Knowledge Management Initiative: A Case Study of the National Library of Bangladesh

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ABSTRACT

This paper confers about the implementation of Knowledge Management (KM) in the National Library of Bangladesh (NLB). The main aim of this study was to investigate how the NLB goes about creating, implementing, disseminating, and applying knowledge within the organization. The other objectives of this paper were to identify the current status of KM in NLB and the understanding of different facets of KM by the staff of the National Library. The paper revealed that the situation of KM in NLB is not satisfactory. The paper also described the fact that the working environment supports the implementation but there needs to be some changes in the policies. Finally the research disclosed that NLB is a great place for implementing KM and has a large amount of possibilities for the adoption of KM. This qualitative research used the questionnaire as the main instrument for data collection. Finally, data has been processed and analyzed using SPSS and MS Excel.

Keywords: Knowledge Management (KM), National Library of Bangladesh (NLB), Bangladesh

1. INTRODUCTION

KM (Knowledge Management) is the process of capturing, creating, developing, storing, sharing, and effectively using organizational knowledge. It refers to the practices used by organizations to achieve the goals of that organization. Nowadays the library and information institution has become the learning organization in which users can discover the way to capture and share tacit and explicit knowledge (Husain & Nazim, 2013). The NLB was established in 1972. A national library is an organization to develop and maintain a comprehensive national collection, to ensure easy access of citizens to that collection, and to help to collect and preserve intellectual property. This study also presents a theoretical framework for advanced research to examine the problems and prospects of implementing KM in the NLB.

This is the age of information technology. No one can compete without proper utilization of knowledge. KM enhances the innovation and creation of better ideas. These innovative ideas will help to build a sound organizational behavior among staff. It is not a new concept, as since 1991 it is an established discipline. The journey of KM was not a bed of roses. In 1999 the term "Personal KM" was introduced, which refers to the management of knowledge at the individual level. KM lets employees get acquainted with productivity. KM will help to gain opportunities for the betterment of people as well as organizations, but only when they are substantive and have definite aim. KM is useful in every sector of an organization. The major advantage of KM is that information is easily shared between the employees and members of that organization. Knowledge is power, but has little value unless it can be easily accessed and put into practice (Gallant, 2015). Every success needs proper management and a systematic way to go ahead. KM gradually leads to development if people have a tendency to maintain the process. As Wenger (2004) notes, "KM will never work until corporations realize it's not about how you capture knowledge but how you create and leverage it."

According to Drucker (1959), a knowledge worker "works primarily with information or develops and uses knowledge in the workplace." Everybody can use knowledge in their workplace or whenever necessary only by following some criteria. After maintaining those criteria or techniques of using knowledge people will find the magic. Since the ancient period mankind is trying to make a better place for themselves and their future generation. All of them need proper utilization of knowledge and to make all of the things as resources. We have potentiality and it is very important. We cannot overlook the importance of KM in our daily life. From the beginning to the end of a cycle that requires the purpose of gaining some gorgeous aim, KM is a crucial. It is very important to understand what KM actually is, and what is knowledge, data, and information. Data is the raw material and information requires structured data.

1.1. Problem Statement

KM in libraries should be focused on effectual knowledge and precious research and its improvement, knowledge base edifice, knowledge sharing among library staffs, staff training, and hastening explicit processing of the implicit knowledge and recognizing of its sharing (Shanhong, 2000). However, this study deals with the problem of how to exploit knowledge as a competitive benefit and how to become a knowledge based organization. A knowledge based organization is one that harnesses human capital to enable the institution to achieve a competitive advantage to attain strategic objectives. The National Library like any other organizations in Bangladesh right now has Internet connections, intranet, and even has its own web portal, but are these facilities being fully utilized to facilitate the process of managing knowledge in the organization? Evaluating the working environment of the organization will help us identify these problems.

