

Seminar Paper

Knowledge Management as a Tool to Accelerate Human Resource Development: *The Case of Bangladesh Public Sector*

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Participant's Name: **Md Jahid Hossain Panir**

Roll No. **103**

Executive Summary

This study assesses the role of knowledge management in human resource development in the public sector in Bangladesh. The public sector organizations are the main carriers of knowledge, particularly in terms of intellectual capitals. Knowledge management through creating, converting, storing, sharing and applying knowledge is often underutilized in the government offices. Although knowledge management and its innovative use by the power of digital technologies in the public sector are current topics of discussion, these issues severely lack in sufficient literature. Hence, this study was undertaken to address this gap in the literature. Furthermore, it investigates the drivers and obstacles to the successful implementation of knowledge management.

This exploratory qualitative research involved detailed case studies from two organizations across the public sector. Primary data were collected through in-depth semi-structured interviews. Other than interviews, this study used diverse data sources including participant observation, document analysis, and site visits. Findings from these case studies reveal that knowledge management can foster skills and capabilities of the government employees. Among other limitations, this study depended on inferences to make analytical generalizations and therefore, lacks in statistical inferences, which may be subject to bias.

This study contributes to the body of literature in knowledge management domain. The findings also have important practical implications for the government decision-makers to create a knowledge management-focused digital innovation culture.

Table of Contents

CHAPTER I: INTRODUCTION.....	1
1.1 Background & Problem Statement	1
1.2 Aims and Objectives of the Study.....	2
1.3 Research Questions.....	2
1.4 Research Methodology.....	3
1.5 Significance of the Study	7
1.6 Contribution of the Research.....	4
1.7 Limitation of the Research.....	4
CHAPTER II: REVIEW OF LITERATURE	5
2.1 What is Knowledge.....	5
2.2 What is Knowledge Management	5
2.3 Issues in Public Sector Knowledge Management.....	6
2.4 ICT Application in Knowledge Management	8
CHAPTER III: RESEARCH METHODOLOGY.....	9
3.2 Research Design.....	10
3.3 Data Sources.....	10
3.4 Case Study Analysis.....	10
CHAPTER IV: FINDINGS AND DISCUSSION.....	76
4.1 Research Question.....	11
4.2 Findings of Subsidiary Research Question 1.....	11
4.3 Findings of Subsidiary Research Question 2.....	13
4.4 Findings of Main Research Question.....	14
4.5 Discussion	14
CHAPTER V: CONCLUSION.....	16
5.1 Findings to the Research Questions.....	16
5.4 Contribution to the Body of Knowledge.....	16
5.3 Implications of the Study	16

5.4 Limitations of the Research.....	17
5.5 Future Research Directions.....	17
5.6 Policy Recommendations	18
5.7 Final Remarks.....	19
References.....	19
Appendix: Questionnaires.....	22

I. Introduction

1.1 Background & Problem Statement

Studies show that 80 percent of the employees' personal or tacit knowledge remains uncaptured and unutilized, which results in huge monetary loss to any public sector organization (Alavi and Leidner, 2001). This picture is very evident when public sector organizations hardly take measures to capture precious knowledge of experienced government officials, who are retiring or being transferred (Panir *et al.* 2018). However, studies reveal that since knowledge as 'intellectual capitals' (Gil-Garcia *et al.*, 2018) is a vital asset for public sector organizations, its management can enhance human capitals (Blackler, 1995; Kim & Lee, 2006).

Davenport and Prusak (1998) define knowledge as 'a fluid mix of insight from experts, context around the insights as well as experience and values'. This tacit nature of knowledge has two implications for human resource development. *First*, the cognitive aspect of tacit knowledge helps procedural thinking or mental skills, e.g. understanding concepts or applying methods to solve problems (Buckley and Jakovljevic, 2013). *Second*, technical aspect of tacit knowledge enhances negotiation skills, driving car, operating machine and so on. Studies show that although the application of knowledge management (KM) practices are often difficult, but it is not impossible to create, convert, store, retrieve, share and apply such knowledge in innovative ways (Holzner & Marx, 1979) particularly for human resource development in the public sector (UNPAN, 2016). Researchers also argue that ICTs can be utilized for converting this tacit knowledge into explicit knowledge for storing, coping and sharing an expert's insights and experiences (UNPAN, 2016) digitally without any geographical and time barriers (Panir *et al.*, 2018). There are also many instances of managing knowledge in providing training to public sector officials even without ICTs (Alavi and Leidner, 2001) in the areas of exchanging & utilizing knowledge and creating knowledge (Kshetri, 2016).

