management and are practicing manual systems in library activities such as acquisition, technical processing, information retrieval, and circulation control. This situation provides a genuine reason to analyse the level of method of knowledge management practices in the university libraries of Pakistan. This study has helped to know the implementation of KM methods that are being used in university libraries of Pakistan. Hence, the present study is an attempt to fill the gap of literature in the field of LIS regarding the availability of limited literature on methods use for knowledge management practices in university libraries of Pakistan.

2. LITERATURE REVIEW

Some well-recognized knowledge management practices have not changed much beyond the traditional activities of information management [Marouf (2004)]. Similarly, KM is seen as distinctive from both librarianship and information management, including knowledge capturing, organizing, knowledge sharing, and the transaction of tacit and explicit, individual and mutual knowledge [Davenport (2004)]. In the mid of 1990s, KM was concerned with much concentration [Ponzi and Koenig (2002); Chowdhury (2004)] by other research scholars and professionals of various fields related to management science, computer science, business, library and information science, etc. Several experts explored Library and Information Science (LIS) as one of the major parts of KM. Knowledge management is now an emerging interdisciplinary or multidisciplinary field [Ponzi and Koenig (2002), Davenport and Cronin (2000); Reardon (1998); Koenig (1999)]. In simple words, KM is concerned with both explicit and tacit knowledge [Chowdhury (2004)]. On the other hand, (LIS) is generally apprehensive of recorded knowledge. Koenig (1999) described that there is no ideal place for KM, because education for KM is likely to appear in various places. Another research revealed the new methods and developments of KM in the perspective economies [Oliver (2015)].

2.1. Knowledge Sharing/Knowledge Acquisition/Knowledge Capturing

For the use of knowledge management, the help of enterprises, cultural atmosphere for knowledge sharing, exchange, and learning has to be created. This would be an important foundation for the promotional activities and effective practices of knowledge management [Yang and Liu (2009)]. Marouf (2004) studied the role of corporate setup in the United States American library and information centers in knowledge management. The results of the study reported that librarians are using KM practices and participation in knowledge capturing, sharing and organizing; in addition, they are taking part in the use of intranets, knowledge sharing techniques, and use of web portal.

2.2. Practices of Knowledge Management in Libraries

Knowledge management is comparatively a new concept of analysis which integrates an extensive range of areas, with the practices and theories of different disciplines. The appearance of knowledge has a direct impact on the conversion of post-industrial information society into the society of knowledge base. The goal of knowledge management in libraries is a practical one. Individual and collective knowledge resources can improve the services of library and information centers services. These resources are the combination of the skills, experiences, abilities, leadership, norms, and routines of LIS professionals, with the help and use of technologies. Surprisingly, despite the strong consent on the consequence of knowledge or "intellectual capital" to every company's success, most companies are practicing knowledge management in a poor way. Some of them have defined the role of management clearly, such as the role of Chief Knowledge Officer (CKO). However, the attention to knowledge management is growing and is increasingly becoming a more significant discipline for companies who wish to contest the market. They are forced to rethink to achieve something and even to survive for the management of their organizational knowledge. With these following questions raised, the use of knowledge management practice in companies and the opportunities for information science professional will increase [Abell and Wingar (2005)].

2.3. Challenges for the Implementation of Knowledge Management Practices

The literature of library and information science is characterized by thought about the prospect of LIS professionals and libraries. The developments in technology, and for the most part the use of Internet growth, transformed the feature of Library and information science and have raised serious questions in lieu of LIS professionals with libraries. The development of the telecommunication system and IT infrastructure, that changed social and economic values as well, freedom of information and expression changed the information seeking behaviour of people. With this [Järvenpää, *et al.* (2016)] identified three aspects as challenges

for the practices of KM: behaviour of people having a different background, stint of integration in the applied information systems and codification from tacit to explicit knowledge. The expectation of people depended on "www", through which they can find anything on web. As we all know, LIS professionals are at risk. Although, the world's infrastructure relies on knowledge and information and can be done quickly anywhere and at any place, what is the role of print? Maybe this may be part of the museum, or part of libraries [Brophy (2001)].

3. METHOD OF THE STUDY

The study intended to explore the methods of KM practices in university libraries of Pakistan. A survey method has been used; questionnaire was distributed among the LIS professionals of public and private sector universities of Rawalpindi and Islamabad. The data were collected from the respondents during the summer break period. The population of the study consisted of the head librarians of university libraries of the twin cities. The research tool consists of the methods of KM practices. By using the research tool, the methods of KM practices are measured through Likert-type scale, which includes knowledge sharing, knowledge acquisition, knowledge organization and retrieval of knowledge. A pilot-tested questionnaire was used to collect the data for this study after receiving the responses; data were analyzed using the SPSS software. The data were displayed in ranks that present the number, mean and standard deviations of the variables.

