Knowledge Management Practices in the Public University Libraries: Librarian's Perspective

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Abstrak

Beberapa perpustakaan memainkan peran penting dalam pengajaran dan pembelajaran namun masih terdapat beberapa kendala. Hal ini menyebakan perguruan tunggi harus mampu mengidentifikasi berbagai faktor dan mengatasi tantangan penerapan KM di perpustakaan. Penelitian ini bertujuan untuk mengeksplorasi praktik Manajemen Pengetahuan (KM) saat ini di Perpustakaan Universitas Umum (PUL). Jenis penelitian ini yaitu kualitatif, Metode yang digunakan dalam pengumpulan data kualitatif yaitu observasi, wawancara dan kuesioner. Instrument yang digunakan yaitu lembar wawancara. Sampel penelitian ini berjumlah 11 orang dengan menggunakan Purposive sampling. Data yang terkumpul dianalisis dengan menggunakan analisis isi. Temuan mengungkapkan bahwa tidak ada program KM formal di salah satu universitas yang dipilih. Penelitian ini menemukan bahwa strategi yang bijaksana untuk implementasi KM, merekrut tenaga terampil, program pelatihan berkelanjutan untuk staf dan pengguna, kepemimpinan, infrastruktur TIK, keputusan otoritas yang lebih tinggi, anggaran, kurangnya tenaga terampil adalah faktor penentu keberhasilan implementasi KM di PUL. Penelitian ini mengidentifikasi banyak tantangan yang biasanya dihadapi PUL dalam upaya mereka untuk mengimplementasikan KM, yaitu, kurangnya anggaran, kurangnya kesadaran pengguna, kurangnya staf terlatih, dan teknologi usang.

Kata kunci: Praktek KM, PUL, Bangladesh

Abstract

Some libraries play an essential role in teaching and learning but there are some constraints. It causes universities to be able to identify various factors and overcome the challenges of implementing KM in libraries. This study aims to explore current Knowledge Management (KM) practices in Public University Libraries (PUL). This type of research is qualitative. The methods used in collecting qualitative data are observation, interviews, and questionnaires. The instrument used is the interview sheet. The sample of this research is 11 people using purposive sampling. The collected data were analyzed using content analysis. The findings reveal no formal KM program in any of the selected universities. This study found that a prudent strategy for KM implementation, recruiting skilled personnel, ongoing training programs for staff and users, leadership, ICT infrastructure, higher authority decisions, budgets, and lack of qualified personnel are critical success factors for KM implementation in PUL. This research identified many challenges that PUL usually faces in their efforts to implement KM: lack of budget, lack of user awareness, lack of trained staff, and outdated technology.

Keywords: KM Practice, Puls, Bangladesh

1. INTRODUCTION

University libraries play a significant role in accomplishing user demand in higher education institutions. These libraries are accountable for offering information sources and services supporting students, staff, and faculty's teaching, learning, and research needs (Atanda et al., 2021; M. A. Islam et al., 2014). In addition, Public University Libraries (PULs) may be mentioned as an asset of learning institutions. Also, a source of knowledge with the accountability to put together all acquisition, processing, storing, and dissemination of knowledge sources in paper-based and automatic set-up for users' requirements (Agarwal & Islam, 2020; Zimmer & Madeja, 2019). At the same time, Knowledge Management (KM) has extended much attention during the past three decades. It is an enterprise and knowledge

itself, covering several scientific disciplines. As a developing country, Bangladesh has better prospects for sharing knowledge and managing resources in its knowledge-driven institutions like libraries and information centers (Alshehri & Cumming, 2020; N. Islam et al., 2020).

Libraries were engaged in the re-engineering of information environments, where it was used in the fields of collecting, user support, e-resource acquisition, KM, and many others. The university libraries of developed countries are currently turning into information centers to support users, while libraries of third-world countries such as Bangladesh attempt to provide their users with an efficient service to manage their existing knowledge resources (Asante & Ngulube, 2020; Goyal & Sharma, 2014). Other study stated that consuming more library resources, buying more books, and moving to large premises improved the quality of libraries in the past (Khan & Kamal, 2015). Though, such a strategy may no longer be appropriate in today's world. Providing the correct information to the relevant user appropriately is an excellent way to improve quality and sustainability. This necessitates a significant shift, which might be accomplished by adopting a user-satisfaction-based approach (Harbo & Vibjerg Hansen, 2012; Loughridge, 1999). However, some libraries played an essential role in teaching and learning some obstacles. So, KM can be applied to advance excellent user services in PULs libraries in Bangladesh, and this can be attained by identifying various factors and overcoming the challenges of implementing KM in these libraries. The results from the research are predictable to aid the higher authorities' decisions regarding successful KM policies and strategies for KM implementation in university libraries.