Although the tacit dimension of knowledge has huge potential for enhancing capacity development of public sector officials, these issues severely lack in sufficient literature. Most of the studies embark on knowledge management in the private sector (Lee & Trimi, 2018). It

poses a serious knowledge gap in KM-HR relation in the government offices particularly in the developing countries.

Under this backdrop, utilizing a qualitative approach, this study attempts to find out the role of knowledge management, particularly tacit dimension of knowledge for enhancing human resource development in the public sector.

1.2 Aims and Objectives of the Study

This study mainly aims to understand the role of knowledge management in human resource development in the public sector in Bangladesh in order to contribute to the public sector KM literature by bridging a knowledge gap. It will investigate how knowledge management initiatives are promoted towards human resource development.

To achieve these aims, the study poses the following objectives:

1. To analyze the role of knowledge management in human resource development in various public offices in Bangladesh;
2. To investigate the factors affecting KM practices in the public sector of Bangladesh;
3. To recommend the policy guidelines in managing knowledge for better human resource development in the public sector of Bangladesh.

1.3 Research Questions

The main research question and subsidiary research questions are developed for this study.

The main research question of this study goes:

What role does knowledge management play in accelerating human resource development in the public sector in Bangladesh?

Two subsidiary research questions are:

Subsidiary Research Question 1: How does knowledge management accelerate human resource development in the public sector in Bangladesh?

Subsidiary Research Question 2: What are the factors that affect knowledge management in the public sector domain?

1.4 Significance of the Study

UNO (2018) stated, “knowledge is like light - weightless and intangible - it can easily travel the world, enlightening the lives of people everywhere. Yet billions still live in the darkness of poverty – unnecessarily”. Although Bangladesh government has a sustainable development goal (SDG): by 2030, government has to achieve full and productive employment and decent work for all women and men, including for young and persons with disabilities (PMO, 2018), little is known about how government is going to strategize to utilize tacit knowledge to meet this goal through developing human resource in the public sector. However, there are ample opportunities of utilizing tacit knowledge of government employees to enhance public servants’ skills.

From the review of literature, no systematic quantitative or qualitative studies on this area have been found. Under this backdrop, this study investigated how knowledge management accelerates human resource development in the public sector in Bangladesh.

1.5 Research Methodology

Methodology is the analysis and rationale of the particular methods used in the study and is the overall approach to the research process (Creswell, 1994). The methodology of this study consists of purpose, process, approach or strategy and technique. From the process perspective, this study adopted qualitative approach. If it is viewed from purpose, it is of exploratory nature. As an approach or strategy, it followed interpretative case studies. It collected data through multiple case study approach as a research technique.

Crotty (1998) contends that the context for selecting a method is based on researcher’s theoretical perspective backed by ontology. Researcher’s intention to understand the role of knowledge management in human resource development is rooted in the research paradigm (Lincoln & Guba, 2000).

Yin (2003) suggests that case study methodology is primarily based on interview, together with various sources of evidences. Since there are limited previous research on knowledge management in the public sector, an inductive approach using semi-structured interviews to produce qualitative data seems to be suitable. It enabled the researcher to gain in-depth views and experiences of individuals. Under this backdrop, the qualitative research design was adopted to generate in-depth insights. Primary data will be collected through in-depth semi-

structured interviews. This study also used diverse data sources including participant observation, document analysis, and site visits. Two organizations were considered as cases on the basis of their involvement in KM application, especially developed for the study. A total of fifteen semi-structured interviews were conducted with fifteen respondents who have somehow a direct or an indirect connection with knowledge management in the public sector in Bangladesh.