4. PRESENTATION AND ANALYSIS OF DATA

When we talk about the practices of KM in university libraries there are lots of questions raised: 1) what type of method is involved in practices of KM in the libraries? 2) How effective is the use of communication system? and 3) Is there a proper system of the organization and retrieval of knowledge in the practices of KM? On the bases of these questions this section asked the questions from respondents about the practices of knowledge management in their libraries and information resource centers.

4.1. The Level of Knowledge Management Methodologies Used in University Libraries

There are different methodologies used for the practices of knowledge management in the libraries. These methodologies have different levels for the practice of KM. The level of methodology varies from one practice to the other. Therefore, these methods build the professional development of LIS community. On the bases of it, library services can be improved for the implementation of these methodologies. In table 1, respondents were asked to indicate the method of knowledge management used in their library. Respondents rated conference and workshop as a useful method used in their libraries with a mean score 4.27, followed by the use of training, cooperation with other organizations, documentation, rotational assignments, and exit interviews of library management in their libraries with a mean scores 4.19, 4.19, 3.96, 3.81 and 3.54, respectively.

Table 1. KM Methodologies Used in University Libraries

Ran	k KM Methodologies Used in Universities Libraries	N	Mean	Std. Deviation
1.	Method of attending conferences and workshops	26	4.27	0.533
2.	Use of training as a method	26	4.19	0.801
3.	Cooperation with other organizations	26	4.19	0.801
4.	Method of documentation	26	3.96	0.699
5.	Rotational assignments method	26	3.81	0.895
6.	Exit interviews of library staff	26	3.54	0.948

Note: Scale: 5= Strongly Agree, 4= Agree, 3=Not Sure, 2= Disagree, 1 = Strongly Disagree.

4.2. Training and Monitoring

Table 2 shows that training and monitoring are very important aspects for the development of LIS profession. The LIS professionals' skills and knowledge can be developed and enhanced by proper training and regular monitoring. LIS professionals were asked to indicate the training and monitoring used in their library. Majority of the respondents

rated motivation by senior LIS Professionals to help and guide juniors as a useful method and ranked it at the top. Provision of tuition fees for LIS Professionals to increase their education and skills was ranked at number 2 with a mean score 4, followed by provisions of formal training in the field of knowledge management practices at number 3 with a mean score 4. Respondents rated provision of off-site training to LIS professionals, provision of formal training, the provision of informal training in the field of knowledge management, usage of apprenticeships, and other monitoring can increase their skills with mean scores 4, 3.85, 3.81 and 3.62, respectively.

Table 2. Training and Monitoring used in the University Libraries

Rank	Training and Monitoring Used in Libraries	N	Mean	Std. Deviation
1	Motivation by senior LIS professionals to help and guide to juniors	26	4.27	0.533
2	Provisions of tuition fees for LIS professionals to increase their education and skills	26	4.00	0.748
3	Provisions of off-site training to LIS professionals to increase their skills	26	4.00	0.748
4	Provisions of formal training the field of KM practices	26	3.85	1.008
5	Provisions of informal training the field of KM practices	26	3.81	0.849
6	Usage of apprenticeships and other monitoring practices	26	3.62	0.898

Scale: 5= Strongly Agree, 4= Agree, 3=Not Sure, 2= Disagree, 1 = Strongly Disagree.

4.3. Communication

Table 3 reveals that in libraries and information centers knowledge sharing pave the way for the development of services and professionalism. There are different ways and methods that can be used for the sharing of knowledge. Majority of the respondents agreed for provision of collaborations on projects that are separated physically with a mean score 4.12. They agreed that workers share knowledge or information by using databases regularly related to learned lessons, listening to experts, and good work practices with a mean score 4.94. The responses also show that provision of formal documentation such as training manuals, articles, learned lessons, and good work practices

should be encouraged for communication among workers with a mean sore 3.85.

Table 3. Sharing of Knowledge or Information by LIS Professionals in University Libraries

Rank	Workers Share Knowledge in The Library	N	Mean	Std. Deviation
1.	Provisions of collaborations to projects that is separated physically	26	4.12	0.585
2.	Workers share knowledge or information by using updating databases regularly related to learned lessons, listening experts and good work practices	26	4.04	1.113
3.	Provisions to formal documentation such as training manuals, articles, learned lessons and work practices	26	3.85	0.925

Note: Scale: 5 = Strongly Agree, 4 = Agree, 3 = Not Sure, 2 = Disagree, 1 = Strongly Disagree.

