# Exploring the Skills and Competencies of Information Professionals for Knowledge Management in the Information Institutions of Bangladesh

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## ABSTRACT

The aim of the study is to explore the views of information professionals for knowledge management (KM) in the libraries/information institutions of Bangladesh. *Research Questions*-This paper seeks to address the following research questions: How the information professionals of Bangladesh perceive the views of KM? What are likely to be the skills required by the information professionals of Bangladesh for KM in the libraries of Bangladesh? and what are likely to be the critical success factors for encouraging KM in the information institutions of Bangladesh? The methodology includes a quantitative approach. The study has been conducted through a survey using a pre-structured questionnaire. A short and structured questionnaire was sent to 50 information professionals who had been working in different libraries of Bangladesh through email and/or by post. The respondents were selected from 6 divisions of Bangladesh (25 respondents from Dhaka division, 5 each in Chittagong, Rajshahi, Khulna, Barishal and Sylhet division). We received 30 responses, for a response rate 60%. The results of the study show that that 93.24% of the respondents first read about KM in the literature, but none had taken any courses on KM. Only 6.76% of the respondents had attended a workshop on KM. Findings also yield that most of the professionals believe that communication skills, facilitation skills, coaching skills, mentoring skills, networking skills, negotiating skills, consensus building skills and team working skills are inevitable for KM in the libraries of Bangladesh. This paper also suggests some critical success factors for encouraging the information professionals to KM in the libraries of Bangladesh. It investigates the original views of the library and information professionals of Bangladesh regarding the skills and competences of information professionals for KM in the libraries of Bangladesh. The department of Information Science and Library Management of Dhaka University and Rajshahi University should introduce KM course(s) either in the graduate level or in the post-graduate level.

*Keywords:* Skills and competencies; Knowledge management; Information professionals; Information institutions; Bangladesh.

## INTRODUCTION

In this information and knowledge age, KM has emerged as a current 'hot issue' for many organizations (Kim, 1999). One of the significant events faced by Library and Information Science (LIS) was the emergence of Knowledge Management (KM) as a business concept during the last decade (Roknuzzaman & Umemoto, 2009). According to Gartner Group (1997), KM is "a discipline that promotes an integrated approach to identifying, capturing, evaluating, retrieving and sharing of an enterprise's information assets". There seems to be a close relationship between LIS and KM, and some authors explain KM is an old concept (Hawkins, 2000), and a new name for what librarians or information professionals have been doing for years (Ajiferuke, 2003), while Petrash (1996) argued that KM is getting the right knowledge to the right people at the right time so they can make the best decision. Davenport (2004) on the other hand, consider that KM is distinct from both librarianship and information management; Koening (1997) described KM as librarianship in new clothes; Rowley (1999) & Schwarzwalder (1999) stated KM simply as a case of new wine in old bottles. Another way to define KM is that knowledge management is the conceptualizing of an organization as an integrated knowledge system, and the management of the organization for the effective use of that knowledge (Wang, Hjelmervik & Bremdal, 2001). According to Watson (2003), KM involves the acquisition, storage, retrieval, application, generation, and review of the knowledge assets of an organization in a controlled way. In this regard, Jain (2009) carried out research on KM giving the importance of KM for the 21$^{st}$ century information professionals, their evolving new roles, skills and challenges, and finally recommended some important aspects to have in place for information professionals to be part of this KM economy. Ajiferuke (2003) explored that many information professionals

are involved in the KM programs and playing key roles, such as deign of the information architecture, development of taxonomy, or content management of the organization's intranet and others play lesser roles, like providing information for the intranet, gathering competitive intelligence, or providing research services as requested by the KM team. Kim (1999), on the other hand, defined knowledge, KM and considered the partnership for KM, especially how librarians as knowledge professionals, users, and technology experts can contribute to effective KM. Rehman (2006) explored management and functional competencies that would make LIS professionals relevant in the emerging market. In Bangladesh, Haq & Munshi (2005) defined KM, showed different approaches of KM activities and mentioned the modules and processes of KM and also discussed the KM techniques in libraries. Furthermore, they showed the present status of KM activities in the libraries of Bangladesh as well as gave some directions for better implementation of KM in the libraries of Bangladesh. The above review of literature reveals that the definition of KM, its implications to information science or libraries, skills and roles of information professionals that will help them to implement KM in the library premise. There is an acute gap of literature and initiatives to implement KM in the libraries and information institutions of Bangladesh. Therefore, we made an initiative to explore the skills and competencies of the information professionals of Bangladesh for KM in the information institutions of Bangladesh and identified some Critical Success Factors (CSFs) that will be essential for encouraging KM in the libraries of Bangladesh. However, the rest of the paper is organized as follows: Section 2-4 describes the objectives, research questions, and methodology and the sample of the study; Section 5 presents the results and discussion, Section 6 discusses the critical success factors for encouraging KM in the information institutions of Bangladesh, and we conclude with a brief summary in section 7.