1.6 Contribution of the Research

This study contributes in several ways: *First*, it fills the knowledge gap in understanding the role of knowledge management and the driving forces that positively impact on knowledge management; *Second*, based on the key theories on contemporary knowledge management and human resource development, this study developed a conceptual framework for the analysis of the findings to link theories with practices. *Third*, from a methodological standpoint, this research took a holistic view of the whole gamut of knowledge management and human resource development by collecting data across four case organizations.

1.7 Limitation of the Research

The study acknowledges the following limitations:

First, this research depended on inferences to make analytical generalizations based on observations and perceptions of the respondents. Therefore, it lacks in statistical inference that may be subject to bias; *Second*, it collected data from a limited number of officials from only four organizations, which does not allow the findings to be generalized, therefore, the recommendations from this study might vary in different contexts. *Third*, the sample of cases for this study had drawn only from Bangladesh. So, the generalizability of the findings is not relatively enriched due to the lack of cultural variations.

CHAPTER II: REVIEW OF LITERATURE

2.1 What is Knowledge?

Nonaka and Takeuchi (1995) define knowledge as a product of interaction which can be managed. This practical aspect of knowledge is further discussed by Raudeliuniene *et al.* (2015), who explain that knowledge product can be transferred through personal exchanges such as professional training, knowledge networks, documentation, socialization, and copying of knowledge. One of the core definitions of knowledge was given by Davenport and Prusak (1998), who view knowledge as a fluid mix of insights from experts, context around the insights as well as experience and values. Based on the work of Polanyi (1962, 1967), Nonaka (1994) explicates two basic knowledge taxonomies: tacit and explicit. The tacit dimension of knowledge is an individual's mental maps, intuition, beliefs, judgement, and viewpoints (cognitive elements) and know-how, skills & personal experience (technical elements). Reversely, explicit dimension of knowledge is formal, articulated and systematic that can be codified, written down, and passed on to others in documents (Daft, 2004) or communicated in symbolic form or in natural language (Alavi & Leidner, 2001).

These tacit and explicit knowledge dimensions are also clarified by Davenport (1997), who opines that tacit knowledge remains inside the individual's head - not in computers and databases. That is why, a book or a website is an example of explicit knowledge of its author's or developer's tacit knowledge. They might have much insights and experiences in them but they could make a little part of their knowledge explicit to others. From the reader's/visitor's perspective, that book /website contains only data and information, which may turn into knowledge, only when the reader/visitor can apply proficiently what they had read or visited. The idea of Davenport is again supported by other researchers since knowing is a human act, knowledge inevitably involves humans, who do the knowing. Knowledge is an intrinsic resource and therefore people are the only true source of knowledge (Lang, 2001).

2.2 What is Knowledge Management?

Knowledge management is to manage knowledge for individual or organizational needs (Alavi & Leidner, 2001). According to von Krogh (1998), knowledge management refers to identifying and leveraging the collective knowledge in an organization to help it compete. As a source of competitive advantage, value creation (King & Zeithaml, 2003), strategic

resource and high level of innovation, KM has been practiced in e-government (Metaxiotis & Psarras, 2005), and policy development (Reige & Lindsay, 2006). Therefore, a good practice of KM can enhance the effectiveness of organizations (Papavassiliou *et al.*, 2003) and develop a knowledge-competitive workforce (Wiig, 2002). Alavi and Leidner (2001) argue that the aims of the initiatives of managing knowledge are to make knowledge visible, to develop a knowledge-intensive culture and to build a knowledge infrastructure.

There are various observations on the definition of KM processes / functions. According to Costa and Monteiro (2016), most of the KM literature classify KM processes as knowledge acquisition, knowledge creation, knowledge transfer, knowledge storage, and knowledge application. The authors such as Ahmad *et al.* (2017), and Shujahat *et al.* (2017) define KM processes as knowledge creation, knowledge sharing and knowledge utilization. However, a widely accepted and working definition mentions four sets of KM processes: knowledge creation, knowledge storage, knowledge transfer/sharing and knowledge application (Holzner & Marx, 1979).

2.3 Issues in Public Sector Knowledge Management

Knowledge has been recognized as a vital resource for public sector organizations because it is central to policy making and public services (Seba & Rowley, 2010). However, it is evident that until few years ago, KM was a topic of management field that dealt only with private sector organizations. But recently, the public sector knowledge management (PSKM) has also attracted many researchers.