In an organization, successful KM strategies should increase the willingness of employees to share their information and help employees resolve their psychological obstacles in searching for or receiving knowledge from others (Bartol & Srivastava, 2002; Tong & Shaikh, 2010). Similarly, previous study indicated KM promoted professional skill and competence among employees (Semradova & Hubackova, 2014). Other study stated KM should concentrate on efficient knowledge and useful research and development in the library, KS, and training among library staff (Shathi, 2019). It should speed up the explicit processing of implicit knowledge and use it for sharing. This interchange can occur informally and formally in meetings, conferences, and presentations (Abah, M., Asiedu, N. K., & Dei, 2022; Bircham, 2003).

In LIS, there are close relations and well-established interactions with KM procedures. Some experts also stated KM was a new name for the LIS sector that professionals have used for many years (Ahmad, 2017; Branin, 2004). Similarly, previous study mentioned KM had become an independent academic field, but this subject has a high degree of interaction with other disciplines such as LIS (Liebowitz & Paliszkiewicz, 2019). However, KM in libraries can expand communication among users and staff of the library and can encourage a culture of KS. Allowing user-oriented solutions can make libraries more involved by reducing reply time, and it can help increase performance. Both lead to lower costs, better efficiency, and satisfied library employees and customers (Roknuzzaman et al., 2009; Teng & Hawamdeh, 2002).

KM practices in an organization help make good decisions and achieve the value of organizational knowledge (Abah, M., Asiedu, N. K., & Dei, 2022; Sinclair, 2006). KM is vital in a library because it improves the effectiveness of a librarian's sense-making capability. For best practices and service delivery, academic libraries need to apply KM. Library users may also benefit from the best practices of KM in the library, so improvement is easier to adopt within the library. The following benefits that can be derived from knowledge-based initiatives and practices suggest that KM has a lot to offer organizations

determined to change their environment. PULs may initiate to apply the KM for the following reasons (Anand & Singh, 2011; Musangi et al., 2019).

It is important to provide a more comprehensive and intentional analysis of the essential success factors for the implementation of KM. Organizations need to be conscious of the factors that will influence the efficiency of a KM initiative and be aware of them (Migdadi, 2009; Shuva, 2013). Many factors in institutions can affect KM, and leadership is one of them. The influence of leadership on KM is more noticeable because this is a comparatively innovative discipline, and nothing has a better effect on an institution than leadership. According to previous study employees must be updated on new technologies and their benefits to capitalize on these opportunities (Musangi et al., 2019). On the other hand, organizational culture is unique for every organization. It can play a dynamic role in the factors that lead to the acceptance or rejection of KM in the library (Harbo & Vibjerg Hansen, 2012; Poonkothai, 2016).

Users' demands might change gradually over time, and libraries must continuously consider such changes. Students of the present era still need guidance in using the enormous amount of electronic literature. At the same time, they are also the advanced users of the latest information technology (IT), which library institutions, often conservative by nature, provide this kind of services to users. It is said that this infrastructure promotes contact between people in pursuit of information and people who guide the path to knowledge (Marouf, 2017; Sarawanawong et al., 2009). Library professionals perceived several challenges to incorporating KM into academic library practices. Lack of skills and competencies, the reluctance of library professionals to accept the change, misunderstanding of KM concepts, lack of KS culture, lack of incentives or rewards for innovation and sharing knowledge, top management commitment, lack of collaboration, and lack of resources are the major challenges discussed in LIS literature (Mostofa & Islam, 2015; Nazim & Mukherjee, 2013; Roknuzzaman et al., 2009). Base on those descriptions and result from previous studies. This study aims to explore current Knowledge Management (KM) practices in Public University Libraries (PUL).

2. METHODS

Qualitative data collection methods were employed in the research. The research used semi-structured interviews to collect qualitative data from the Librarians/Deputy librarians and Assistant librarians of these libraries. This research used semi-structured questionnaires to collect primary data from the sample of the targeted university libraries. This research purposively covered five public universities (University of Dhaka, University of Rajshahi, Bangladesh University of Engineering and Technology, Jashore University of Science and Technology, and Sylhet Agricultural University). These universities are well-developed, appropriate infrastructural facilities and have an advantage over newly established smaller universities. This research interviewed 11 Librarians/Deputy librarians/Assistant librarians of the respected PULs as they hold the highest position at their university library.

The data's depth is more important than generality for qualitative data collection. By reviewing previously published literature, a comprehensive semi-structured interview questionnaire was developed with some self-developed questions to investigate the issues in the current research area (Bryman, 2016; Davenport et al., 2010). Therefore, in this approach, a pre-written set of questions were employed to record the answers from the interviewees. A semi-structured questionnaire was divided into several sections. The main sections were as follows, which consist of additional and further precise sub-questions, i.e., Demographic

information, General information about the institution, Overall KM issues and status, KM policy and implement in the libraries, and Critical success factors and challenges of KM.

