Knowledge Management as a Tool of Human Resource Strategy in University Administration: Bangladesh Perspective

2 authors, including:

Zahed Mannan
Bangladesh Open University
11 PUBLICATIONS **4** CITATIONS

Knowledge Management as a Tool of Human Resource Strategy in University Administration: Bangladesh Perspective

Zahed Mannan
Associate Professor
School of Open Learning & Management
Bangladesh Open University
Md. Abu Taher
Professor, Department of Management Studies
University of Chittagong

Abstract

The aim of this research is to investigate how administration department in Bangladeshi universities are using the knowledge environment they are operating from and the knowledge at their disposal to craft suitable strategies that supports the university's overall strategic goals. The paper employed an expressive survey design within the qualitative research model to solicit for the research data. Non-random sampling was used to select participants for inclusion in the research sample. The study discovered that administration departments in Bangladeshi universities are using knowledge management as a strategy although to a limited degree in the areas of recruitment and selection, training, and to a certain degree in rewards management. Administration departments, however, found wanting in the promotion of externalization, combination and internalization, as well as creation of relevant communication, structural and cultural environment. It was recommended that the administration department should establish knowledge sharing as an attribute in their recruitment and selection strategies, promote the establishment of a knowledge sharing culture, incorporate knowledge management practices in their training strategies as well as exercise knowledge management as a metric in performance evaluation.

Keywords: knowledge management, human resource, knowledge, strategy

1.0 Introduction

Knowledge management has become a foremost trend since the mid-1990s. Different professional communities, among them information systems/information technology and more business management oriented actors, have created strong theoretical ties with the idea of managing knowledge. Knowledge management has been hyped as the latest fad to occupy management discourse today (Millmore et al, 2007). This shift to knowledge management has been necessitated by a shift away from the traditional labor intensive organizations to the modern day high-tech industries which rely on knowledge workers (ibid). In new knowledge economy, value addition is achieved by development and use of new and existing knowledge to increase organization effectiveness, efficiency and innovation. This is in contrast to the use of traditional factors of production, land, labor and enterprise (ibid). Managers today are continually strategizing on how to effectively direct their employee knowledge assets to strengthen the strategic performance of their organizations (Carter and Scarborough, 2001). Therefore to construct an organization that is able to deliver on its strategic plans, HR managers and other line managers need to properly staff their organizations, build fundamental abilities, and arrange the organizational processes to leverage the knowledge held by the employees (Davenport and Prusak, 1998).

Prusak (1999) describes knowledge as "what an organization knows, how it uses it and how fast it can know something new". The minds of employees employed in organizations are embedded with knowledge about organizational routines, processes, practices, systems, software and norms that they use in their daily working experiences (Hislop, 2003). The information is also embedded in official documents and information repositories (Leopold, et al., 2005).

For organizations, capability based on knowledge-based resources is critical to sustained competitive advantage. However, simply processing knowledge based resources will not itself achieve competitive advantage – these resources must be managed in ways that allow the organization to leverage them for strategic advantage (DeNisi, Hitt and Jackson, 2003).

Knowledge management is the discipline that formalizes approaches to understanding and benefiting from knowledge assets at the firm level. The intellectual antecedents of knowledge management include economics, sociology, philosophy and psychology (Prusak, 2001). Reflecting this, knowledge management is best thought of as a framework rather than as a single approach – a collection of elements that work together in varying combinations to accomplish the goal of leveraging an organization's knowledge capital (Saint-Onge and Wallace, 2003).

Bangladesh currently boasts of 34 state-owned and 77 private universities (University Grants Commission, 2013). All these universities are offering a number of degrees in a number of disciplines. The important goal of any university in Bangladesh and beyond is to generate, disseminate and foster the application of new knowledge in nation building. This places the university's administration departments in a position to use different knowledge management strategies as tools to drive the overall university's HR strategy.

It has been observed that few private universities in Bangladesh has HR department and no public university has. Administration department are conducting most HR related activities. It is suggested that university should develop HR department which can offer and provide services and solutions in recruitment, employment, compensation, benefits, employee relations, policy development and interpretation, training and development, labor relations, human resources information systems, strategic organizational restructuring and change management.