Knowledge is a public good and its real power lies in keeping it shared and acquired by all (Blackler, 1995). Trumuller and Wimmer (2003) call PSKM as knowledge government or K-government, which is also an integral part of e-Government. Wimmer (2003) argues that the prime goals of KM in government are establishing organizational memory, creating a learning environment, allowing proactive transfer of skills, expertise and know-how. A survey on knowledge management practices of twenty-member countries of the Organization of Economic Cooperation and Development (OECD) reveals the key expectations of K-government, which include: making up for the loss of knowledge (due to the shortage of staff turn-over and future retirement), releasing information available to the public, improving transparency and work efficiency within the organization (UNPAN, 2016).

A review of research evidences indicates that there are several factors affecting knowledge management in the public sector. For example, the study of Cong *et al.* (2007) discovers that

public sector knowledge management is largely dependent on cultural and organizational change. It is also supported by Yao *et al.* (2007) who find that employee attitudes seriously affect knowledge sharing in the government offices. The investigation of Currie *et al.* (2008) identifies political commitment to be a driving force for knowledge management initiatives. The lack of transformational leadership is viewed as a barrier by Amayah (2013). A study of Dawes *et al.* (2009) finds bureaucracy which clouds the performance of public sector knowledge management. Chiem (2001) discovers that the conception of loss of power among the government employees hinders KM initiatives.

Although public sector organizations possess huge intellectual capitals, in practice, it is noticeable that much of this capital is hardly explored. Furthermore, the knowledge they need to solve a real problem cannot be traced out in the time of need. However, there are potential solution to this problem areas as shown in Table 2.1.

Table 2.1 Problem-Solution Approach in the Public Sector KM

Problem Areas	Explanations with Potential Solution
<i>Loss of knowledge</i>	Tacit knowledge of experienced employees is lost, when they are transferred or retire or quit the job. Their personal knowledge can be codified to a possible extent
<i>Limited use of Intellectual Capitals</i>	All employees' tacit knowledge together creates a huge intellectual capital, which can be utilized as the most powerful organizational asset
<i>Lack of knowledge-flow</i>	All flows of knowledge can be connected to search/generate, share and apply knowledge
<i>Lack of knowledge exchange</i>	An employee might have skills in ICT and another employee might have expertise in drafting official letters. So, their knowledge can be exchanged
<i>Limited ideas about knowledge management</i>	Some employees are good source of knowledge (technical elements). But they do not know how to share it. They also spend much time on sharing only explicit knowledge. A Knowledge Management Culture can be practiced

2.4 ICT Application in Knowledge Management

Daft (2004) explains that ICT can contribute towards all sets of knowledge management processes through creating, storing, retrieving, transferring and applying knowledge. Hansen *et al.* (1999) suggest tacit knowledge to be a person-to-person approach. So, ICTs, such as videoconferencing or the telephone, are proved effective at enabling people to transfer tacit knowledge. Explicit knowledge being a people-to-documents approach, allows the reuse of knowledge such as documents. Studies also show how ICTs can integrate both explicit and tacit knowledge from different perspectives. In this regard, the ICT-KM integration model of Alavi and Leidner (2001) plays a key role as it illuminates the insights of ICT-based knowledge management studies. However, there are criticisms that the capacity of ICT in managing knowledge (Paskalva & Cooper, 2018) is often limited. They argue that tacit dimension of knowledge is soft and invisible - for example, a person's insights. Therefore, ICT cannot be fully utilized for accessing all knowledge domains. The work of Alavi and Leidner (2001) view knowledge with different perspectives as shown in Table 2.2:

Table 2.2 ICT Application in Different Knowledge Perspectives

Perspectives	Explanations	Tacit or Explicit	Implications for ICT
<i>State of mind</i>	Knowledge is a state of knowing & understanding	Tacit / Explicit	ICT can provide access to the sources of knowledge
<i>Object</i>	Knowledge is an object that can be stored or shared	Explicit	ICT can gather, store and transfer knowledge
<i>Process</i>	Knowledge is a process to apply expertise	Tacit	ICT can provide links among knowledge sources to create wider flows of knowledge
<i>Condition</i>	Knowledge is a condition of access to information	Explicit	ICT can offer effective search and retrieval mechanisms for getting right information
<i>Capability</i>	Knowledge has the capability to influence action	Tacit	ICT can enhance intellectual capital by facilitating the development of competencies of individuals in organization