## OBJECTIVES OF THE STUDY

This study explores the skills and competencies of information professionals for KM in the information institutions of Bangladesh. In the current economic climate, organizations are characterized by more knowledge incorporated in the new content, business and services. Library as a social organization has its own tradition to deal with information and knowledge. In a digital environment, the role of knowledge has become even more significant. Therefore, the purpose of this study is to explore the views of information professionals of Bangladesh about KM. More particular objectives of this study are to:
- investigate the skills required by the information professionals of Bangladesh for KM in the libraries/information institutions of Bangladesh;
- identify some critical success factors for encouraging the information professionals to KM in the information institutions of Bangladesh.

## RESEARCH QUESTIONS

In pursuing the above research objectives, the following research questions (RQs) have been posed that will guide the study:
**RQ1:** How the information professionals of Bangladesh perceive the views of KM?
**RQ2:** What are likely to be the skills required by the information professionals of Bangladesh for KM in the libraries of Bangladesh?
**RQ3:** What are likely to be the critical success factors for encouraging KM in the information institutions of Bangladesh?

## METHODOLOGY AND THE SAMPLE OF THE STUDY

The methodology includes a quantitative approach. The study has been carried out through email and/or by postal mail survey (A letter was posted to the information professionals) based on a pre-structured questionnaire. The respondents were selected from each division of Bangladesh based on their professionals' experiences and/ or ICT skills as well as research interest on KM. We had exclusively used Members' Directory, of Library Association of Bangladesh (LAB) and, of Bangladesh Association of Librarian, Information Scientists and

Document lists (BALID) for the selection of respondents. The geographical distribution of the sample shows that it includes 25 (50%) in Dhaka, 5 (10) each in Chittagong, Rajshahi, Khulna, Barishal and Sylhet division.
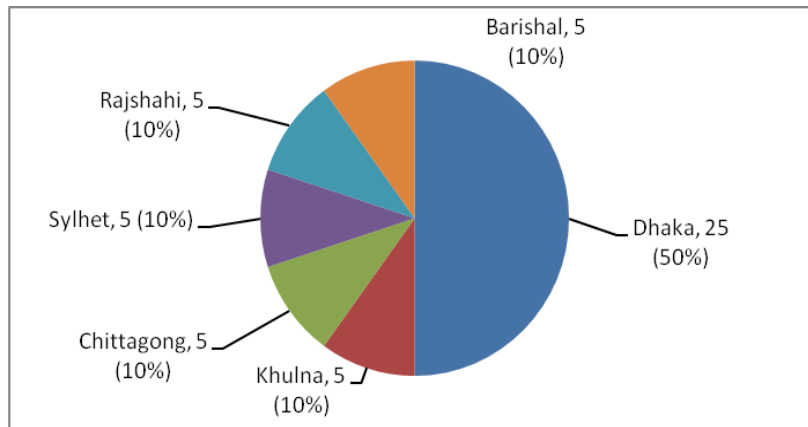


**Figure 1: Geographical Distribution of the Sample**

A short and structured, both open and close ended, questionnaire was sent to the respondents by email and postal mail.  We sent 50 respondents all over Bangladesh and received 30 responses from them and the response rate was 60% (See Fig. 2). In this survey, we have chosen the highest number of information professionals (respondents) from Dhaka division due to having large number of libraries there. We used SPSS 16.0 for descriptive analysis of data.

## RESULTS AND DISCUSSIONS

### *Profile of the respondents (n=30)*

### *Geographic distribution of the respondents*

Figure 2 indicates that the highest number of responses, 16(53%), came from Dhaka Division where the highest sample size was 25(50%) in the same division as shown in figure 1. The second highest responses, 4(13%), were received from Rajshahi, followed by Khulna 3(10), Sylhet 3(10%), Chittagong 2(7%), and Barishal 2(7%).
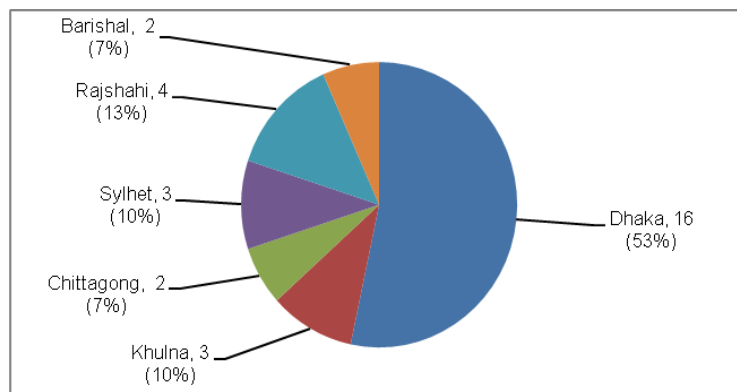