2.0 Statement of the Research Problem

Knowledge is today viewed as a critical organization resource which is a critical source of competitive advantage (Torrington, Hall & Taylor, 2005). Universities generate lot of information and knowledge throughout the teaching and research processes. Likewise universities employ knowledge workers who generate and obtain knowledge in their day-to-day work activities. University administration departments can take advantage of this state of affairs to craft appropriate knowledge based HR strategies. This research intends to discover how administration departments in Bangladeshi universities are using the knowledge environment they are operating from and the knowledge at their disposal to craft suitable strategies that supports the university's overall strategic goals. The findings will be used to build the existing information base and to make recommendations for adoption by the university administration departments in Bangladesh, regionally and abroad. In addition scant research has been carried out in the application of knowledge management in Bangladeshi

university administration departments and it is envisaged that this study will fill that knowledge gap.

3.0   Unresolved Questions in Existing Literature

Managers and academics have recognized knowledge as a key source of competitive advantage (Grant, 1997). The ever growing importance of knowledge in modern society calls for a shift in our thinking regarding innovation in business organizations – be it technical innovation, product or process innovation, strategic or organizational innovation. It raises questions about how organizations craft new knowledge and, more importantly, how they shift new knowledge. Innovation, which is a key form of organizational knowledge creation, cannot be explained sufficiently in terms of information processing or problem solving (Alwis and Hartmann, 2008). Innovation can be better understood as a process in which the organization creates and defines problems and then actively develops new knowledge to solve them (Nonaka, 1994). Davenport and Marchand advise that: "whilst knowledge management does involve information management, beyond that it has two distinctive tasks: to facilitate the creation of new knowledge and to manage the way people share and apply it" (Davenport and Marchand, 1992).

HR managers require to craft organizational structures and systems that promote knowledge dissemination as well as train people to gain knowledge accessing skills (Torrington, et al, 2005). Armstrong (2003) in his famous book, agreed and quoted knowledge management is concerned with people in organizations and how these people attain, share and disseminate knowledge in their daily work activities. This knowledge flows all over the organization throughout management information systems and through "traditional" manners like meetings, workshops, courses, the intranet and written correspondence. Blake (1998) views the purpose of knowledge management as "to capture an organization's collective expertise and distribute it to whenever it can achieve the biggest payoff". This according to Armstrong (2003) recommends that the source of competitive advantage in many organizations lies in its human capital, not in how the organization positions' itself in the market.

In terms of Human Resource Management (HRM) role, the increase of the knowledge economy has had a large impact with a move away from HRM as a bureaucratic "personnel management" function to the development of contemporary day HRM (Gloet, 2006). In fact a number of researchers notify that HRM faces extinction if it does not take action to changes brought about by the shift from a traditional to a knowledge based economy (Lengnick-Hall, 2003; Saint-Onge, 2001; Stewart, 1997). Under the knowledge economy HRM's traditional role of managing people has been broadened to include managing organizational capabilities, relationships as well as learning and knowledge (Lengnick-Hall 2003). This engages developing themes and making environments conducive to learning as well as to the achievement, sharing and dissemination of knowledge within organizations. Lengnick-Hall and Lengnick–Hall (2003) recommend a "revitalization" of the HR function to respond to the demands of the new knowledge economy. Such revitalization entails the assumption of new roles, responsibilities and strategic focus (Gloet, 2003). New HR functions include those of the human capital steward, knowledge facilitator, relationship builder and a rapid deployment specialist (Gloet 2003). Therefore, it was argued that HRM approaches should focus on creating the conditions for knowledge sharing through recruitment policies and rewarding such behavior (Carter and Scarborough, 2001). HR may lobby the strategic planning processes to develop vision statements which spell out the organization's aims to achieve competitive advantage by developing and effectively using knowledge and that to achieve that aim, sharing knowledge is seen as a core value (Armstrong, 2003). This incorporation of

knowledge management in the strategic management planning of the organization lays the groundwork for the effective implementation of knowledge management activities in the organization (ibid). Torrington, Hall and Taylor (2005) recommend that HR managers have to formulate organizational structures and processes that promote knowledge diffusion and in the formation of systems that support knowledge access, training employees in their use, provide mechanisms for sharing knowledge as well as promote a "knowledge-centric culture" in the workplace.

Knowledge in organizations needs to be protected if it is to make any significant contributions to organizational success. As Randeree (2006) notes, if knowledge is determined to be the most important resource of the firm, then clearly the need to secure that resource must be a primary responsibility. If knowledge is power and a source of competitive advantage (Salisbury, 2003), then it is needed to give special concentration given to securing knowledge and knowledge repositories within the firm to protect the core assets of the organization.

