Present scenario of knowledge management effectuation in the national library of Bangladesh: A study

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Abstract. The primary goal of this paper includes finding out systems used in the National Library of Bangladesh (NLB) to confine the created knowledge and investigate the library officers' views of knowledge management (KM). A survey method has been used for this present study. The staff of NLB was purposively chosen for this study. For data collection, a questionnaire was sent to the 12 officers of NLB. The study revealed that NLB record their tacit knowledge by keeping in mind, and 36.4% recorded their knowledge by taking notes. A maximum number of respondents replied that KM is essential and relevant in NLB but needs to update regularly in the library. The study identified that KM might bring benefits for the organization, and the response rate regarding this was 100%. This research is restricted in its span, and data was collected from only twelve library officers of NLB by applying a questionnaire survey. The paper proposes that library users and staff of NLB need to broaden their understanding and modify their usual mindset and concern about the holistic approach of KM system design by giving attention to various types of knowledge, i.e., explicit and tacit knowledge. This research explored the unique views of library officers on the topic of KM in libraries.

Keywords: Knowledge, knowledge management, national library of Bangladesh, Bangladesh.

1. Introduction

Knowledge management (KM) is the discipline of enabling individuals, teams, and entire organizations to collectively and systematically create, share and apply knowledge to better achieve their objectives [1]. KM is also a mutual and integrated approach to creating, capturing, organizing, access, and using an enterprise's intellectual assets [2]. NLB was established in 1972. Since then, this organization is devoted to maintain, manage and develop a comprehensive national collection. NLB ensures easy access of citizens to that collection and helps to collect and preserve the intellectual property.

This study presents a theoretical framework for advanced research to examine the problems and prospects of implementing KM in NLB [3]. KM is an appropriate discipline for enabling a smooth combination of innovative necessitates from the present economic, social, and technological context into higher education. Libraries at all times facilitated information exchange, so they are sound placed to take on the KM functions. Libraries have a most important responsibility to play [4].

1.1. Definition of knowledge management (KM)

There is no universally accepted KM definition, but experts proffered numerous definitions [5]. KM is the conversion of tacit knowledge into explicit and sharing it within the organization. Technically and accurately, organizations can be benefited from the value originated from their intellectuals and knowledge-based assets through proper implementation of knowledge management. Define in this manner; it becomes apparent that KM is concerned with identifying, acquiring, distributing, and maintaining knowledge essential to the organization. KM refers to the critical issues of organizational adaptation, survival, and competence

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against discontinuous environmental change. Essentially, it embodies organizational processes that seek a synergistic combination of data and information processing capacity of information technologies and human beings' creative and innovative capacity [6].

1.2. Types of KM

Two types of knowledge are usually defined in KM, and they are explicit and tacit. Explicit knowledge is codified knowledge, such as those found in printed documents. On the other hand, tactic knowledge is non-codified and mostly gained from personal experience. KM and organizational learning theory almost always take root in the interaction and relationship between these two types of knowledge. This concept has been introduced and developed by Nonaka [7] in the '90s and remains a theoretical cornerstone of this discipline. Botha [8] said that tacit and explicit knowledge should not be considered as a definitive point. Therefore, all knowledge is a mixture of tacit and explicit elements rather than one or the other in practice. However, to understand knowledge, it is essential to define these theoretical opposites [9].

1.3. Explicit knowledge

Explicit knowledge is the final output of the knowledge process. We can see its practical existence. The printed document is like a book, newspaper, journal article, and many things that store explicit knowledge. It is formalized and codified and is sometimes referred to as know-what [10]. This type of knowledge is thus simple to ascertain, store, and retrieve [11]. It is found in databases, memos, notes, and documents [8].

1.4. Tacit knowledge

Tacit means unexposed, hidden, or intangible, so tacit knowledge is stored in the human brain but not yet published. Basically, in [12] defined tacit knowledge. It is occasionally referred to as know-how [10] and confers to intuitional and difficult to intended, which is exceedingly based on competency. That is why tactic knowledge is personal and context-dependent most of the time. Nonaka [7] stated that it is difficult to share and profoundly dense in the act, promising, and engaged. The human brain is a magic box. Many cells in the human brain remain inactive, but this magic box may sometimes have revealed, and we see the power of discovery. Here, one thing needs to be pointed out: all sorts of knowledge was tacit. After exposing tacit and codifying it, this kind of knowledge is now powerful explicit knowledge.