Source: Adapted from Alavi and Leidner (2001)

CHAPTER III: RESEARCH METHODOLOGY

3.1 Justification of the Research Method

Since the main and the subsidiary research questions seek to understand the role of KM in accelerating HR development in the Bangladesh public sector, qualitative research seems to be befitting for this study. It is easy to understand the real situations of the organizations through the direct contact with the respondents, which allows rich descriptions for a better analysis of the research questions. This descriptive nature of study endeavors not only justifying the truth but also intends getting an overall meaning of the study. Therefore, it was apparent that this deeper investigation and explanation could only be obtained through qualitative research.

To obtain the answers to the research question, this study incorporated a multi-organizational case-study design under a description research approach. According to Yin (2003), a case study refers to an empirical investigation that examines a contemporary phenomenon with its real-life context. Primarily based on interviews, this method yields a rich detail of activities (Larsson, 1993). It is not only a data collection tactic, but also a comprehensive research strategy (Yin, 2003). Patton (1990) argues that the depth and detail of qualitative study typically derive from case studies, which is considered as the underpinning of qualitative research (Strauss & Corbin, 1998) because of its ability to generate a holistic understanding of the topic (Gummenson, 2000). This study followed the footsteps of Yin (2003), who argues that the qualitative studies require no minimum number of cases or randomly selected cases.

This study undertook two cases, for which the analyses were made to ascertain whether and/or how KM contributes to HRD in different public offices. The intention from this relatively small sample was to gain a large amount of in-depth information about KM practices in these case organizations. Overall, Bangladesh is still at the early stage of its implementation. Therefore, KM cases from two organizations, well-known for their HR involvement, were selected for analytical purposes. A semi-structured research question was developed which enabled the researcher to gain the views and experiences of the relevant stakeholders.

3.2 Research Design

Research design is the logic which links the data to be collected for drawing inferences to the study (Yin, 2003). Since the research question for this study is related to KM and its role on HRD in the Bangladesh public sector, the unit of analysis adopted for this research was at the organizational level. Researchers argue for higher-level unit of analysis and more entities in qualitative studies (Myers & Avison, 2002; Cassell & Symon, 1994). For this study, the case-selection process considered the capacity of these organizations in contributing to KM-centric HR development.

3.3 Data Sources

The transcriptions of interviews were the primary sources of data for this study. It also consulted relevant government official documents such as organizational and statistical reports, websites and other materials. In addition to interviews and document analysis, this study is enriched with other sources of data, including site visits and participant observation.

Conducting interviews with key informants was the principal method of data collection. A thematic interview protocol was developed for the respondents. They were asked to widen the depth, intensity and scope of the discussion. Since the research question provides the foundation for the analysis of data, interview questions were designed to pull out what actually need to be known. This study utilized various official documents and several site visits to government offices for conducting interviews with the participants. It helps the researcher to visit the case organizations.

3.4 Case Study Analysis

Since data were collected through a number of interviews and other sources, Microsoft Word was applied for coding and analytical purposes through the editing approach. The experts in research methodology hold the view that as a data analysis technique, exploratory qualitative research of inductive nature needs to use a thematic approach. According to Thaenou *et al.* (2007, p. 253), content analysis is 'a technique to extract thematic information from qualitative materials'.

CHAPTER IV: FINDINGS AND DISCUSSION

4.1 Research Questions

Two subsidiary research questions were developed in order to substantiate this research question, i.e. how KM applications are tapped for HRD in the Bangladesh public sector. Three public sector organizations were studied to answer the research question. Primary data were collected through in-depth semi-structured interviews with relevant persons in two government offices and eighteen stakeholder organizations in Bangladesh. In all cases, officials affiliated with the KM and HRD were interviewed. A total of fifteen respondents from fifteen organizations were interviewed. Six respondents were from implementing organizations, two respondents from ministries, three representatives from advisory bodies, four respondents from professional groups.