Secure knowledge management activities incorporate limiting the number of employees who have access to certain information, making sure no any employee has access to the majority of information surrounding a new product, and maintaining a causal ambiguity around a firm's capability to successfully compete (Bloodgood and Salisbury, 2001). Restricting employees with access provides a method for firms to only provide key personnel access to critical knowledge. A second security activity engages keeping all the information out of the hands of one employee. This is done for competitive reasons. With improved mobility of employees between firms, knowledge concentrated in one or a small group of individuals can be a threat to the competitiveness of the firm. Employees can leave the firm taking the knowledge with them – specially the tacit knowledge achieved in the organization. Another concern with concentrating knowledge in one individual occurs if that individual retires or is ill (Randeree, 2006).

Nowadays in our fast-changing environment innovations are key for business survival (Alwis and Hartman; 2006). It is essential for management to be attentive of issues contributing to the development of new strategies, new products and new ways of manufacturing, distributing and selling. In such organizations the HR department can take advantage of the various opportunities availed by knowledge management to assist their organizations achieve sustainable competitive advantage. In a recent empirical study La¨nsisalmi et al. (2004) focused on six types of barriers of innovation: underutilization of knowledge, skills and abilities, lack of resources, lack of communication and cooperation, non-supportive managerial behavior, non-supportive reward systems and innovative activities considered as unimportant. However, innovative HR departments are always best placed to overcome these challenges. The field of knowledge management and its applicability in HR systems in Bangladesh has not been researched adequately and there is little knowledge on the ground.

4.0 Research objectives
The objectives of this study are to:
1. Identify trends in knowledge management in Bangladeshi universities;
2. Assess the extent to which knowledge management is practiced in university administration departments; and
3. Identify factors that hinder knowledge generation and sharing in the university sector.

5.0 Conceptual Model

Professor Ikujiro Nonaka and Hirotaka Takeuchi firstly proposed SECI (Socialization-Externalization-Combination- Internalization) model in their co-worked book The Knowledge Creating Company in 1995, becoming one of the most widely cited theories in knowledge management, to present the spiraling knowledge processes of interaction between explicit knowledge and tacit knowledge. As shown in Figure 1, Nonaka and Takeuchi claim that the four conversion processes involving these two types of knowledge constitute the essence of knowledge creation:

1. From tacit to tacit (i.e., socialization)
2. From tacit to explicit (i.e., externalization)
3. From explicit to tacit (i.e., internalization)
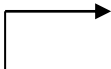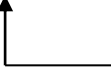4. From explicit to explicit (i.e., combination).

	Tacit Knowledge	Tacit Knowledge	
Tacit Knowledge	Socialization (Originating 8a)	Externalization (Interacting)	Explicit Knowledge
Tacit Knowledge	Internalization (Exercising 8a)	Combination (Cyber/Systemizing)	Explicit Knowledge
	Explicit Knowledge	Explicit Knowledge	

Figure 1: SECI Model (Source: Ikujiro Nonaka and Hirotaka Takeuchi, 1995)

The creation of knowledge is a continuous process of dynamic interactions between tacit and explicit knowledge. Only by tapping into tacit knowledge can new and improved explicit knowledge be created. In turn, better explicit knowledge is essential for stimulating the development of new, higher level, tacit knowledge. The four modes of knowledge conversion interact in the spiral of knowledge creation. The spiral becomes larger in scale as it moves up through organizational levels, and can trigger new spirals of knowledge creation.

5.1 Assumptions of the model
- The raison d'être (reason for existence) of any organization is to continuously create knowledge.
- Organizations create and develop knowledge to solve organizational problems.
- Knowledge workers are motivated by the need for personal growth, occupational autonomy, task achievement and by monetary rewards.

According to the model, any organization operating in the contemporary knowledge economy should be able to use the 4 levels of knowledge management to support organizational objectives. The elements are:

1. **SECI:** Socialization, Externalization, Combination and Internalization process. This is the process of knowledge creation through the inter-conversion between tacit and explicit knowledge.
2. **Ba:** This term derived from the Japanese word meaning "place" refers to the shared context for knowledge creation. In other words this refers to the organizational climate or culture where information is interpreted to become knowledge. Ba is not merely a physical place but rather unifies the physical space such as office space, virtual space such as email and mental space such as shared ideals (Little 2006, p.30)..
3. **Knowledge Assets:** This refers to the inputs, outputs and moderators of the knowledge creation process. In other words these are the employees in the organization who drive and utilize knowledge in their day-to-day work activities.
4. **The SECI Process:** An organization creates knowledge through the interaction between tacit and explicit knowledge. This interaction is called knowledge conversion. Through this conversion process, tacit and explicit knowledge expand both in quality and quantity. There are four modes of knowledge conversion under the SECI process; socialization, externalization, combination and internalization.