1.5. Implicit knowledge

Implicit knowledge is that people cannot describe it exactly but can do it and know how to do it. This type of knowledge is something that people acquired naturally. For example, closing eyes, laughing, and breathing. Implicit knowledge can then be defined simply as the knowledge that is not explicit [13]. On this construal, implicit knowledge corresponds roughly to Polanyi [12] called 'tacit knowledge': 'we know more than we can tell.'

1.6. Aims and objectives of the study

This paper aims to determine the systems used in NLB to confine the created knowledge and investigate the library officer's views of KM. The other objectives are to:

1. recognize the way of recording tacit knowledge in NLB.
2. Determine the opinion regarding the policies and procedures of KM in NLB.
3. Determine the problems that are connected with KM practice.
4. Categorize the way of serving knowledge and the KM tools used in NLB
5. benefits of KM at NLB.

2. Literature review

Rao [4], in his papers, stated that KM is a business perception which endeavor is to enhance and improve operations to expand profits and competitive advantages. He also described that the apparatus and skills of KM moreover be implemented to non-profit organizations such as libraries to develop their services to meet up the changing requirements of the readers and users.

Mostofa and Islam [14] carried out research to uncover the challenges and opportunities of KM in an academic library in Bangladesh. They identified that perpetual expertise and lack of translucent guidelines are the most significant challenges for implementing KM in DUL.

Sivankalai and Thulasi [15] revealed TQM in academic libraries to examine the disclosure of library professionals. Besides, it aims to highlight the professionals' problems and recommend some measures for its improvements. They distributed a list of questionnaires among library employees and investigated the situation based on their feedback. Their research also confirmed that professionals are conscious of attending conferences, seminars, workshops, and programs, and colleges should conduct some library events and programs.

Roknuzzaman and Umemoto [16] found that accepting KM conceptions and the library practitioners diverge, and most of them have focused on a simple idea of KM for its integration into library implementation. They also revealed several grounds for replying to KM, especially the rapidly increasing importance of the knowledge economy, the advantage of using information technology, and available opportunities for progressed library practices.

Suraya and Jamaliah [17] demonstrated that the role of librarians had been changed a lot over time. Currently, they are actively playing the role of knowledge manager; it is necessary for them to constantly update their knowledge and gather new skills to remain up to date for the present library environment. Besides, libraries should also reorganize their functions and extend their roles and responsibilities to make some valuable contribution to a large and diverse community. An overall discussion on KM practice in the National Library of Malaysia is also provided in this paper.

Carrol et al. [18] revealed that five sets of methods and tools had been found to work correctly basis on the competence of institutions that have implemented effectual KM initiatives. They stated five sets, which are - (a) communities of practice, (b) knowledge repositories, (c) expertise directories, (d) peer assistance, and (e) best practice replication.

In their paper, Kwan, and Balasubramanian [19], in their paper, described the development and implementation of a specific KM strategy, which is widely known as Process-oriented Knowledge Management. Their research also assumes that documents are usually stored in various repositories based on their subject area. In this strategy, each of the KM projects is developed based on an organizational process. The scope of the KM project also depends on the mission, rationale, and objectives of the respective process. Process-oriented Knowledge Management is essential as the core competence of an organization are originated from process knowledge.

Grover and Davenport [20] proposed a usual and empirical framework for the study of KM. The primary focus of this framework is the knowledge process and the context in which the process is embedded. They showed that these processes are either deliberate or emergent. Among them, Deliberate knowledge processes usually come from conscious organizational KM preclusive.

There are three vital obstacles in implementing the standard on KM according to the research works conducted by the American Productivity and Quality Center [21]. The Conference Board [22] and some other different organizations. The major problem is that organizations often do not feel or express the need to manage obtained knowledge. The inability to understand the purpose of KM and its benefits toward achieving organizational goals is the primary reason behind this. Another significant barrier to KM implementation is the lack of knowledge sharing within an organization because of competitive culture, which may block the natural flow of knowledge. The third obstacle is separate functional units of an organization that are disconnected from each other. Sometimes these units maintain some informational boundaries, which create barriers to prevent knowledge transfer. It is easy to understand that all three impediments discussed here relate to the organization's internal issues and not external factors. An organization's culture mainly drives these problems, values, and internal politics.

Wigg [23] Chairman, Knowledge Research Institute, Inc., discovered five basic knowledge-centered strategies, which are:

1. **Knowledge approach as a business policy** – This strategy aims to capture, create, organize, renew, share, and use gained knowledge. It ensures the availability of the best possible knowledge at each point of action.
2. **Logical asset management policy** focuses on intellectual asset management, including patents, operational and management practices, technologies, customer relations, organizational arrangements, and other structural knowledge assets.