2. OBJECTIVES OF THE STUDY

The prime aim of this study is to investigate how the NLB goes about creating, implementing, disseminating, and applying knowledge within the organization. The specific objectives are to:

1. Reveal the level of understanding of KM among the staff of NLB
2. Identify that the working atmosphere supports the execution of KM in the library
3. Disclose that knowledge sharing practices occur among the staff
4. Discover the challenges associated with KM practices

5. Provide some recommendations for better implementing KM at NLB

2.1. Brief History and Future Plan of NLB

After the partition of the subcontinent in 1947 the Government of Pakistan established the National Library of Pakistan in Karachi in 1962, and a provincial book deposit branch of the Pakistan National Library was established in Dhaka in 1967. In fact, the book deposit branch is the embryo of the NLB, which came into being after the independence of the country in 1971. After the Liberation War of Bangladesh it was keenly felt by all quarters that a National Library is indispensable for the newborn nation. Considering the necessity and importance, the Government of the People's Republic of Bangladesh resolved to set up the NLB in Dhaka. The library started functioning with the manpower and resource materials inherited from the Provincial Book Deposit Branch in Dhaka. Later on, in 1972 the two national wings, namely the National Archives of Bangladesh and NLB started functioning in the name of the Directorate of Archives and Libraries under the Sports and Culture Division, Ministry of Education (NLB, 2016). The NLB received a large collection from various government organizations, and foreign sources like UNESCO, the World Bank, and ILO. The national library has a great collection of books and its amount is like 400,000. There are rare books and manuscripts and about 100,000 copies of journal articles. It has also a huge collection of books, journals, and manuscripts as donated items. The *National Encyclopedia of Bangladesh (Banglapedia)* has shown that the national library of Bangladesh has a good collection of Urdu, Arabic, and Persian books as well as manuscripts and a large number of old maps of Bangladesh and of the Indian subcontinent. There is a seven story air-conditioned stack block and this building is very unique in its design. When visiting the library it is found to be very well equipped with modern facilities. The staff of NLB are very careful to handle all of the resources.

NLB is the biggest platform of the library sector in Bangladesh. NLB has different kinds of users who visit the library almost every day. After this study the higher authority of NLB will understand the necessity of implementing KM properly because they know and believe that KM is helpful and also the working atmosphere of NLB may support the execution of KM. So, they will take initiative to make readers understand the current status and future plan for the library environment regarding the KM in Bangladesh. During the completion of this study the officers of NLB shared some of their future plan, like they are interested in doing analysis on the previous condition of the library and current conditions after implementing KM properly. They believe that KM will definitely change the environment of the library and also bring users to explore more fruitful ways to implement it in their personal life too. As the leader of the library in Bangladesh, NLB wants collaboration with the other information institutions of the country and to spread the message of KM to the whole country. NLB also wants to increase the acceptance of the library to the user more positively through the process of KM.

2.2. History of KM

Dr. Karl Wiig has a very important role in the journey of KM. One of the first books dedicated to KM was written by him, *KM Foundations*. A number of management theorists have contributed to the evolution of KM, among them such notables as Peter Drucker, Paul Strassmann, and Peter Senge in the United States. Drucker and Strassmann have stressed the growing importance of information and explicit knowledge as organizational resources. Senge has focused on the "learning organization" as "a cultural dimension of managing knowledge" (Thomas, 1995).

Nonaka and Takeuchi (1995) studied how knowledge is produced, used, and diffused within organizations and how this contributes to the diffusion of innovation. In parallel, there were many key developments in information technologies devoted to knowledge-based systems: expert systems that aimed at capturing experts on a diskette; intelligent tutoring systems aimed at capturing teachers on a diskette; and artificial intelligence approaches that gave rise to knowledge engineering, someone tasked with acquiring knowledge from subject matter experts, conceptually modeling this content, and then translating it into machine-executable code (Briggs, 1989).