The data collected were analyzed by using content analysis. Content analysis was chosen for this research because it allowed the researchers to understand the actual situations of the libraries. In addition, extracting meanings shows underlying the responses given by the interviewees. To identify the interviewee's responses, initially, they were given codes. Any details that identify them were removed from the writing as requested by the respondents. Qualitative data from the semi-structured interview was arranged in the following section according to the questions asked based on the research questions from the interviewees. The findings are presented as follows.

3. RESULTS AND DISCUSSION

Results
Profile of the Libraries

The respondents in the study were drawn from the five selected PULs in Bangladesh. Table 1 shows the basic information about these libraries.

Table 1. Profile of the Libraries

Parent Organization	Name of the Library	Year of Established	Total Employees including Admin Staff	Specialized Area of Education	Address in Bangladesh
DU	DUCL	1921	202	General	Shahbagh, Dhaka
RU	RUCL	1955	98	General	Rajshahi
BUET	BUETCL	1962	39	Engineering	BUET Central Road, Dhaka
JUST	JUSTCL	2007	16	Science and Technology	Jessore
SAU	SAUCL	2006	08	Agriculture	Sylhet

Base on Table 1, it is found that DUCL was the oldest library established in 1921, and SAUCL was established in 2007, and is the youngest library among the five. Among the universities, DU and RU's specialized area is general. BUET is an engineering university, JUST is science and technology, and SAU is an agricultural university. The table also reported that the highest numbers of employees are working in DUCL (202), followed by RUCL (98), BUETCL (39), JUSTCL (16), and SAUCL (8).

Response Rate of Interviewees from five PULs in Bangladesh

The details information of the semi-structured questionnaire distributed to the PULs in Bangladesh is show in Table 2.

Table 2. Response Rate

Sl. No.	Name of the University	No. of Semi-structured interview Questionnaires distributed	No. of Semi-structured interview questionnaires returned	Response rate
1.	University of Dhaka	3	3	100%
2.	University of Rajshahi	2	2	100%

Sl. No.	Name of the University	No. of Semi-structured interview Questionnaires distributed	No. of Semi-structured interview questionnaires returned	Response rate
3.	Bangladesh University of Engineering and Technology	2	2	100%
4.	Sylhet Agricultural University	3	2	66.66%
5.	Jashore University of Science and Technology	3	2	66.66%
	Total	13	11	84.61%

Base on Table 2, it is found that out of 13, Librarian/Deputy Librarian/Assistant librarians, 11 were interviewed, giving a response rate of 84.6%.

Demographic Profile of the Respondents Interviewed

This section presents data collected from semi-structured interviews conducted with Librarians/Deputy librarian and Assistant librarians of five PULs in Bangladesh. The interviewees were questioned about their qualifications, job experience, years in the current position, library designation, and name. The summary of all respondents interviewed is show in Table 3.

Table 3. Summary of the Respondents Interviewed

Name of the University	Name of the Library	Designation	Highest Educational Qualification	Total service experience and experience in the present position	No. of persons interviewed
University of Dhaka	DUCL	Librarian	PhD	26(05)	01
		Deputy librarian	MA	11(03)	01
		Assistant librarian	MA	08(03)	01
Bangladesh University of Engineering and Technology	BUETCL	Deputy librarian	MA	22(02)	01
		Assistant librarian	MSS	24(08)	01
University of Rajshahi	RUCL	Deputy librarian	MA	20(09)	01
		Assistant librarian	MSS	13(04)	01
Jashore University of Science & Technology	JUSTCL	Librarian	MA, Med	20(01)	01
		Deputy librarian	MA	12(02)	01
Sylhet Agricultural University	SAUCL	Librarian	MA	25(10)	01
		Deputy librarian	MA	11(04)	01
	Total				11

Understanding KM

In the semi-structured interviews questionnaire, the study sought to investigate the Librarian/Deputy librarian/Assistant librarians' understanding of the KM concept. They were expected to indicate their understanding of the concept by providing their own definition. Among the 11 interviewees, 10 provide KM definitions according to their point of view. Only one person did not provide any definitions but mentioned that he has a basic

understanding of KM. It means librarians/deputy librarians in PULs in Bangladesh are familiar with the term KM. Interviewees' Understanding of KM is show in Table 4.