4.2 Findings of Subsidiary Research Question 1: How does knowledge management foster human resource development in the public sector in Bangladesh?

Findings revealed that there are huge activities of knowledge management – both conventionally and through ICTS. The experiences of KM practices were shared by the officials of the organizations under study, i.e. Ministry of Public Administration and Bangladesh Civil Service Administration Academy. These offices have the examples of creating, storing, transferring, and applying knowledge for human resource development.

KM Practices Fosters HRD at Ministry of Public Administration

Ministry of Public Administration (MOPA) arranges training, and other interactive activities of knowledge sharing. It also uses website, personnel management information system, e-file, e-library, e-learning as part of its ICT-utilized knowledge management. As a result, its clients are benefitted in several ways. Findings also reveal that MOPA has improved its knowledge management experiences than before. It has not only reduced time, cost and movements of its clients digitally, but also enhanced the organizational efficiency to a great extent. Apart from explicit knowledge, public sector organizations can play a challenging role in managing its invaluable tacit knowledge.

MOPA's experience demonstrates the influence of knowledge management on capacity and human resource development. A number of sub-themes were identified, e.g. 'resource-

saving' (TCM-saving), 'filling knowledge gap', and 'increased efficiency'. All the respondents agreed that both conventional and ICT-based KM can impact on capacity development of public officials through information or gaining a piece of knowledge that enhances the efficiency of the government machinery.

Increased Knowledge Management Practices at Bangladesh Civil Service Administration Academy (BCSAA)

Bangladesh Civil Service Administration Academy (BCSAA) is one of the apex training institutes in the public sector. Its core function is to provide training to civil servants. BCSAA implements a training management system for its core courses. It is an example of knowledge management. It invites resource persons to disseminate their tacit knowledge to the newly recruited public servants. In that sense BCSAA is one of the knowledge houses, which is directly mandated to development capacity / human resource in the public sector. Other than conventional KM practices, it practices ICT-enabled KM for the capacity building of government officials. KM applications for HR development can be measured by the number of its users getting required knowledge without spending money.

Director (ICT) of BCSAA mentioned:

Knowledge management at the Academy is of great importance to us because we are mandated to manage existing knowledge, create new knowledge, store and share the knowledge with the existing and potential participants who are in serious need of such tacit and explicit knowledge of experienced and renowned civil servants. We can use simple and friendly ICT tools to capture tacit knowledge of our resource persons. For example, it is easy for us to make audio or video record of the lectures, edit the recorded files and upload them in e-Learning platform or in popular social media which can be widely used by the field-level officers at their convenient time.

However, findings show that BCSAA does not have extensive use of ICT-utilized KM initiatives in the areas of converting tacit to explicit knowledge, although there is a huge demand of such knowledge among the civil servants. It was also observed that academy is yet to initiate the ideas of capturing the experiences, insights and other intellectual capital of the retiring or the senior civil servants in order to archive their knowledge permanently for the potential trainee officials. It is a good example of ICT-mediated tacit knowledge transfer that promotes KM-focused digital innovation. Overall, several knowledge management applications were employed to foster human resource development of the government offices.

4.3 Findings of Subsidiary Research Question 2: What are the factors that affect knowledge management for human resource development in the public sector domain?

Since KM is a very preliminary concept in the public sector organizations, the respondents view that it is too early to comment about the success and failure. Overall, they have identified several factors as responsible for the success and failure of such initiatives. The most important factor is that the concept of knowledge management in the public sector is almost missing. So, it is often difficult to grasp how strategies can be taken into exploiting tacit and explicit knowledge in the public sector. Among others are the leadership role, political commitment, vision and strategy and availability of ICTs.

According to the representative from BCSAA:

In fact, we are at the initial stage of public sector knowledge management. However, any application of KM should be strongly meant by the government. If there is huge demand of KM in the tacit domain, the public officials will be more encouraged to create, store, retrieve and disseminate knowledge.

Respondents suggested an effective knowledge management strategy and action plan in the digital age. Respondents contended that failure is due to the lack of leadership role and government initiatives towards a comprehensive policy and guidelines on KM practices. They also mentioned the traditional mindset and fear of change of senior officials as other reasons of failure.