Socialization tacit to tacit knowledge transfer is referred to as socialization. Since tacit knowledge is difficult to formalize and often time and space-specific, tacit knowledge is acquired and converted only through shared experience.

Explicit to tacit knowledge transfer is referred to as **externalization**. Knowledge is formed when tacit knowledge is articulated into explicit knowledge. This allows it to be shared by others, and it then becomes the basis of new knowledge. The publication of research findings into books, papers or manuals is an example of knowledge externalization.

Transferring explicit knowledge to more complex and systematic sets of explicit knowledge is referred to as **combination**. Explicit knowledge is gathered internally in or external to the enterprise and then combined, edited or processed to form new knowledge, which is then disseminated among the members of the enterprise.

Finally, explicit to tacit knowledge transfer is referred to as **internalization**, which is closely related to 'learning by doing'. Created explicit knowledge is shared throughout an enterprise and converted into tacit knowledge by individuals as they embody it.

6.0   Research Methods

The study used a descriptive survey design within the qualitative research paradigm. The design was used to gather the opinions and perceptions of administrators on the knowledge management practices in use in the Bangladeshi academic sector. The paper's perspective in doing this is threefold. First, the participants involved in the 'making of knowledge management history' are examined. Second, an important focus is on the content aspect. The paper analyses which conceptual ideas are linked to the term knowledge management and which shifts in content can be observed over time. Finally, statements that comment directly on the status of knowledge management as a fashionable concept are borne in mind. The entire analysis follows an inductive orientation in the sense that all final coding categories were developed from a preliminary, exploratory coding of the data.

6.1   Research Design and Approach

This study is carried out by applying the qualitative approaches. A survey with a semi-structured questionnaire followed by interviews and observation was used to collect primary

data. The benefit of this is to be able to focus on the breadth and depth of the research while also increasing the validity and truthfulness of the research and thereby minimize confounding factors. Basically, the research is exploratory wherein qualitative and quantitative data were collected and researched upon. Primary data are the findings from the interviews. The secondary data were used from of internet websites, policy papers, journal articles, newspapers and magazine articles.

As indicated before, the qualitative approach involves gathering in-depth information presented in non-numerical format, which can be used to support a subsequent quantitative approach. The aim of this stage was to collect information from knowledgeable informants who were in a position to provide directions, insights and useful information on the problem under investigation (Creswell, 2003).

6.2   Method and Procedure
6.2.1   The Questionnaire: Development and Administration
Based on the literature review and benchmarking process, a survey questionnaire was developed for the participants of selected universities (both public and private). Expert advice was also solicited before finalization of the questionnaire which was then administered to the sample universities.

The language used in this questionnaire was kept simple and the questions were provided in English and Bangla to suit respondents' language preferences. Using an interview guide to ensure consistency in the interview content, the researcher questioned key university administrators in the identified departments. All interviews were audio-taped and transcribed verbatim.

6.2.2   Sampling
A two-stage sampling design is planned for the study. The first is stage consists of identification of public and private universities. The universities are selected from the 'list of universities' prepared by the University Grants Commission (UGC). The second stage is deal with selection of respondents from the universities using random sampling technique.

6.2.3   Selection of Areas
For the purpose of the present study, higher education institutions (both public and private), situated in greater Dhaka (Dhaka Metropolitan Area and Gazipur area where over 65 percent of the universities are located) are selected.

6.2.4   Selection of Sample Institutions and Respondents
Out of a total population size of 115 (36 public and 79 private universities) from the list collected from UGC, a non-random, suitable sample from the 5 universities (3 public and 2 private) administration departments and other HR supporting structures such as the Information Technology (IT), The Research Board and the Library were selected for the research. Stratified random sampling was used to select 15 members of teaching staff and 10 members of support staff for inclusion in the research sample. The relatively large size of the sample would ensure a high degree of generalizability of findings for all the universities in Bangladesh.

6.3 Validity and reliability

This research applied the test-retest reliability method, which is widely used in social science. It refers to establishing the stability of the measuring instrument by correlating the score obtained through its application to the same set of respondents at two different points in time (Cavana et al., 2001). Reliability estimates for the measures of variables were computed using the Statistical Package for the Social Science (SPSS). Data should be subjected to such testing before any further analysis to ensure that the data being analyzed are reliable.

A questionnaire is examined for validity by investigating whether the questions focus on the results of the study and whether the results are understood within the context of the research's purpose (Zikmund, 2000). Despite there being several validity tests, three are most commonly used: content validity, criterion validity, construct validity.