Table 4. Interviewees' Understanding of KM

"KM is organizing, maintaining, retrieving, and distributing relevant knowledge for future use."
KM maintains the important knowledge for future growth and makes essential knowledge available at the right time.
"KM is the process of identifying, organizing, storing, and sharing information within an organization."
"KM is one of the important practical understandings that help to run the library smoothly and efficiently. In addition, it helps the acquisition, processing circulation, reference, and ICT management at the highest level."
"KM is a newly emerging interdisciplinary business model that can provide knowledge with the framework of an organization."
"KM is the collection of methods relating to the creation, sharing, using, and managing of the knowledge and information of an organization."
"KM is the collection of methods relating to creating, sharing, using, and managing the knowledge and information of an organization."
"KM is the process by which an institution gathers, organizes, shares, and analyzes its knowledge in a way that is easily accessible to its users."
"KM is the process of identifying, organizing, storing, and disseminating information within an organization. Km is the conscious process of defining, structuring, retaining, and sharing the knowledge and experience of employees."
"KM is the collection of methods relating to creating, sharing, using, and managing the knowledge and information of an organization. It refers to a multi-disciplinary approach to achieve organizational objectives by making the best use of knowledge."

Library Practicing Knowledge Management

Moreover, the study sought to investigate whether your library is practicing KM in these PULs in Bangladesh. The participants were expected to indicate if the activities were being practiced with a "Yes" or "No" response. In addition, they also asked how they were practicing. The result of interview related to practicing knowledge management is show in Table 5.

Table 5. The Response Whether the Library is Practicing KM

Name of the library	Statement from the interviewees	Coding
DUCL	• Yes, a library is a storehouse of relevant information and other reading materials. The library itself maintains and practices KM by acquiring, processing, classifying, and distributing institutional repositories to the users. • Yes, internship programme, acquisition, sharing, collection of materials, digitization, OPAC, Repositories. • Yes, acquisition, classifying, cataloguing, shelving, digitizing, and sharing.	• Acquisition, processing, • institutional repositories, • OPAC
BUETCL	• Yes, acquisition, processing, circulation, reference, and ICT. • Yes, the existing computer and information technology infrastructure, including the improved intranet, should be used to build the KM system.	• Acquisition, processing, circulation • ICT section, • Speedy internet

Name of the library	Statement from the interviewees	Coding
RUCL	• Yes, collecting new reading materials like books, CD, DVD (AV materials) and cataloguing standard formats MARC21 and then open for the users	connections • CD, DVD, MARC21
JUSTCL	• No	
SAUCL	• No	

Base on Table 5 show the participants' responses, three of the libraries are practicing KM in their libraries out of five. The findings of this study show that librarians in Bangladesh are still learning about KM and its implications. They have been practicing KM or aim to do so soon in their libraries. They have mostly been active in KM by applying their talents in organizing and retrieving information in various sectors such as acquisition, processing, circulation, distribution, or creating intranets, institutional repositories, etc.

Present Status of KM in the Libraries

In this part of the semi-structured interview questionnaire, interviewees were asked to present the status of KM in the libraries. Present Status of KM in the Libraries is show in Table 6.

Table 6. Present Status of KM in the Libraries

Name of the libraries	KM sections in the library	Staff of KM section	Budget allocating for KM
DUCL	No	N/A	No
BUETCL	No	N/A	No
RUCL	No	N/A	No
JUSTCL	No	N/A	No
SAUCL	No	N/A	No

The Table 6 reveals no KM sections in any of the libraries. From Table 6, it is also found that there is no budget allocation for KM in their libraries.

Knowledge Handled in the Library

In this part of the semi-structured interview questionnaire, interviewees were asked how knowledge is handled in the library/section in day-to-day duties of the semi-structured interview schedule for the head/deputy head of the library and the assistant librarian interview schedule. The result of knowledge handled in the library in day-to-day duties is show in Table 7.

Table 7. Knowledge Handled in the Library in Day-to-day Duties

Name of the libraries	Statements of the interviewees	Coding
DUCL	• We deliver services to the users in time, acquiring new resources per users' needs. • Keeping library resources up to date, Sharing and	• Providing services to the users,

Name of the libraries	Statements of the interviewees	Coding
	maintaining strong bonds among users of other libraries • Providing information to the right user at the right time, institutional repository work is updated as per needed, organization of resources and helps to improve teaching and research, knowledge valued and shared by the staff's performance and knowledge • Organizing and retrieving information, distributing to the users according to their needs	• Acquiring new resources • Library networking and RS
BUETCL	• Knowledge is handled in a different section of the library and ICT management.	• Application of ICT
RUCL	• Books are catalogued by specific software, and the circulation process is also handled softly. Future plans are to digitize library repositories. Different sections are working separately but do not have a KM section.	• Cataloging library materials, • Using library software
JUSTCL	• Knowledge is the source of all information stored in the library. So, it is impossible to continue library service without knowledge and books being catalogued.	• Cataloging library materials
SAUCL	• Organizing, retrieving and distributing information by the user's need.	User service,

Base on Table 7, the interviewees replied that they handled knowledge in the library by providing services to the users, acquiring new resources, library networking, and application of ICT, using library software, and cataloguing library materials.