**Figure 2: Geographic Distribution of the Respondents**

### *Professional positions of the respondents*

Figure 3 shows that 33.30% of the respondents are librarians, 23.31% are deputy librarians, 26.64% are assistant librarians, 9.99% are library officers, and 6.66% are other categories of information professionals.
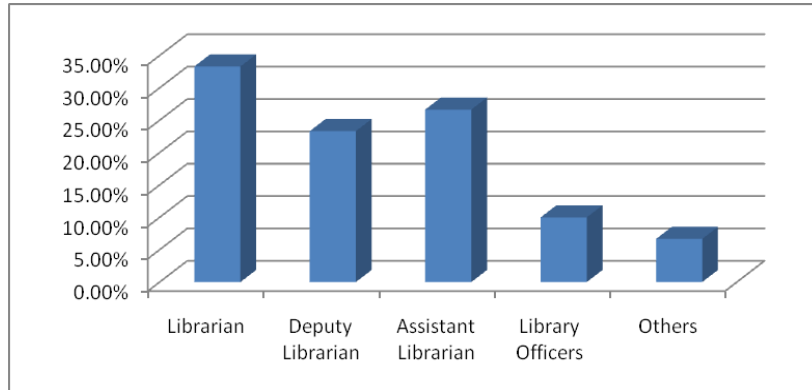


**Figure 3: Professional Positions of the Respondents**

### *The views of the respondents about "Know-How"*

As the concept of KM is not clear to many information professionals of Bangladesh, they are not versed enough to comment on KM but the respondents were asked how they came to know about KM. Figure 4 reveals that 93.24% of the respondents first read about KM in the literature, but none had taken any courses on KM. Only 6.76% of the respondents had come to know about KM attending a workshop on KM.
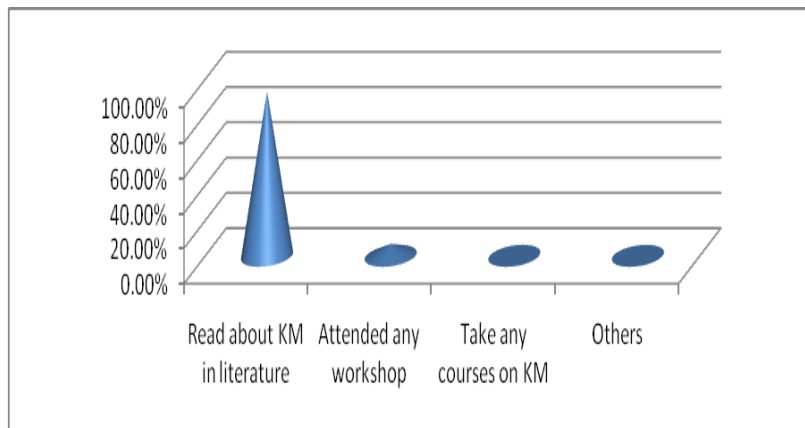


**Figure 4: Views about 'Know-How'**

### *The views of the respondents regarding the skills and competencies for KM in the libraries of Bangladesh*

The skills and competencies including communication, facilitation, networking, negotiation, consensus building, team work, coaching and mentoring skills and competencies were identified by Abell (2000) and the results validate the skills and competencies for KM in the libraries of Bangladesh. The respondents were asked to specify their level of agreements on some specific KM skills and competencies. The responses regarding skills and competencies for KM in the libraries/information institutions of Bangladesh are analyzed in Table 1 on 1-5 Likert scale, and Mean and Standard Deviation of their level of agreement were calculated according to the

following scores**:** 1.00- not required, 2.00-Partially required, 3.00- required, 4.00 -very required, 5**.**00 **-**badly required.