3. LITERATURE REVIEW

A literature review is nothing but an evaluation and integration of the previous research. But it is not a
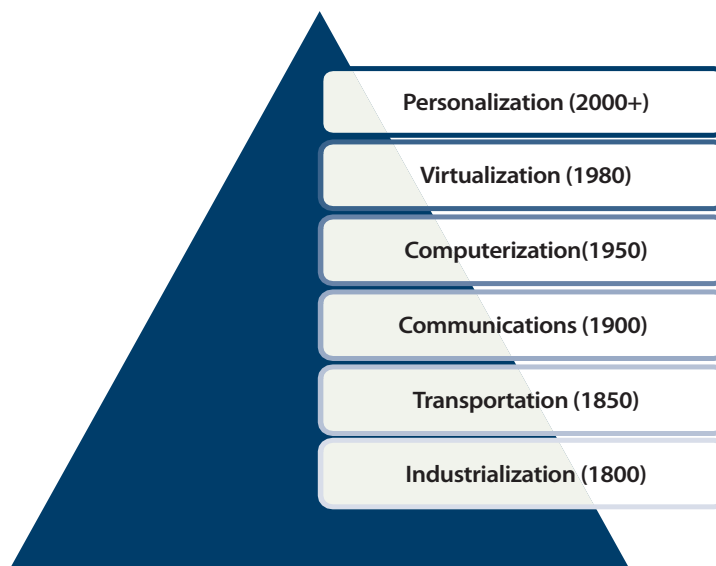
Fig. 1 Development phase in KM history (Source: Sultana, 2017)

complete research or collection of some data, quotes, or information. Before conducting this research, there is a need to find out what has already been done in the KM sector. And after that, there is a need to study thoroughly those papers.

According to Davenport and Prusak (1998), most knowledge management projects have one of three aims: (1) to make knowledge visible and show the role of knowledge in an organization, mainly through maps, yellow pages, and hypertext tools; (2) to develop a knowledge-intensive culture by encouraging and aggregating behaviors such as knowledge sharing (as opposed to hoarding) and proactively seeking and offering knowledge; and (3) to build a knowledge infrastructure—not only a technical system, but a web of connections among people given space, time, tools, and encouragement to interact and collaborate.

Che Rusuli (2012) in their paper clearly stated that the environment in which academic libraries operate is changing. While facing challenges and opportunities academic libraries need to come up with a response in order to better serve the needs of the academic community. One way to do this is by engaging in practices of

knowledge management; this is, create, capture, share, and use knowledge to achieve the goals of the library.

Tseng and Fan (2011) carried out a study on "Exploring the influence of organizational ethical climate on KM" by following some arguments about the association between KM and organizational culture, and then further adopting the perspective of organizational ethical climates to explore its influence on knowledge practices.

Islam, Siddike, and Naznin (2015) in their paper identified that information professionals' perceptions of KM concepts were narrow and focused primarily on management of explicit knowledge. They also mentioned that, like business or profit making organizations, KM is also applicable to LIS in Bangladesh but in practice.

Kwan and Balasubramanian (2003) in their paper described the development and implementation of a KM strategy called process-oriented KM in a real-life global company. They also mentioned that most knowledge repositories store documents organized by subject areas. In process-oriented KM, each KM project is developed around an organizational process and the mission, rationale, and objectives of the process define the scope of

the project. This process orientation is justified by the fact that process knowledge is believed to be the source of the core competences of an organization.

Mostofa and Islam (2015) carried out research to find out the "Challenges and opportunities of KM in the university library: A case study of Dhaka University library in Bangladesh." The purpose of their study was to find out the challenges and opportunities associated with KM practices in Dhaka University Library (DUL). The findings indicate that limited expertise and lack of clear guidelines are the major challenges for the implementation of KM in DUL.

Sivankalai and Thulasi (2012) made findings on TQM (Total Quality Management) in academic libraries with a view of examining the exposure of library professionals. Besides, the study aimed to highlight the problems encountered by professionals and suggests some measures for its improvements. The authors investigate the professionals through a survey based on structure questionnaire. Various statistical methods have been used for data analysis. The study confirmed that professionals are aware of attending the various types of conferences, seminars, workshops, and programs, and colleges should conduct some library events and programs.