As identified by many respondents, institutional factors are the most significant for implementing knowledge management environment. Next to the administrative leadership, political commitment and management of change are needed to promote any technological change in the public sector. The respondents observed that some government officials are reluctant to understand the big vision of managing and exploiting knowledge. Their conception about creating, storing, transferring and applying knowledge is not fully clear. So, the absence of such atmosphere of promoting knowledge-based innovators is another reason of the missing administrative leadership.

Organizational culture is another factor that hinders the application of knowledge management. Respondents apprehended that government officials are not often inclined to share their tacit knowledge because they have the fear that sharing personal knowledge will

weaken their power and authority. Next to the institutional perspective, resource category listed some important factors including human, financial and technological standpoints.

4.4 Findings of Main Research Question: What role does KM play in fostering human resource development in the public sector in Bangladesh?

This study investigated the effect of knowledge management on human resource management in the public sector. The respondents from case organizations held the view that KM can promote HRD in the Bangladesh public sector. The respondents observed that in the existing administrative system, enhancing employees' skill through training course requires visit to the training center. Now knowledge can be acquired without going to its providers or to the source of origin.

Any KM initiative can empower MOPA and BCSA to capture, store, retrieve, disseminate and apply knowledge, which enables better decision making of the employees, provides internal knowledge base, reduces the loss of know-how, constructs a supportive corporate community, boosts efficiency and cuts down costs and time. The respondents from these case organizations viewed that it's the government employees who have all their organization's knowledge stored in their brains. These organizations perceive that KM – both face-to-face and through digital devices holds the potential to enhance efficiency and generate innovative ideas.

Respondents viewed KM can accelerate enhanced skills of government officials, increased transparency, improved governance, and connected citizens. Respondents stated that the organizations under investigation can convert personal knowledge into shared or collective knowledge to develop human resource. However, findings also showed that the overall application of KM in the public sector is still in its infancy.

4.5 DISCUSSION

Respondent viewed that the overall knowledge management practices in Bangladesh is at the initial stage and most of the government officials are unaware of the impact of knowledge management. Much of their awareness is connected with explicit type of knowledge. The implication of this finding is connected to the limited view of KM potential. It also matches with the observation of Hedlund and Nonaka (1993) that organizations lose much of their

knowledge creation potential by overemphasizing on explicit dimension of knowledge. This finding is also consistent with prior studies (Nonaka, 1994; Stoffregen *et al.*, 2015; Wild *et al.*, 2002; Lee *et al.*, 2009), who view that the main task of knowledge management is to convert tacit knowledge into explicit knowledge. Since this study particularly focuses on managing tacit knowledge, it deals with tacit knowledge management from the government employees' perspectives.

CHAPTER V: CONCLUSION

5.1 Findings to the Research Questions

The research addressed one research question and two subsidiary research questions. Here is the summary of the findings to answer the research questions.

Findings revealed that KM is at the primary stage in the public offices. The respondents identified several factors which are responsible for the success and failure of knowledge management. These include institutional, resource and access factors. Institutional factors are comprised of the leadership role, political commitment, organizational culture, vision & strategy and availability of ICTs. Resource factors include human, financial and technological issues.

It was revealed from the study that knowledge management application can contribute to human resource management. All the organizations under study are somehow connected with knowledge management through ICTs, although they do not have huge awareness about ICT4KM, particularly in utilizing tacit knowledge. The key applications are mainly concentrated on the explicit knowledge.

5.2 Contribution to the Body of Knowledge

While answering the research questions, this study adds to the literature within the issues of KM and human resource development in the public sector. It offers a range of insights into knowledge management and HRD in the context of Bangladesh public sector. Therefore, the empirical investigation of this study offers a number of lessons. The case-study approach coupled with in-depth interviews enabled a deep understanding of the impact of knowledge management practices.

5.3 Implications of the Study

This study has three major contributions by filling the knowledge gaps: *First*, it shows new knowledge about how KM influences human resource development; *Second*, it discovered the driving forces that positively impact on knowledge management.