6.4 Techniques for Data Analysis

After data collection was completed, data analysis strategies were applied to analyze the collected data. The forms were firstly checked for the accuracy of data entry and for missing values. Descriptive statistics analyses were next conducted to provide an overview of the sample, summarizing demographic details of the participating organizations and respondents. Given the nature of the topic, which entails soliciting attitudes and opinions on a social phenomenon, a qualitative, interpretivist approach was most appropriate. Data were coded and categorized using the Miles and Huberman (1994) method of data analysis.

7.0 Findings & Discussion

From the results, it appears that all participants agreed that they belonged to some formal socialization composition at their respective universities. These comprised the local Worker's Committees and many other various associations. In addition all participants pointed out that they belonged to other informal out of work socialization clubs. No participant cited any financial aid as coming from admin to support their clubs/associations. A number of participants revealed that they are members of regional and international associations and 12 associations were mentioned. The interview carried out on the Administration Department's staff revealed that the department supports the existence and formation of various clubs and association where employees might socialize.

The important findings of the present study, as it follows from the analysis of the recent data, are incorporated below:

7.1 Library systems and SECI

The library in a university setting becomes the focal point for knowledge socialization, externalization, combination and internalization (Franklin & Hodgkinson, 2007). However, the interview with the key library staff members revealed that nearly all libraries surveyed were facing a number of challenges in service delivery. The fact that the library is said to be failing to secure enough material makes knowledge combination and internalization difficult in Bangladeshi university libraries. This failure by the library department to deliver in terms of knowledge combination and internalization as validated by the responses of the university employees who are the possible users of the library services. A cumulative 83% of these respondents felt that the library was failing to deliver and in this shows that although knowledge management may be in operation at in their libraries, it is still inadequate in terms of effective in terms of Combination and Internalization of knowledge. Most participants cited the cost of acquiring material in the face of dwindling budgetary allocations as the

biggest challenge. When asked what cost was involved in obtaining local research publications, the participants highlighted that the acquisition of locally published material was being hindered by bureaucratic red tape. The formation of the "Institutional Repositories" by the respective universities library departments also shows efforts been made to externalize knowledge by the universities. The "Institutional Repository" will provide a database of information that can be accessed by a large user community to promote knowledge externalization. Moreover, the findings explored that there are no synergetic relationships between the three line management functions which form the crucial arms of knowledge management. This was again confirmed by the questionnaire responses with all participants citing lack of support from the HR as the major obstacle for the establishment of an environment conducive for research and publishing. For example, 88% of the participants revealed that they were never asked to reveal any knowledge sharing attributes they have either as part of the recruitment process or at the selection stage. Remaining 12% participants said they had been asked for the aptitude to knowledge generation and sharing. It has been found that the selection strategy for employees in Bangladeshi universities do not have any requirement for knowledge related attributes. The interview with the senior admin staff participants revealed that out of the job or person related attributes used in employee selection, "an affinity to acquire, disseminate or share knowledge" is not considered.

To see whether Library Information Systems (LIS) professionals regarded Knowledge Management (KM) as a survival factor for libraries, respondents to the survey were asked to respond to a statement using a five-point Likert scale ranging from "Strongly agrees" to "Strongly disagree". As is clear from Table 1, 82.2 per cent of LIS participants in the research survey "Agreed" and "Strongly agreed" with the statement that KM can contribute to an improvement in the future prospects of libraries.

Table 1: KM can contribute to an improvement in the future prospects of libraries

Strongly disagree (%)	Disagree (%)	Do not know (%)	Agree (%)	Strongly agree (%)	Overall[a] (mean)
0.5	3.8	13.4	59.9	22.3	Agree

Notes: [a] The researcher has designed the following scoring for the purpose of providing an overall selection for the statements in sections 2: Mean: 1 to 1.44= Strongly disagree; Mean: 1.45 to 2.44 = Disagree; Mean: 2.45 to 3.44 = Do not know; Mean 3.45 to 4.44 = Agree; Mean 4.55 to 5 = Strongly agree

KM gives libraries an opportunity to collaborate with other units in their organizations and hence, to become more integrated into corporate operations and enhance their overall visibility within the organization. To test if LIS professionals believed that KM can enhance the visibility of libraries, they were asked to show their level of agreement. Their answers have been summarized in Table 2. A clear 82.2 per cent (a high majority) of respondents to the survey "Agreed" and "Strongly agreed" with the statement.