Hamid and Nayan (2005) declared that the changing role of librarians as knowledge managers emphasizes the need to constantly update or acquire new skills and knowledge to remain relevant to today's library environment. Libraries may need to restructure their functions, and expand their role and responsibilities to effectively contribute and meet the needs of a large and diverse group of community and users. They also discussed a preliminary study of KM in the National Library of Malaysia.

Ugwu and Ezema (2010) carried out research on "Competencies for successful KM applications in Nigerian academic libraries" and reveal that all the KM leadership skills identified are found to be essential. The most essential KM leadership requirement is trustworthy skills. Other essential leadership skills for KM are participative decision making skills, collaborative skills, change management skills, innovative skills, and communicative skills. This is not surprising because the literature reveals that the success of KM in an organization depends on the extent of top management support for the organization's leadership qualities.

In this study the literature review helped us to find the depth of KM and its implementation. It took a long time to discover various related paper on KM. Some obstacles were arising when doing this review, for example, generating an exact summary of a research work. It is not so easy a task to find the inner gist of the work that is done by other scholars regarding this field. The area of Knowledge Management is vast. There were many previous research efforts relating to it. Some research was about the introduction of KM to libraries and some was about business sectors. Also, some research was held on challenges and opportunities of KM in the academic library; some on exploring its influence in organizational aspects; some about discovering the strategies and role of KM; and also about competencies for successful KM applications, and so on. This current paper attempts to describe the adoption and implementation of KM.

4. METHODOLOGY

As a sample of the present study the employees of NLB were selected. There are 98 staff members in the national library and archives (12 first class officers, 1 second class, 50 third class, and 35 fourth class). The deputy director of the library, bibliographer, programmer, microfilm officer, and research officers were selected as the sample for the study because of their role and authoritative power for the building of the library. For the data collection case study method was used. A case study is a systematic way of gathering information from a sample for the purpose of constructing an analysis. It is about a person, group, or situation that has been studied over time. This case study was about the implementation and behavior of the employees towards KM. This study describes the overall attitude of employees regarding the concept of KM and of course its implementation. Data analysis has largely been conducted on responses to the questionnaire that was distributed at the NLB. The questionnaire was made up of close-ended questions with responses ranging from YES/NO and option based questions in which the respondents were required to choose the options. Data were analyzed using the Statistical Package for Social Science (SPSS). Descriptive and inferential statistics such as tables and percentages were used in the data analysis.

5. DATA ANALYSIS OF THE STUDY

The following are the findings from the questionnaire survey.

Figure 2 indicates that among 11 officials of the NLB, 10 (91%) were male and only 1 (9%) was female. Here we can see that there is discrimination between male and female employees.

Table 2 indicates that the largest group of respondents, i.e. 6 (54.5%) are comprised of the ages between 36-41 years in the NLB. And two other age groups consist of equal percentages, i.e. 18.2%. Only one respondent, i.e. 9.1% belongs from the age group in between 30-35.