Apparatuses Used to Gather EK in the Library

In this section, participants were asked which apparatuses their libraries use to gather EK. The following table indicates that book selection tools like indexes, bibliographies, etc., are almost common in all libraries to gather EK as show in Table 8.

Table 8. Apparatuses Used to Gather EK

Name of the libraries	Statements of the interviewees
DUCL	• Book Selection tools like indexes and bibliographies, and other references books suggestions, recommendations, and complaints of the active library users, proceedings and manuals, documents • Book Selection tools like indexes and bibliographies.
BUETCL	• ICT and long experiences. • Recorded and communication.
RUCL	• Specific software, online subscription, sometimes from the users directly. • Book selection tools, bibliographies, and index, demand, and recommendations from the users of the different departments or disciplines.
JUSTCL	• Encyclopedias, subjective dictionaries, newspapers, and journals.
SAUCL	• Index, bibliographies, and other reference sources.

How the Library Record TK

In this part of the semi-structured questionnaire, respondents were asked how they recorded TK. The result of interview is show in Table 8.

Table 8. Recording TK

Name of the libraries	Statements of the interviewees
DUCL	• Interview (recording), Audio recorders (CD-DVD), Documentary, KS statistics, formal and informal records, integrated applications/Audiovisual materials, filing
BUETCL	• In long experience, social interaction and capture employee's stories.
RUCL	• TK is stored by interviewing, recording and documentary.
JUSTCL	• Personal wisdom experiences are written down.
SAUCL	• Filing, Audiovisual materials, etc.

Base on Table 8 show most of them replied that they recorded TK by interview (recording), audio recorders (CD-DVD), formal and informal records, integrated applications/audiovisual materials, personal wisdom, and experiences are written down.

Application KM in University Libraries

The question is intended to find out how KM is applied to the university library of the semi-structured interview schedule for the head/deputy head of the library and the assistant librarian interview schedule. How the application km in university libraries is show in Table 9.

Table 9. How the Application KM in University Libraries

Name of the libraries	Statements of the Interviewees
DUCL	• Application of KM in university libraries should have a strategic plan including specific objectives, the role of librarians, and areas of KM, purposes of KM practices for libraries should be defined before its implementation.
	• Providing staff with training and learning opportunities to help them acquire new skills, expanding access to external information resources through library networks, and encouraging a culture of knowledge sharing.
BUETCL	• Acquisition, processing, circulation, reference, and ICT management.
	• Reference services, KS, information networking.
RUCL	• By recruiting skilled employees, taking expert advice, adequate training programs, and joining seminars.
	• By following a proper system like acquisition, circulation, and cataloguing, KMcan be applied.
JUSTCL	• Building professional teamwork by engaging users in sharing what they know and what they learn with others.
	• We can apply KM to university libraries by categorizing KM, i.e., groupware, workflow, system, content and document management, institutional portals, e-learning, planning.
SAUCL	• By improving the library infrastructure, providing personnel with training,

Name of the libraries	Statements of the Interviewees
	and learning opportunities to expand their knowledge, etc. • Improving the existing ICT facilities, access to knowledge resources through library network, improving the library infrastructure, training, and learning facilities to the staff for exploring new knowledge.

Base on Table 9, the respondents mentioned that the application of KM in university libraries should have a strategic plan, including specific objectives, the role of librarians and areas of KM, and the purposes of KM practices. Additionally, they stated that providing staff with training and learning opportunities for acquiring new information, broadening access to external knowledge resources through library networks, and encouraging a KS culture may aid in applying KM in Bangladesh's PULs. Additionally, they mentioned that providing training and learning opportunities to the employees to acquire new knowledge, extending access to external knowledge resources through library networks, and promoting knowledge sharing culture may help apply KM in the PULs in Bangladesh.

Strategy to Implement KM

The question is intended to find out what strategy will be implemented in the library for KM. Table 10 shows that developing KM strategies and model plans, developing KM tools and technologies, introducing KM policy, implementing KM culture, and introducing KM courses will be the strategy to implement KM in their libraries.