**Table 1: Views of the respondents about the skills and competencies for KM**

| Statement | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Communication skills | 30 | 2.00 | 5.00 | 3.47 | .776 |
| Facilitation skills | 30 | 1.00 | 5.00 | 3.30 | 1.022 |
| Networking skills | 30 | 1.00 | 5.00 | 3.83 | 1.053 |
| Negotiating skills | 30 | 2.00 | 5.00 | 3.43 | .858 |
| Consensus building skills | 30 | 2.00 | 5.00 | 3.57 | .773 |
| Team working skills | 30 | 1.00 | 5.00 | 3.57 | .898 |
| Coaching skills | 30 | 1.00 | 5.00 | 3.30 | 1.188 |
| Mentoring skills | 30 | 1.00 | 5.00 | 3.30 | .915 |
| **Valid N (listwise)** | 30 | | | | |

### *Communication Skills*

Communication skills are one of the significant skills for KM. Table 1 reveals that the respondents agreed with a mean score 3.47 on 1-5 scales that communication skills are badly required for knowledge management in the information institutions of Bangladesh.

### *Facilitation Skills*

Facilitation skills are also important components of KM. The respondents agreed with a mean score 3.30 that the facilitation skills is badly required for KM in the libraries of Bangladesh.

### *Networking skills*

The information professionals should have networking skills in order to manage, maintain, and handle e-resources properly. The respondents affirmed with the highest mean score 3.83 in Table 1 that networking skills are also badly required for KM in the information institutions of Bangladesh.

### *Negotiation skills*

KM not only handles tacit and explicit knowledge but also deals with human resources. In this regard, negotiation skills of KM play an important role to solve organizational problems. However, the respondents agreed with the mean score 3.43 that negotiation skills are badly needed in the libraries of Bangladesh.

### *Consensus building skills*

The participants of the survey reported with the second highest mean score 3.57 in Table 1 that consensus building skills are essential for KM in the information institutions of Bangladesh.

### *Teamwork skills*

One of the important skills of KM is teamwork skill. The respondents reported with the second highest mean score 3.57 in Table 1 that team working skills are badly required for KM in the information institutions of Bangladesh.

### *Coaching skills*

The respondents asserted with a mean score 3.30 that coaching skills are also required for KM in the information institutions of Bangladesh.

### *Mentoring skills*

Mentoring is one of the significant skills of KM. The respondents affirmed with a mean score 3.30 that mentoring skills are required for KM in the information institutions of Bangladesh.

## CRITICAL SUCCESS FACTORS (CSFs) FOR ENCOURAGING KM IN THE INFORMATION INSTITUTIONS OF BANGLADESH

Davenport, De Long, & Beers (1998) identified eight critical success factors for success of KM but they agreed that these factors were hypothesized, not proven. Similarly Chourides, Longbottom & Murphy (2003) identified various critical success factors for successful KM implementation in five organizational functional areas: strategy, human resource management (HRM), IT, quality and marketing. While Liebowitz (1999) proposed six key ingredients in order to make KM successful in organizations. He suggested the need for a KM strategy with support from senior leadership, a chief knowledge officer (CKO) or equivalent and a KM infrastructure, knowledge ontologies and repositories, KM systems and tools, incentives to encourage knowledge sharing and a supportive culture. However, we used the following nine Critical Success Factors (CSFs) that was provided by Sarawanawong et al. (2009). The researchers also firmly believe and propose that these nine CSFs will help to build a successful implementation of KM in the information institutions of Bangladesh, which are illustrated in Figure 5. Next, we investigate the views of the information to learn their agreement about the importance of these CSFs in the implementation of KM in the information institutions of Bangladesh.



Organizational culture

↓

Information technology (IT)

↓

Staff

↓

Organizational administration

↓

KM administration structure

↓

Administrators

↓

KM process

↓

KM measure

↓

KM strategy

**Figure 5: CSFs for KM in the Libraries of Bangladesh**

Table 2 indicates the level of agreements of the respondents for each KM critical success factors in Bangladesh perspective on 1-5 Likert scales. It is also worth noting here that Mean and Standard Deviation of the responses were calculated according to the following scores**:** 1.00- Not important, 2.00- Less important, 3.00- Important, 4.00- More important, 5.00- Most important.

**Table 2: Views of the Respondents about the CSFs for KM in the Libraries of Bangladesh**

| Statement | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Organizational culture | 30 | 3.00 | 5.00 | 4.17 | .912 |
| Information Technology | 30 | 3.00 | 5.00 | 4.50 | .777 |
| Staff | 30 | 1.00 | 5.00 | 4.37 | .964 |
| Organizational administration | 30 | 3.00 | 5.00 | 4.13 | .776 |
| KM administration structure | 30 | 4.00 | 5.00 | 4.80 | .407 |
| Administrators | 30 | 3.00 | 5.00 | 4.23 | .859 |
| KM process | 30 | 3.00 | 5.00 | 4.20 | .805 |
| KM measure | 30 | 3.00 | 5.00 | 4.17 | .912 |
| KM strategy | 30 | 3.00 | 5.00 | 4.57 | .679 |
| **Valid N (listwise)** | 30 | | | | |

### *Organizational culture*

Developing and implementing an organizational culture is one of the significant critical success factors for KM. The respondents reported with the second lowest mean score 4.17 in table 2 that organizational culture is one of the most important CSFs for KM in the information institutions of Bangladesh.