In this question the respondents were asked to rate their levels of familiarity of KM with a five point Likert scale measuring from 'very low' to 'very high.' From a total of 11 officials of the NLB the maximum number of officials, i.e. 7 (63.6%) are seen to have rated themselves as "highly familiar with KM." The rest, 4 (36.4%) have rated themselves as "moderate with KM."
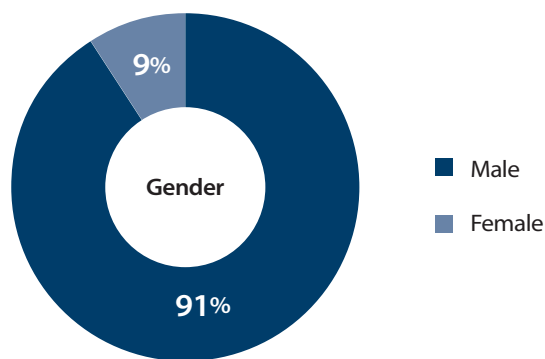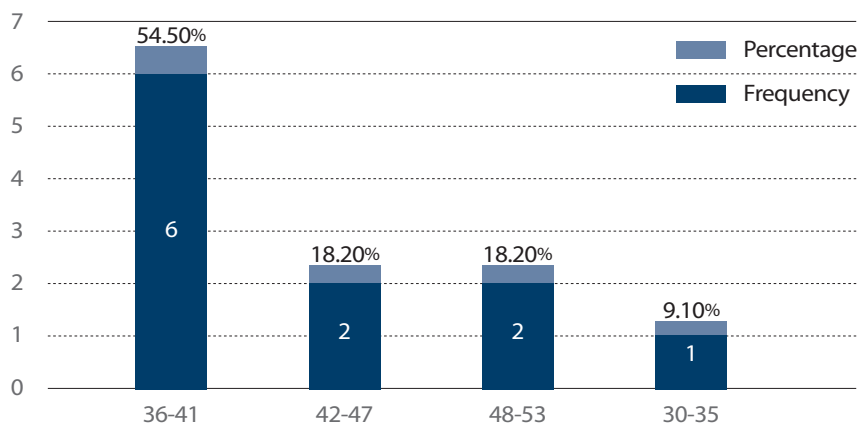
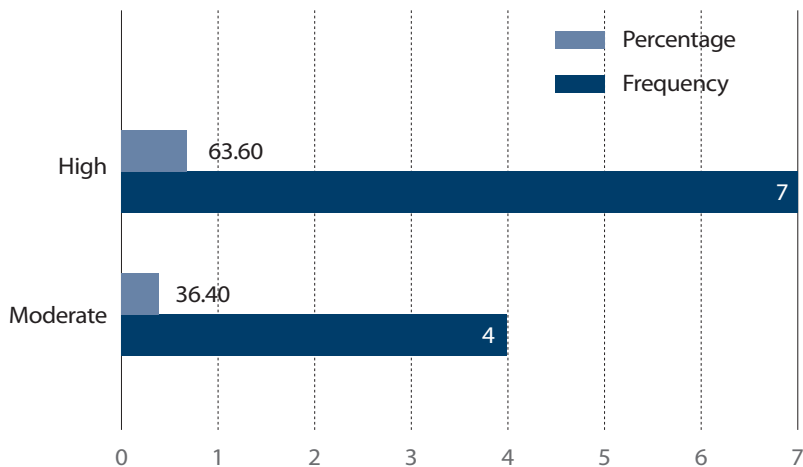**Fig. 2** Representing gender

Fig. 3 Representing age group of respondents

Fig. 4 Showing the level of familiarity with KM

Table 1. Level of Thought

Level of thought	Frequency	Percentage
Something that can change or improve organizational atmosphere	6	54.5%
All about information management	3	27.3%
It is specially based on the business field	2	18.2%
Total	**11**	**100.0%**

The respondents were asked regarding their thinking about KM. A great number of respondents, i.e. 6 (54.5%) from the NLB answered that KM can change or improve organizational atmosphere. And the other part of the respondents, i.e. 3 (27.3%) replied that KM is all about information management. The lowest amount of frequency, i.e. 2 (18.2%) of respondents think that KM is based on the business field.

In this part of the questionnaire the respondents were asked whether they have any idea about explicit and tacit knowledge, or not. The table shows that all of the participants, i.e. 11 (100%) have an idea on explicit and tacit knowledge.

As there is no section for dealing with KM in the NLB, Table 3 identifies that the present scenario of KM in NLB is not good, i.e. 36.4%; whereas the same number of participants, i.e; 36.4% said that the present scenario of KM in NLB is good. The rest, 27.2%, said that the NLB is practicing KM nicely.