Table 2: KM can help make libraries more relevant to their parent organizations and users

Strongly disagree (%)	Disagree (%)	Do not know (%)	Agree (%)	Strongly agree (%)	Overall[a] (mean)
1.1	3.8	12.8	55.7	26.5	Agree

Notes: [a] The researcher has designed the following scoring for the purpose of providing an overall selection for the statements in sections 2: Mean: 1 to 1.44= Strongly disagree; Mean: 1.45 to 2.44 = Disagree; Mean: 2.45 to 3.44 = Do not know; Mean 3.45 to 4.44 = Agree; Mean 4.55 to 5 = Strongly agree

In addition, neither is knowledge aptitude considered in grading employees on initial appointment, instead issues like "experience" are given due consideration. However, the grading procedure takes cognizance of the research history of the candidates. This discloses the knowledge generation ability in all potential employees. The fact that the universities do not consider knowledge acquisition, dissemination and sharing as significant job related and employee related attributes in their recruitment and selection procedures explains that the administration department is failing to apply KM in recruiting staff. This represents that the selection process does not weed out employees who cannot engage in knowledge generation or sharing activities.

7.2 ICT and Knowledge SECI

The IT system provided another forum for socialization. However, the ICT department as a strategic wing of the university's information delivery and knowledge sharing does not appear to have any working relationship with the administration department. This state of affairs was identified across all universities under study. The interviews showed that the two departments perform as autonomous entities with each department not aware of what the other department is doing. The same state of affairs was also identified in the relationship between the administration department and the Research Board and the Library in supporting knowledge externalization activities. According to Borghoff (2008) ICT systems in an organization provides a forum for employee socialization and the proper transfer of knowledge across the whole organization. Various computer labs of the university were identified as a significant forum for employee socialization and sharing of tacit knowledge. This illustrates the reality that the University's ICT systems to facilitate the exchange of tacit knowledge and internalization of knowledge by university employees. Nevertheless, the fact that administration departments do not make use of the ICT department to promote this socialization, combination or internalization of knowledge reveals the limitation to the knowledge management trends at in all universities in Bangladesh.

Table 3: IT system as a forum for socialization

Statements	Yes (%)	No (%)	Don't know (%)
ICT and administration departments have working relationship.	-	93	7
ICT and administration departments are aware of what the other department is doing.	9	89	2
Computer labs are a significant forum for employee socialization and sharing of tacit knowledge.	87	13	-
Administration department is using ICT department to promote socialization.	3	93	4

Communities of practice are an essential element in all knowledge management activities (Lengnick-Hall & Lengnick-Hall 2005). It is HR's role to invest in the building of communities of practice in the organization since this directly contributes to the creation of a competitive advantage through employee socialization (ibid). The membership of a number of university employees to a range of professional organizations points out that University employees are members of communities of practice. This reveals the fact that employees of University are engaged in socialization activities that assist in the generation and passing on of tacit knowledge on a local scale. This extensive reach of the communities of practice in which Bangladeshi university employees are members and their variety shows to a large degree the high levels of tacit knowledge sharing on the ground.

Table 4: Building of communities of practice in the organization

Questions	Yes (%)	No (%)
Are you a member of any communities practice?	86	14
Is your university supports the formation of communities of practice?	4	96
Is your department (admin) know what "Communities of Practice" are leaves a yawning gap in the HR activities?	-	100

However, the fact that the administration departments do not support the formation of communities of practice as discovered by the absence of a register for such communities in 3 of the universities surveyed and the fact that participants from the administration department did not know what "Communities of Practice" are leaves a yawning gap in the HR activities that need to be carried out to by the administration department to sensitize their staff and departments and then support the formation of such socialization fora. In addition, the absence of team working initiatives as HR strategy in support of knowledge sharing also showed the limitations of the current knowledge management trends applied by the administration departments in Bangladesh.

7.3   Training strategy and SECI

The concept of training is a core facet of knowledge management (Nonaka, Toyama and Konno, 2000). It includes all the four KM activities of socialization, externalization, combination and internalization. The training policy in the various universities surveyed is guided by each institution's respective policy. Table 5 shows an analysis of the policies that 88% universities not interested in locally-based training experts (knowledge workers) as resource persons in in-house training sessions. Instead, 83% participants think that the training policies put emphasis in the use of external resource persons. The fact that 68% of the participants across all universities have not taken part in any training program paints a picture of a failure to implement KM as HR strategy by the administration departments in Bangladeshi universities.