3. **Individual knowledge asset responsibility policy** is related to managing personal knowledge assets for knowledge-related investment, innovation, and competitive state and renewal. Personal knowledge assets should be available to other employees' areas of works for their practical use. It helps to offer the most competitive knowledge within an organization.
4. **The** main focus of this strategy is to learn new knowledge, conduct basic and applied research and development, and motivate employees to record learned lessons innovatively. It helps to obtain new and better knowledge, which is essential for improving competitiveness.
5. **Knowledge transmits policy** – this strategy focuses on utilizing knowledge in an appropriate point of action. This procedure includes distributing and deploying knowledge through transfer, organizing, memorizing, restructure, and repackaging systematically. Knowledge sharing and adopting best practices are other important goals of this strategy.

In this study, various research papers were studied, and after that, some reviews have been written. This literature review allowed us to study various related papers on KM and gather in-depth knowledge about previous KM implementation efforts. Consequently, for further research, this study may able to guide as a foundation research paper.

3. Materials and methods

A survey method has been used for this study. For data collection, a questionnaire was sent to the 12 officers of NLB (98 staff in NLB. Among them, we sent our questionnaire to only 12 first-class employees). Deputy Director of the library, bibliographer, programmer, microfilm officer, and research officers were selected as samples for present research because of their accountability for building the library). The questionnaire was carefully distributed from person to person. Besides distribution, every option was described to them. All sort of confusion about this questionnaire was successfully made clear. The respondent was informed about the KM first, then about the Implementation of KM, and then the questionnaire was handed over to them. It needs to be mentioned that the employees were given alerts by email, text messages, phone calls, and personal meetings. Finally, 11 questionnaires were collected. Moreover, this paper is stimulated by other relevant literature obtained from different primary and secondary sources.

3.1. Data analysis of the study

Each of the following data tables represents the response rate and percentage from NLB. The tabulated data is then graphically represented by bar charts, pie charts, and column charts. Presentation is given according to the data gathered from the respondents. Some selected questions from the whole questionnaire have been analyzed below:

The study revealed that among 11 officials of NLB, more than 90% were male, and less than 10% were female. Here, we can see that there is discrimination between male and female employees. The present study also identified that the largest group of respondents, i.e., 54.5, comprises those aged between 36-41 years in NLB [24]. Results of our survey are as follows:

Table 1. Supporting the process of KM

Supporting the process	Frequency	Percentages
Yes	11	100
No	0	0
Total	11	100

In this portion of the questionnaire, participants were asked whether they support the process of KM or not? The participants replied that they support the process of KM in NLB. The response rate was 100%.
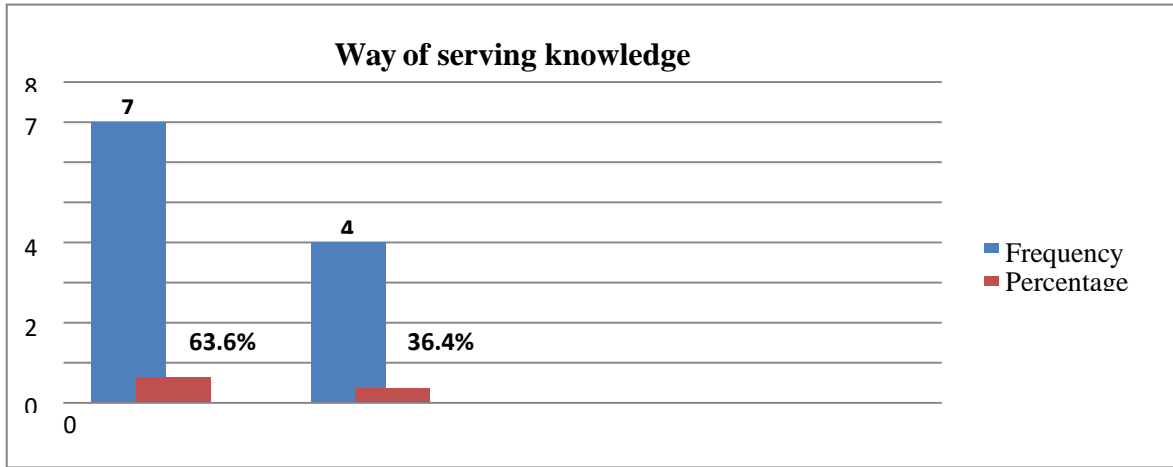
Way of serving knowledge