Table 10. Strategy to Implement KM

Name of the libraries	Statements of the Interviewees	Coding
DUCL	• Creating KM model plans, developing KM strategies, encouraging KS culture, and implementing more significant KM policy to make it count. • Creating KS culture, developing a strategic plan, developing a central repository, developing knowledge enabling tools and technologies, creating a knowledgeable learning environment • Implementing KM tools, providing KM training and seminar, and practicing proper knowledge sharing.	• Developing KM strategies and model plan • Developing KM tools and technologies. • Introduced KM policy
BUETCL	• Through ICT. • Using ICT and developing KS culture.	• ICT and developing KS culture
RUCL	• . First, to convince the higher authority to implement the process, arrange the system centrally. • Proper knowledge about KM, adequate training, and guidance for KM.	• Convince the higher authority to implement the process • Proper training and guidance for KM.
JUSTCL	• Define the goal and objectives, develop a change management strategy, inventing and organize	• Develop ICT and infrastructural

Name of the libraries	Statements of the Interviewees	Coding
SAUCL	knowledge assets. • The strategies are convincing the higher authority, arranging training, developing all infrastructural facilities, and coordinating with ICT experts. • The implementation of KM culture in libraries and the information environment should be needed to introduce training and seminar and KM courses are increasingly introduced in our university libraries. • Implementing KM culture and KM courses have increasingly been introduced to UG and PG programmes in our university library.	facilities • Implementation of KM culture • Introduced KM courses

KM Policy in the Library

In this section, participants were asked is there was any written KM policy in their organization. The table found that none of the libraries have written KM policies in the organization as show Table 11.

Table 11. KM Policy in the Library

Name of the libraries	Is there a written KM policy in your organization?	If not, please mention the reason behind it.
DUCL	No	• There is no KM policy in the library because there is no proper guideline about this.
BUETCL	No	
RUCL	No	• Lack of initiative and overlook this critical issue
JUSTCL	No	
SAUCL	No	

Base on Table 11, only two participants mentioned the reason behind it . These results show that KM policies and incentives systems have not received their attention.

Critical Success Factors for Practices KM

In this section, interviewees were asked about the critical success factors of KM implementation in the university libraries. This question sought to identify the critical success factors experienced by the Librarian/Deputy librarian of the respective libraries. Critical success factors for practices KM base on interview result is show in Table 12.

Table 12. Critical Success Factors for Practices KM

Name of the libraries	Critical success factors identified by the interviewees
DUCL	• A tactful strategy, recruiting skilled manpower, Continuous training program for staff and user • IT literate staff, library professionals' unwillingness to use technology, sharp and analytical mind, innovation and inquiring, creation flow and communication power • KM tools, proper KM training, practicing a proper KM
BUETCL	• Feedback from the users, especially in library services, feedback from the

Name of the libraries	Critical success factors identified by the interviewees
RUCL	library staff.
	• Organization culture and strategy, systems, and IT. Infrastructure, effective and systematic process of measure.
	• Leadership, ICT infrastructure, training program, etc.
	• Higher authority decision, budget, skill manpower.
JUSTCL	• Unawareness of users, philosophy of the chief, lack of funds, interruption of power supply.
	• Lack of training facilities.
SAUCL	• Information system infrastructure, KM tools, and proper user training are necessary for implementing KM.
	• The success factor for implementing KM is that adequate information system infrastructure is necessary; KM tools and proper user training are needed.

Base on Table 12, the interviewees replied that tactful strategy for KM implementation, recruiting skilled staffing, and the continuous training program for staff and users are the critical success factors for implementing KM. Leadership, ICT infrastructure, training program, higher authority decision, budget, lack of skilled manpower are the other critical success factors for implementing KM.

Challenges for KM Practices in the Library

In this section, interviewees were asked whether the present ICT infrastructures are adequate to provide web-based KM library services**.** The result of interview related to challenges for km practices is show in Table 13.

Table 13. Challenges for KM Practices

Name of the libraries	Statement from the interviewees	Coding
DUCL	• Inadequate KM strategies, carelessness of KM implementation, lack of budget and user awareness, lack of advanced ICT implementation.	• Inadequate KM strategies,
	• Making information easy to find, employee motivation.	• Lack of user awareness strategies
	• Inadequately trained staff, lack of expertise and understanding KM, lack of knowledge about ICT and tools.	• Lack of a budget
BUETCL	• Inadequate budget related to ICT development which plays a vital role in KM achievement in the university library.	• Lack of budget
	• Obsolete technology, employee motivation.	• Employee motivation.
RUCL	• Lack of user awareness, lack of proper knowledge about KM, authorities are reluctant to adopt the process	• Lack of user awareness
	• Lack of budget, lack of professional workforce.	• Authorities are reluctant to adopt the process
		• Lack of budget
JUSTCL	• Obsolete technology, employee motivation, making information easy to find.	• Obsolete technology,
	• Unawareness of students and staff, philosophy of the chief, lack of coordination between ICT experts and library officers.	• Employee motivation
		• Lack of awareness of students and staff

Name of the libraries	Statement from the interviewees	Coding
SAUCL	• Lack of trained staff, lack of employee motivation about KM, obsolete technology, lack of ICT knowledge and tools. • Lack of user awareness.	• Lack of skilled staff • Lack of employee's motivation about KM • Obsolete technology

Base on Table 13, there are numerous challenges that the PULs usually face in their quest to implement KM. However, all the participants agreed with the challenges of "lack of budget and user awareness," "Lack of trained staff," and "Obsolete technology," which are the challenges for KM implementation in the library. The participants also stated that KM strategies, carelessness of KM implementation, lack of proper knowledge about KM, and lack of employee motivation about KM are the other challenges to KM implementation in the library.