### *Information Technology (IT)*

An information and communication technology(ICT) infrastructure provides a broad platform for exchanging data, coordinating activities, sharing information, emerging private and public sectors, and supporting globalization commerce, all based on powerful computing and network technology (Lao, 2003). However, the respondents asserted with a mean score 4.50 that IT is important for KM in the information institutions of Bangladesh.

### *Staff*

Information institutions of Bangladesh should develop staff with an understanding KM tools and processes. The respondents reported with a mean score 4.37 that staff is important critical success factor for KM in the information institutions of Bangladesh.

### *Organizational administration*

Bangladesh should evolve from a rigid hierarchical structure to a process-oriented structure. The management should focus on empowerment. Bangladesh should have mechanisms in place to reward staffs who are consistent with learning and knowledge sharing. The respondents reported with the lowest mean score 4.13 in table 2 that Organizational administration is an important CSF for KM in the information institutions of Bangladesh.

### *KM administration structure*

Bangladesh should develop a qualified and ideal KM team to lead and develop effective KM operation at the information institutions. The structure of KM administration of Bangladesh should be composed of a CKO (Chief Knowledge Officer), KM members from different faculties, and KM faculty members with expertise in the method of KM processes, thereby enabling a high potential to drive KM successfully. The respondents of the survey affirmed with the highest

mean score 4.80 in Table 2 that KM administration structure is the most important CSF for KM in the information institutions of Bangladesh.

### Administrators

Administrators must understand, support, and participate in KM achievements, have strong commitment to KM initiatives, establish clear KM strategies, and vision, as well as knowledge of process that encourage practice. The respondents reported with the mean score 4.32 that administrators are the most important CSF for KM in the information institutions of Bangladesh.

### KM process

Information institutions of Bangladesh should have a standardized KM process that will be designed to provide guidelines for staff. The KM process must be easy to use and understand. However, the respondents agreed with a mean score 4.20 that KM process is the most CSF for the libraries of Bangladesh.

### KM measure

The libraries of Bangladesh should measure the impact of KM activities for performance, including benefits such as reduced staff work time and increase quality of products and service. The respondents agreed with the second lowest mean score 4.17 in Table 2 that KM measure is the most important CSF for KM in the libraries of Bangladesh.

### KM strategy

The information centers of Bangladesh must establish a clear vision and strategic plan for use of a knowledge management approach. The respondents asserted with the second highest mean score 4.57 in Table 2 that KM strategy is important for KM in the libraries of Bangladesh.

## CONCLUSIONS

The aim of the study was to explore the views of information professionals for knowledge management in the libraries of Bangladesh. The results of the research showed that 93.24% of the respondents first read about KM in the literature, but none had taken any courses on KM. Only 6.76% of the respondents had attended a workshop on KM. The findings also yielded that several skills are required by the information professionals of Bangladesh for KM in the information institutions of Bangladesh, including communication skills (mean score 3.47), skills of facilitator (mean score 3.30), networking skills (mean score 3.83), negotiation skills (mean score 3.43), consensus building skills (mean score 3.57), teamwork skills (mean score 3.57), coaching skills (mean score 3.30), and mentoring skills (mean score 3.30). This paper identified and proposed nine CSFs which are very essential for encouraging KM in the libraries of Bangladesh that include organizational culture (second lowest mean score 4.17), IT (mean score 4.50), staff (mean score 4.37), organizational administration (lowest mean score 4.13), KM administration structure (highest mean score 4.80), administrators (mean score 4.32), KM process (mean score 4.20), KM measure (second lowest mean score 4.17) as well as KM strategy (the second highest mean score 4.57). These CSFs were also investigated and measured with the agreement of the respondents, and explained how the CSFs help to implement KM in the libraries and information institutions of Bangladesh. Finally, we suggest that the Department of Information Science and Library Management of Dhaka University and Rajshahi University should introduce KM course(s) either in the graduate level or in the Post-graduate level. Really, there is a limited scope for the information professionals of Bangladesh to learn about KM and implement those CSFs in the Libraries and information Institutions of Bangladesh.

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