The findings have important practical implications for the government decision-makers, who are involved in managing knowledge for many years but possibly are not quite aware about

how personal knowledge can be created, stored, shared and applied with or without ICTs. There is no planned approaches and remarkable initiatives in KM. Furthermore, there is a consensus that existing initiatives are very limited due to the institutional factors including lack of awareness, leadership role and unclear idea about the integration of knowledge management with HRD.

5.4 Limitations of the Research

This study acknowledges several limitations:

First, although this study posed to study the role of KM in HRD in the public sector, it only considered KM human resource management from the government perspective. Due to the time limitation and accessibility, it did not consider the pass people who are also a source of knowledge.

Second, this study adopted case study approach and provided empirical evidence of how KM initiatives are promoted as HRD in the public sector in Bangladesh. However, it lacks in statistical inference. The researcher depended on inferences to make analytical generalizations on the basis of observations and perceptions of the respondents at a particular point of time. Although measures were taken to offset biases, it is also a realization that the in-depth interviews as a data collection technique, may be subject to bias and poor recollection.

Third, this study considered only two organizations, and data were collected from a limited number of officials. Therefore, the findings cannot be generalized to other public sector employees. As a result, recommendations from this study may vary in different contexts.

5.5 Future Research Directions

This study offers a foundation for future research, which may qualify the research limitations as identified in the preceding section. Specifically, the study suggests the following areas for undertaking future research:

- knowledge management through encompassing both citizens and government employees to understand a macro-view;
- The influence of knowledge management on the performance of public sector employees;

- The integration of tacit and explicit knowledge through ICTs;
- The effects of the factors critical for knowledge management;
- ICT application in knowledge management in other public sector organizations, which are less ICT-intensive compared to the case organizations.

5.6 Policy Recommendations

On the basis of the findings, the following recommendations are suggested:

- Necessary measures need to be taken for the creation of awareness about knowledge management in the public sector. Since most of the people spend more time on explicit knowledge, now it is recommended to emphasize more on tacit dimension of knowledge, so that it is difficult for knowledge to be lost.
- The knowledge leaders need to develop strategies for knowledge management and consider how the access, creation, storage and dissemination of tacit knowledge through digital technologies can accumulate intellectual capital of the public sector organizations.
- In order to popularize KM practices, a knowledge management culture needs to be nurtured in the public offices. The government may rename the official designation of several employees. For example, the post of 'steno-typist' can be replaced with 'knowledge worker' (KW). Similarly, other designations such as chief knowledge officer (CKO), knowledge manager can be popularized among the government officials in order to make them share their knowledge. It will enable the government officials to realize that knowledge management is a core function of public sector organizations. In order to enhance the capacity of public sector employees, this nomenclature may pave the avenues for better utilization of human resource capacity development;
- Public sector training institutes should emphasize more on tacit knowledge and try to capture it innovatively through new technologies through brainstorming sessions.
- Available and easy-to-use ICT tools can be popularized among the government employees for their awareness building about tacit knowledge and apply these tools for administrative efficiency in their workplaces.
- A macro view about KM is necessary to best utilize ICT for knowledge management. It will not only view knowledge management from technological

perspective, but also consider other soft issues to tap ICTs more efficiently and effectively;

- On the basis of the strategies developed for enhancing skills and capacity development through knowledge management, several organizational conventions need to be abolished. For example, sudden transfer of officials with huge knowledge creates a vacuum which cannot be compensated instantly. Therefore, the government should take measures to address these practices.

5.7 Final Remarks

Although Bangladesh, as a resource-poor country faces a number of challenges to fully tap KM, it is important to note that getting benefits from knowledge management does not always call for a huge investment. This study discovered from the case studies that money is important but not always the main issue. Therefore, what is important is to make awareness among the public sector employees about the meaning of KM, ICT4KM and knowledge-based innovation. Furthermore, strategic planning, capacity development leadership role are also important issues for consideration.

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APPENDIX : Questionnaire

Knowledge Management as a Tool to Accelerate Human Resource Management

1. Does your organization knowledge management practices? If yes, what are the key applications?
2. How does your organization create, store, share and apply explicit (know what) knowledge?
3. Does your organization manage personal / tacit (know how) knowledge (e.g. skills, experience and insights of your employees) into shared / explicit knowledge across organization? If yes, please give examples.
4. What are the factors that affect knowledge management in your organization?