Discussion

The study indicates that book selection tools like indexes, bibliographies, etc., are almost common in all libraries to gather EK. Most of the respondents replied that they recorded TK by interview (recording), audio recorders (CD-DVD), formal and informal records, integrated applications/audiovisual materials, personal wisdom, and experiences are written down. KM is an indispensable practice for organizational knowledge. To study KM, it is essential to know the concept of knowledge that is the source of power for KM practices in the organization. From the interviews, it was found that librarians at the managerial levels understood KM. These findings mean Librarians/Deputy librarians and Assistant librarians in PULs in Bangladesh are familiar with the term KM. A similar study by in academic libraries revealed that most respondents clearly understand the KM concept (Marouf, 2017). In other research stated that different participants communicated their understanding of KM from their points of view, even though their core understanding was nearly the same (Nazim & Mukherjee, 2013). KM practices turn ideas into action and achieve objectives (Nonaka & Takeuchi, 1995; Sarrafzadeh et al., 2006). According to previous study knowledge generation, acquisition, organization, storage, transfer, sharing, and retention are KM activities (Branin, 2004). The digital revolution has significantly impacted library practices in collecting, organizing, storing, retrieving, and disseminating information globally over the last few decades (M. S. Islam et al., 2011; Roknuzzaman et al., 2009). This research also showed that librarians in Bangladesh are still learning about KM and its implications. Though, out of five libraries, three of them are practicing KM in their libraries, the participants' response.

Moreover, they have primarily been practicing KM or planning to implement KM practice in their libraries soon. They have used their expertise to organize and retrieve information in many sectors such as acquisition, processing, circulation, dissemination, intranet construction, and institutional repositories. Most academic librarians are familiar with KM and highly aware of KM and KM techniques. The study affirmed that no formal KM programs exist in these universities. Similarly, according to previous study university libraries in Bangladesh's Chittagong divisions do not systematically or formally harness and control their KM activities (Shathi, 2019). It is the management of EK that they have been doing for quite some time. The current research discovered that university librarians in Bangladesh are engaged in knowledge creation/capture, knowledge exchange, and knowledge application activities. These findings are congruent with a previous study which investigated KM practices in Indian university libraries (Nazim & Mukherjee, 2013). In India, they found that fewer libraries have implemented KM practices. They also stated that their procedures

extended beyond typical document management. Library professionals believe that professional education and training programs, a community of practices, information technology, and knowledge sharing are important KM tools for academic libraries (Akter & Banik, 2019; Marouf, 2017; Sirorei & Fombad, 2019). According to previous study for an academic institution to succeed, it must effectively manage its knowledge resources to improve teaching and learning, staff retention, the development of new programs, products, cost efficiency, providing flexible learning platforms, and meeting students' needs whenever necessary (Wang & Liu, 2009). The representatives from the libraries mentioned that OPAC searches, searching libraries full-text databases, through ICT, information is retrieved. Manual and verbal communication, using manual registrar and some cases using software or computer and document supply via network information is obtained. Also, information was retrieved from the e-resources center (Liebowitz & Paliszkiewicz, 2019; Nazim & Mukherjee, 2013).

A KM policy and supporting KM infrastructure and enablers to handle KM practices affect successful implementation. Written policies serve as binding contracts between individuals, the organization, and the stakeholders (Asante & Ngulube, 2020; Murumba et al., 2020). Written policies aid in establishing standards and can also motivate employees to produce, share and retain information. This research revealed that none of the libraries had written KM policies. Two interviewees mentioned no KM policy in the library because there is no proper guideline and overlook this critical issue. The research findings also revealed no KM sections in any of the selected PULs in Bangladesh. From the interviewee's responses, it is also found that there is no budget allocation for KM in their libraries. The librarians have planned to implement KM at their university library soon. The present research showed that developing KM strategies and model plans, developing KM tools and technologies, introducing KM policy, implementing KM culture, and introducing KM courses will be the strategy to implement KM in their libraries. The present research found that tactful strategy for KM implementation, recruiting skilled manpower, a continuous training program for staff and user, leadership, KS, ICT infrastructure, training program, higher authority decision, budget, and lack of skilled manpower are the critical success factors of KM implementation in the PULs in Bangladesh. Various investigations have also backed up this point of view. In previous work that highlighted nine critical success factors that are highly important for fostering KM in libraries, including staff, KM administration structure, KM strategy, IT, organizational culture, etc (Siddike & Islam, 2011). Other previous study identified nine critical success factors for KM implementation in the library (Sarawanawong et al., 2009). Other study discovered that leadership and management support boosted the success of KM activities in an organization in a survey of KM practice among academic employees at the University of Botswana (Jain, 2014).