Table 4 showed that 45.4% of the participants identified that the strategy for implementing KM in the NLB needs to follow the KM process. 27.3% of the officials identified that strategies for implementing KM in NLB also require letting employees build co-ordination by managing knowledge. The rest of the officials, i.e. 27.3% answered that making an atmosphere to share tacit

Table 2. Knowledge about Explicit and Tacit Knowledge

Having Knowledge	Frequency	Percentage
Yes	11	100%
No	0	0%
Total	**11**	**100%**

Table 3. Present Scenario of KM in NLB

Present scenario	Frequency	Percentage
Not good	4	36.4%
Good	4	36.4%
Well-practiced	3	27.2%
Total	**11**	**100%**

Table 4. Strategy for Implementing KM

Strategy	Frequency	Percentage
Following the KM process	5	45.4%
Letting employees build co-ordination by managing knowledge	3	27.3%
Making atmosphere to share tacit knowledge among employees	3	27.3%
Total	**11**	**100%**

Table 5. Status of Sharing Knowledge With Colleague

Options	Frequency	Percentage
Yes	5	45.5%
Sometimes	5	45.5%
No	1	9.0%
Total	**11**	**100%**

knowledge among employee is another strategy for implementing KM.

Table 5 indicates that about 45.5% of officers of the NLB share their knowledge with colleagues. More than 45% of officers share their knowledge sometimes. Only 9.0% of them responded negatively.

In another part of the questionnaire that is indicated by table 6, the participants were asked to point out the barriers regarding this field. Among the participants, 45.4% of the officers pointed out the option of unwillingness to discover the challenges associated with KM as a barrier to KM. About 4 (36.4%) officers pointed out that lack of awareness is also a barrier to KM. Feeling shy in nature to share knowledge with others among employees was another barrier in KM, and its frequency was 2 (18.2%).

6. MAJOR FINDINGS OF THE STUDY

The prime aim of this study was to investigate how the NLB goes about creating, implementing, disseminating, and applying knowledge within the organization, and also to reveal the level of understanding of KM among the staff of the NLB. The research aimed at identifying the working atmosphere to support the execution of KM. For examining in order to find out systems used in the NLB to capture the knowledge created, some measures were used in this study:

1. A maximum number of respondents from the NLB stated that their level of familiarity with KM is high and 36.4% were seen to identify that it is at a moderate level.

2. It is seen that the majority of the participants have said that KM is something that can change or improve organizational atmosphere, whereas 27.3% of them think KM is all about information management. The rest of the respondents have the idea that KM is basically in the business field.

3. A majority of the officers of the NLB have an idea about explicit and tacit knowledge.

4. The officials think that KM will meet the needs of an organization to gain its objectives and they replied positively, and its number was 100%.

5. The study revealed that their organization supports the process of KM.

6. It is seen that a maximum number of the employees have stated that KM can play a significant role to achieve the best output of their organization such as increasing employee development, improving delivery, and better decision making, respectively.

7. A majority of the respondents replied that policies and procedures regarding KM are important and relevant in their organization.

8. The study found that only explicit knowledge is gathered and tacit knowledge is difficult to preserve.

9. The research paper revealed that the NLB has no different section/division dealing with KM.

10. A maximum number of employees of the NLB have found KM interesting in practice.

11. A majority of the respondents have replied that the present scenario of KM in NLB is not good; at the same time, the same ratio of the participants said that the present scenario of KM in NLB is

Table 6. Barriers in KM

Barriers	Frequency	Percentage
Unwillingness to discover the challenges associated with KM	5	45.4%
Lack of awareness	4	36.4%
Feeling shy in nature to share knowledge	2	18.2%
Total	**11**	**100%**

good. A maximum number of officers of the NLB believe that effective knowledge utilization will bring great benefit to their organization.

12. A majority of the officers stated that they share knowledge with others and a few of them replied negatively. The rest of them said that sometimes they share knowledge with colleagues.

13. Finally, the majority of the respondents have told us that unwillingness to discover the challenges associated with KM is the main barrier to implementing KM. A few of them identified that lack of awareness and feeling shy in nature are the others barriers to sharing knowledge.

7. PROBLEMS

Research is such a thing that finds out the problems of a specific factor or field or things. During the time of doing this work, some problems were found, although the NLB is a well-established institution and the employees are skilled. At the present time KM is a very important subject that should be used in the library. But it is a matter of sorrow that there is no division/section regarding KM in the NLB. The employees have knowledge about KM but the process of implementation is very poor. Lack of awareness, unwillingness, and inadequate training are the problems here in the NLB.