63.6%   36.4%

■ Frequency
■ Percentage

Figure 1. Reveals that according to 63.6% response, NLB uses a traditional library system for serving the knowledge to the user, and the rest 36.4% replied that they use the website for serving the knowledge.
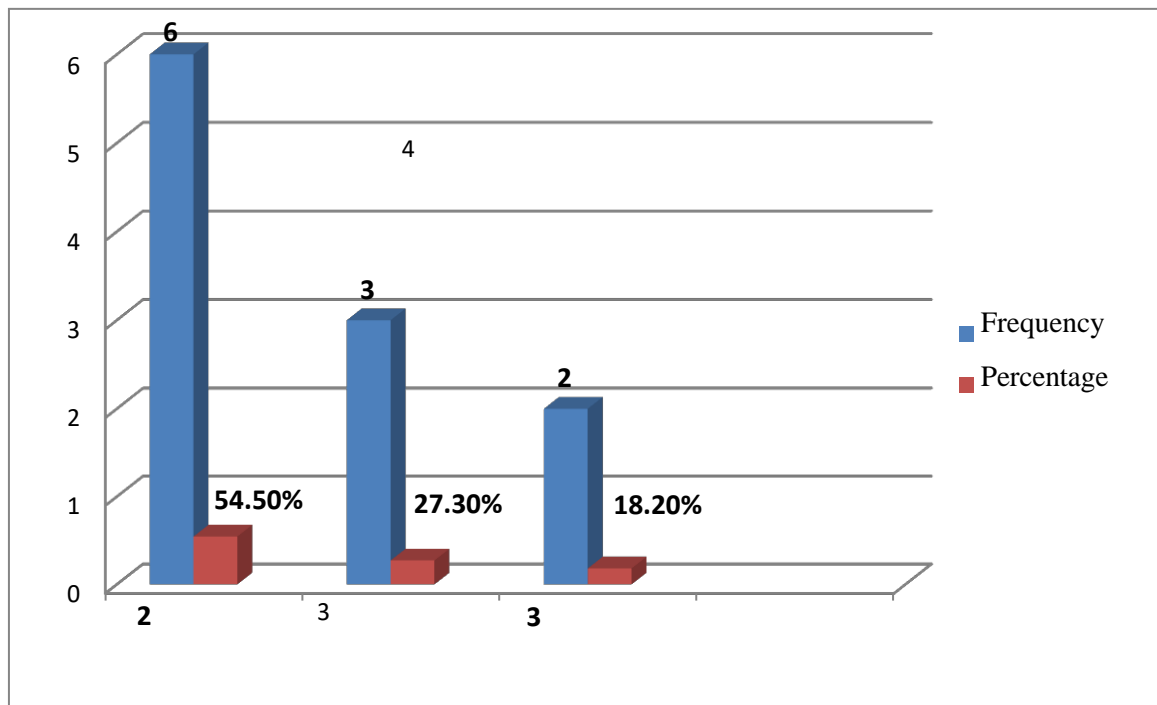
54.50%   27.30%   18.20%

■ Frequency
■ Percentage

Figure 2. Shows KM tools used in NLB

In this portion of the questionnaire, the respondents were asked about the tools used in NLB for gathering explicit knowledge. Among the participants, 6 (54.5%) said that publications are the tool for gathering explicit knowledge, whereas 3(27.3%) said focus group discussion, and the rest 2 (18.2%) replied that conference and seminar is the tool for this assembling explicit knowledge.

Table 2. The way of recording tacit knowledge

Recording Tacit knowledge	Frequency	Percentages
Keeping in mind	7	63.6
Taking notes	4	36.4
Total	11	100

Table 2 identifies that a maximum number of the respondents (63.6%) record tacit knowledge by keeping in mind. The rest of the respondents, i.e., 36.4%, record their knowledge by taking notes.