Table 5: Training strategies within the organizations

Questions	Yes (%)	No (%)
Do you participate in any training program?	32	68
Is your organization's training policies puts emphasis in the use of external resource persons?	83	17
Do you prefer locally-based training experts as resource persons in in-house training?	12	88

It means all the KM activities under SECI are not been fully practiced. However, by placing importance on the use of external sources, the university's training policies are also encouraging the transfer of tacit knowledge from outside the organization to members of the organization. This is important in the support of all KM activities: socialization, externalization, combination and internalization.

7.4   Performance Management and SECI

As in the case of training, performance evaluation in Bangladeshi universities is guided by each institution's policy. An analysis of these policies exposed that knowledge generation is used in performance evaluation. This is revealed in the criteria for granting tenure for teaching staff which specifies the need for "satisfactory research". However, this metric is applied to Teaching Staff only as Support Staff are evaluated using other metrics which are

clouded in the term used: "Satisfactory performance of duties as assigned by the respective Head of Department". All Teaching Staff participants agreed that knowledge generation and externalization was considered in their tenure and promotion evaluations. The researcher concluded that, as in training, KM is applied partially in performance management. Nevertheless, the fact that knowledge is the only metric used in Tenure applications, a one-off event in the life of an employee of the University and not in annual performance reviews or promotions weakens its full applicability. To make matters worse, the same metric is not applied in appraising Support Staff who are evaluated on any other variable that usually are not written.

7.5 Rewards Management and SECI

The survey shows that no any university has a rewards management policy. The researcher had to depend on the interviews in which it was disclosed that there is a clear link between rewards and knowledge generation, dissemination and sharing. Teaching Staff are therefore rewarded according to their teaching hours (knowledge externalization). There are, however, no reward incentives for knowledge acquisition (internalization, combination and socialization). The interview also discovered that the university maintained a different rewards package for the two categories of staff, Teaching and Support staff. Teaching Staff are rewarded relatively higher than Support Staff, even employee holds equivalent qualifications. The fact that Teaching Staff are paid disproportionately higher than Support Staff which indicate that they are being rewarded as the knowledge generators of the organization. Additionally, since Teaching Staff as knowledge workers are given job autonomy, monetary rewards and an opportunity to achieve their set tasks as proposed by Nonaka and Takeuchi (2000) is further evidence of Bangladeshi universities applying KM in rewards management strategy.

The reasons for not evaluating given by respondents are shown in Table 6. Research carried out by Thompson (1992) into the impact of performance-related pay schemes identified another reason for a failure to evaluate, namely, that most employers did not have clearly articulated objectives for introducing such schemes against which they could measure subsequent success or failure. Corby et al. (2005) noted that managers, having spent considerable time, energy and resources in developing and implementing a new pay system, are likely to have a psychological investment in its success and thus have little inclination to carry out any rigorous evaluation.

Table 6: Reasons for not conducting reward evaluations

Reasons given for not evaluating	Percentage of respondents
Lack of resources or time	48
Lack of information or data	19
Senior management indifference	15
Lack of analytical skills	8

7.6 Strategic integration and SECI

The concept of "fit" or strategic integration is considered as a benchmark of human resource management (Beardwell, 2004; Armstrong, 2004). It is defined as the ability of organizations to incorporate their HR programs into strategic plans to ensure that line management functions cohere to pursuit of organizational goals. Employees are seen as key in the implementation of the organizational strategy and therefore the HR strategy should be designed to fit and dovetail with other line functions (ibid). The interviews with the HR, ICT and Library staff in the universities revealed that there are no synergetic relationships

between the three line management functions which form the crucial arms of KM. It affects the creation of an enabling environment (Ba) for KM activities. In other words, it means that HR is failing to create an enabling environment (Ba) for KM.

The prevailing organizational culture also acts as an important factor in shaping the attitudes of employees towards knowledge sharing (Carter and Scarborough; 2001). Culture acts to sustain notions of "what counts as knowledge" and "what knowledge is important" (ibid). Bock and Kim (2000) have argued that HR managers have a pivotal role to play in the shaping and reshaping of an organization's culture. Hence, HRM practices can be significant in terms of building and developing the knowledge sharing spirit or culture in an organization. This knowledge sharing culture does not exist as evidenced by the 80% participants who felt they are not willing to share their knowledge with colleagues. The administration department is not doing sufficient in shaping the organizational culture to be amenable to knowledge sharing.

8.0 Conclusion

This study examined the extent to which the administration departments in Bangladeshi universities are using various KM practices in its day-to-day strategies and operations. The study discovered that the administration departments are applying KM although to limited extent in areas like training, recruitment and selection and performance evaluation. However, their efforts are being inadequate by the lack of strategic integration between the administration department and other line management function and between the administration department and the university's top management, funding limitations for knowledge activities, lack of policy directions amongst other reasons.