8. RECOMMENDATIONS

The NLB is one of the most important institutions for creating a better generation. Books are the real things that can give a person immense knowledge. A knowledgeable person is an asset for the nation. The library can follow the process of KM, and it would be a great help to them to provide better services to the user. This research work provides the following recommendations for better adoption and implementation of KM in the NLB.

A. **Creating awareness:** The very first point is to create awareness among employees about the effectiveness regarding KM. KM is essential for any kind of organization, especially for libraries. The process of KM can make the library a better service center for providing service to the user.

Having good awareness will let the employees know about the KM process and they can realize the usefulness of KM.

B. **Sharing knowledge with colleagues**: The culture of sharing knowledge with colleagues will increase the process of KM more effectively. Tacit knowledge is a hidden treasure. When the employees start to share their knowledge with others the atmosphere of the institution definitely changes and become a better one.

C. **Division/section dealing with KM**: In a library or any other institution there are different divisions or sections dealing with specific work. It is very important because different types of work related to the institution need to be done separately. A library has acquisition, processing, circulation, reference, and so many other sections according to the management and other activities regarding it. But in the NLB there is no section dealing with KM. As KM is very necessary for the library and it has some process to be maintained by the employees of the library it will be helpful to create a division or section for doing the work and making the KM process more effective.

D. **Recording knowledge**: This sounds a little unusual, but there is no such a thing that remains unusual. Once people start to practice something day by day they will definitely become getting used to it. A human being is precious and valuable knowledge remains in their mind. Whenever someone says something useful and delivers a lecture or some small talk related to the library it need to be recorded by the person who will be responsible for the KM section. For example, sometimes scholarly people do a visit in the NLB, and/or a seminar or conference can be held there, and then the unpublished knowledge that they do share in the library can be recorded.

E. **Making a friendly atmosphere**: For the purpose of management of a company or institution it is not always possible to be friendly to the employee. KM allows people to share their knowledge. So the library authority should make a friendly atmosphere inside the library so that the employee will not feel hesitation to share innovative ideas or knowledge that comes to his or her mind.

F. **Discovering challenges**: There are some challeng-

es in the field of KM. Every step needs to be very clear and careful. The employees of the NLB need be more knowledgeable and should discover the challenges relating to KM. After finding out the challenges they should find the possible solutions together and make KM successful to gain the objectives of the library.

G. **Various training programs**: As KM is a multidisciplinary field and employees are not very educated about KM, the library can arrange some training programs. KM adoption and implementation is not so easy a task for establishment. Primarily, training can provide help to the employees.

H. **Networking**: Networking is a vast thing. Here networking refers to the employees using the Internet, making the website lucrative, updating it at a regular basis, posting important notices, building better co-ordination among the employees, and so on.

9. CONCLUSION

KM practice is the best way to transfer and share knowledge and it can be done easily by library professionals if they will give a positive attitude to this field. The findings of this study can be applied in the NLB among their employees and will make something better for the environment of the NLB. We hope that the findings will help not only the NLB, but also provide some new facts toward the other libraries in Bangladesh. Every study shows a way for further research. This research will also contribute in KM related research. KM is a broad concept that is frequently developing and its process is ongoing. Therefore adoption and implementation of KM into the NLB or other libraries will be a great improvement. Proper training programs and a positive attitude regarding KM will make the library or other educational as well as business organizations a better one. KM is already applied in the business field. They follow the process of KM and are doing great. The library is another most important organization that helps the nation to build up a better generation. So, KM is a must followed process here. The NLB is a place where most of the employees have knowledge about KM. But there is no different section regarding KM. The employees can feel the necessity of KM and they have

realized that following the processes of KM will help the institution to gain its objectives. This study also suggests some future research regarding the implementation of KM in NLB; like, the use of KM tools among the user as well as the employees of the NLB, introducing social networking sites to the user for implementing KM, and development of information systems in the NLB for the implementation of KM.

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