Figure 3: Opinion regarding the policies and procedures of KM in NLB
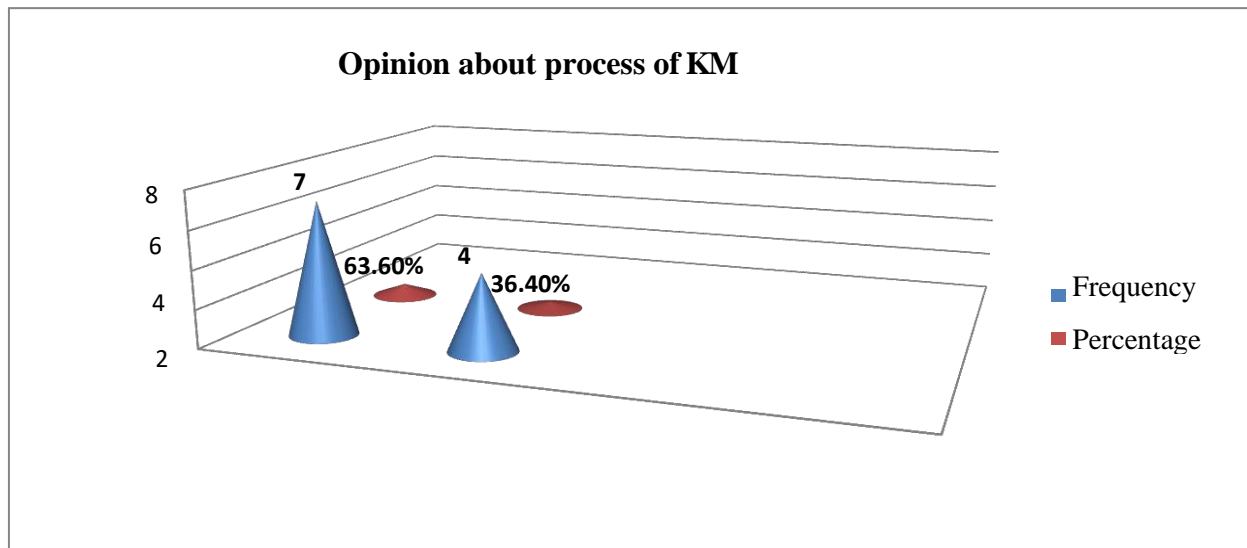

Figure 3 indicates the respondents' opinion about the current policies and procedures of KM in NLB. Amongst the participants, 63.6% replied that KM is essential and relevant in NLB but not updated regularly. Whereas the rest of the respondents, i.e., 36.4%, countered that KM is reasonably necessary, relevant, and latest in their library.

Table 3. Benefit of KM in the libraries

Option	Frequency	Percentages
Yes	11	100
No	0	0
Total	11	100

In this section of the questionnaire, the NLB personnel were asked to answer whether they believe that proper knowledge utilization can benefit their library. The participants replied that KM might bring benefits for their organization and the response rate was 100%.

4. Results and discussion

4.1. Major findings

The significant findings we got from this study are listed below:

1. The participants replied that they supported the process of KM in NLB, and the response rate was 100%.
2. It is seen that 63.6% of the respondents said NLB uses a traditional library system for serving the knowledge to the user, and the rest, 36.4%, replied that they use a website for serving the knowledge.

3. Among the participants, 6 (54.5%) said that publications are the tool for gathering explicit knowledge, where 3(27.3%) said focus group discussion and rest 2 (18.2%) replied that conference and seminar is the tool for this assembling explicit knowledge.
4. The study revealed that a maximum number of the respondents record tacit knowledge by keeping in mind, and 36.4% record their knowledge by taking notes.
5. The maximum number of the participants is 63.6%, who replied that KM is essential and relevant in NLB but not updated regularly in the library.
6. The study identified that KM might bring benefits for the organization and the response rate was 100%.

4.2. Problems in execution of KM in NLB

In their research, Verma and Singh [25] found the following types of problems in implementing KM in the library, similar to this research. The various problems which are generally observed in carrying out KM are:

1. Library officers' have limited time for thinking about KM
2. Existing traditions does not have support for sharing of knowledge
3. Being short of indulgent of KM and its advantages
4. Incapability to assess monetary reimbursement of KM
5. Less funding for KM
6. KM techniques are not up to the mark.
7. Commitment from top-level management
8. Procedures of the organization are not intended for KM
9. There are very few rewards to share knowledge with others

5. Conclusion

Proper implementation of KM in a modern knowledge-based organization ensures flow, convergence, and sharing of knowledge, idea, and concepts. Within that organization efficiently. Libraries can be considered the ocean of knowledge, and because of being the top library of Bangladesh, we always believed implementation of standard KM practice at NLB is a must. Though we found out that most of the employees of NLB have a good idea of KM, our research suggested that KM practice at NLB may perhaps not in a reasonable level. We emphasized on the procedures and tools NLB personnel used to implement KM in their institution. After systematic analysis based on our methodology, we found some critical loopholes in the KM procedure at NLB. These issues are briefly described in this paper, along with the benefits NLB may gain by solving them. We believe our findings of this research will be considered a guideline for implementing KM at NLB efficiently and standardly. Through NLB represents a specific group of organizations, our findings of this study can also be helpful to analyze KM scenario in other similar organizations.

Conflicts of interest. There is no conflict of interest.

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