4.4. Organization and Retrieval of Knowledge in Libraries of Pakistani Universities

Head Librarians were asked about what type of knowledge can be accessed and shared in their library (Table 4). Majority of the respondents reported that knowledge of information about the use of technology should be shared to a very great extent with a mean score 4.58, On the other hand, respondents reported that information about process should be shared at great extent with a mean score 4.35 followed by information about training and development opportunities, information about user satisfaction, information of library competitors, information about future plans, information about new initiatives, information about key library users, information about team and individual success, information about seniors management decisions and information about other business functions with mean scores 4.35, 4.31, 4.23, 4.23, 4.23, 4.23, 4.23, 4.15, 4.15 and 3.96, respectively.

Rank Type of Knowledge Accessed & Shared Ν Mean Std. Deviation 1. Information about the use of technology 26 4.58 0.504 2. Information about process 26 4.35 0.562 3. Information about training and development 26 4.31 0.471 4. Information about user satisfaction 26 4.23 0.652 5. Information of library competitors 26 4.23 0.652 4.23 6. Information about future plans 26 0.652 7. Information about new initiatives 26 4.23 0.652 26 4.15 8. Information about key library users 0.925 9. Information about team and individual success 26 4.15 0.925 10. Information about senior management decisions 3.96 26 0.958 Information about other business functions 11. 26 3.96 0.958

Table 4. Different types of Knowledge Accessed and Shared in Libraries

Note: Scale: 5 = Very Great Extend 4 = Great Extent 3 = Some Extent 2 = Little Extent 1= Very little extent.

5. DISCUSSIONS

With these facts and figures of the study it can be comprehended that the practices of KM are performed using different methodologies. These methodologies are interrelated with each other. Respondents rated conference and workshop as a useful method used in their libraries with a mean score of 4.27. They revealed that cooperation with other organizations is also used in the libraries for KM. Moreover, respondents agreed that "exit interview of library staff" is used sparingly.

These results built valid arguments that knowledge management practices can be implemented in the regular formal and informal training of LIS professionals. Professionals were ranked by the respondents as number 1 for the help and guidance to juniors. Similarly, provision of tuition fees for LIS Professionals to increase their education and skills was ranked at number 2 with a mean score 4. With this the involvement of senior professionals in the field of library and information science is also important. The proper guidance, help, and training by seniors can improve the skills and knowledge of new LIS professionals. There should be a provision of continuing education in the field of library and information science to improve the qualification of LIS professionals.

The system of communication can be improved by the process of knowledge sharing. The knowledge can be shared in the organization by proper organizing of good practices and use of database. Majority of the respondents agreed for the provision of collaborations to projects that are separated physically with a mean score 4.12. They agreed that workers share knowledge or information by using updated databases regularly related to learned lessons, listening to experts, and good work practices with a mean score 4.94. These databases can be updated by the expertise of individuals. A lesson can by learned by the practices and good work of individuals to solve the problem in the organization. On the basis of good work and practices the collaboration with other organizations can be shared.

The results of the study show that organizing and retrieval of knowledge in libraries is for the improvement of library services and the satisfaction of library users. Majority of the respondents reported that knowledge of information about the use of technology should be shared to a very great extent with a mean score 4.58. On the other hand, respondents reported that information about process should be shared to a great extent with a mean score 4.35. The development of technology and use of databases increased the level of competition. The organizing of knowledge is implemented with systematic process of library system. The system can be improved by the use of technology, management, and staff. The training of staff is also very important with the development of technology and library databases. Such types of training can develop the skills of LIS professionals for the improvement of library services.

6. CONCLUSION

In libraries the organization and retrieval of the knowledge is an important and basic function. The role of library is of a knowledge repository from the primitive societies of the world. Librarians were known as the custodian of the books. The primary functions of the libraries were the storage and organization of the knowledge. With the development of civilizations and need of humanity the retrieval of knowledge became a main factor of the librarians' responsibilities. With the storage and organization of knowledge they have to perform a better role for the retrieval of the knowledge in library and information resource centers. The research was conducted to know the methods of KM practices by LIS professionals in university libraries of Pakistan. The

population of the study was university librarians of Rawalpindi and Islamabad. The results from the study are very impressive, indicating that librarians use knowledge management for library services to achieve organizational goals and outcomes. Most librarians learn and develop their skills through the use of methods, attending seminars, conferences and trainings. With this knowledge sharing in the running projects of libraries is a very important aspect. They normally share the knowledge for the advancement of technologies and development of the library services and infrastructure.

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