User demands are changing significantly in the digital environment. So, service innovation is vital to libraries as well. Most of the academic institutions across the country are wrestling to get the most of their information system. However, all the participants agreed with the challenges of lack of budget, user and staff awareness, lack of trained staff, obsolete technology, which are the challenges for KM implementation in the library. Similarly previous study found that a lack of awareness of KM is the major challenge in the libraries in the Chittagong division in Bangladesh (Shathi, 2019). After a more extended period of working together, a group of people who have grown to trust each other is more likely to collaborate well and openly share their knowledge. Another obstacle for KM practices in PULs, according to this research, is a lack of KS culture. Similarly, previous study revealed various challenges for library professionals in implementing KM in university libraries such as limited expertise and lack of clear guidelines, inadequate staff training, etc (Kakhki et al., 2021; Mostofa & Islam, 2015). Furthermore, in other study recognized low internet

connection speed and frequent electrical fluctuations as two of the most common challenges with digital library development in Bangladesh (Shuva, 2013). In addition lack of awareness is another barrier to implementing KM (Chen et al., 2014; M. A. Islam et al., 2014).

The practical implication of this study is the contribution of KM to improve library services. The library's efficacy and efficiency will improve due to KM practices. The important success elements listed can be used as a checklist for organizations to address while implementing KM. This will ensure that the most important challenges and elements are addressed during the design and implementation phases. On the practical level, the higher authority may look for those staff members who know KM when selecting new workers. Higher management can also arrange training programs for the staff and users of the library that have negative attitudes toward KM and KS to help them overcome their adverse approaches. This research will give several strategic options and a model for the future success of various LIS sectors within Bangladesh and other developing countries to identify the barriers and prospects presented by the start of KM in their libraries. This research has a few limitations, like other research. To begin, the study assessed only the selected PULs in Bangladesh. Ideally, it should have been conducted in all PULs in Bangladesh and their affiliated colleges. Other types of higher educational institutions like private universities in Bangladesh were excluded in this research. The population was limited to librarians/deputy librarians and students of five public university libraries in Bangladesh. This research did not include other staff of the libraries (i.e., financial, technical staff of the library). Top management of the university administration was also not included here. Therefore, the findings cannot generalize the same situations if the study is to be carried out at other academic university libraries in Bangladesh.

In the future, research work will be focused on exploring how KM influences service innovation in libraries. Furthermore, how KM can contribute service changes in the library and how the overall performance of the library can be improved. The study was concentrated on only five out of 46 public universities in Bangladesh. Future research should be conducted in the remaining 41 public universities to learn about the KM strategies, practices, and challenges these libraries face. Hence further studies can be done in other educational sectors like secondary, higher secondary, and private universities in Bangladesh. Finally, it is believed that this study has contributed theoretically and empirically to the body of KM, particularly in the field of university libraries. This study, however, looks forward for more investigations by researchers to study KM in Bangladesh from different dimensions by using various research methodologies and tools. This attempt will widen the research area and give a better glimpse of the use of KM and its actual results in university libraries in Bangladesh.

4. CONCLUSION

Libraries will benefit greatly from a good KM approach, especially in developing nations where resources are limited. By integrating knowledge systems and resources, university libraries are positioning themselves as the torchbearers and path makers of educational growth. As a repository of information and a communication hub for universities, university libraries could demonstrate their worth by leading university KM initiatives. KM practices have resulted in effective services. Every organization that wants to flourish in KM must carefully analyze and select the appropriate strategic approach. The library, therefore, should reform its management pattern to KM-based objectives. This research has revealed no doubt about the important role of the KM practices and implementation for the betterment of library services. However, many KM issues must be carefully examined before effectively implementing KM in the PULs. The simple way for successful KM implementation may be summarized as KM policy, clear organizational strategy, the appropriate knowledge of KM,

essential components, and obstacles. The survey conducted at the PULs revealed that the organization needs logistics support from the authorities. Librarians improve employees' knowledge creation capacity by applying KM in the libraries. University libraries can play a key role in national development.

5.   REFERENCES

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