8.1 Recommendations

The following recommendations have been made in using KM as HR strategy that administration departments can adopt:
1. **Lack of information on the concept of KM:** The researcher recommends that HR staff should be trained on the concept of KM and its exercises in HR functions. Finding shows that by consideration to human resources and development of their activities improvement occurred in organization. The purpose of development of human resource management is training the staff, on time payment, give extra services to the staff, instead of their creative activities, and choose the staff and experts, evaluation function of staff, in all of mentioned cases lead to improve staff knowledge, transfer knowledge in staff and use of knowledge in organization.
2. **Strategic integration:** There should be a "fit" between HR functions and activities and other line management functions which have an influence on knowledge generation and dissemination in universities like the Research Board, the Library and ICT department.
3. **Lack of support by top management/trustee board:** There should be vertical integration between the administration department and the university management/trustee board in pursuing KM as a university wide strategy.

Social and technical KM infrastructure capabilities are strongly correlated. They are both enablers for KM process capabilities with social elements having dominant influence. KM processes as dynamic capabilities, in turn, take the key role in contributing to organizational competitiveness. As a result, the indirect effects of social and technical infrastructure capabilities on organizational competitive advantages are fully mediated through KM process capability. In addition to theoretical contributions, the study also provides a variety of

practical recommendations for universities on how to be successful in applying of practical projects to achieve organizational strategic objectives.

8.2 Limitations

The limitations of this field study should be noted. This study is a first attempt to delineate key factors that may assist the top administrators of Bangladeshi Universities in applying of knowledge management as a HR strategy tool. The quantitative survey was biased and confined to only one segment of the education sector namely major institutions in Bangladesh. Other education segments (e.g. tertiary education in madrasah, polytechnic institutes etc.) were excluded as they were less likely to provide useful information. In such situation the results may not represent other education sectors. It should be noted, the researcher is expected that this study will provide a foundation for the application of knowledge management as a HR tool in Bangladeshi universities and for future studies on specific sectors. Such studies will not only substantiate this research but also offer new insights into understanding thoroughly the factors influencing the successful implementation of knowledge management as HR strategy and further contribute to knowledge in this area especially from developing countries' perspective.

Data were collected from a convenience sample that might limit generalizability of the results. It should be noted that the relationships found in this study are correlational and not casual.

8.3 Directions for Future Research

Future research can further investigate knowledge management capabilities to develop a deeper insight into particular factors of interest, especially cultural issues, or can explore other factors to provide a more comprehensive picture of the association between organizational knowledge management and competitive advantage. Cross validation studies might also be conducted in different cultures to improve the generalizability of the findings and to determine if there is an optimum level of capabilities in each context.

References

Armstrong, M. (2003). A handbook of human resource management practice 9th ed. London: Kogan Page.

Beardwell, I. & Holden, L. (2001). Human Resource Management. Prentice Hall: London.

Bock, G. & Kim, Y. (2000). Breaking the myths of rewards: An exploratory study of attitudes about knowledge sharing, *Information Resources Management Journal*, Vol. 15, no.2, pp.14-21.

Boghoff, U.M. (2008). Information technology for knowledge management. Meylan: Rank Xerox Research Centre. Available from: http://www.jucs.org/jucs_3_8/information_technology_for_knowledge/Borghoff_U_M.pdf [Accessed 8 February 2014].

Carter, C., & Scarborough, H. (2001). Towards a second generation of KM? The people management challenge. *Education & Training*. 43 (4/5), Available from: http://www.emeraldinsight.com [Accessed 3 December 2013].

Cavana, R.Y., Delahaye, B.L. and Sekaran, U. (2001), Applied Business Research: Qualitative and Quantitative Methods, John Wiley, Sydney.

Corby, S., White, G., Stanworth, C. (2005). "No news is good news? Evaluating new pay systems", *Human Resource Management Journal*, Vol. 15 No.1, pp.4-24.

Creswell, J. (2003), 'Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, 2nd edn, Sage Publications, London.

DeNisi, A. S., Hitt M. A. and Jackson S. E. (2003).Managing knowledge for sustained competitive advantage. San Francisco: Jossey-Bass.

Gloet, M. (2003). Knowledge management and the links to HRM. *Management Research News*, 29 (7), Available from http://www.emeraldinsight.com [Accessed 4 October 2013].

Hislop, D. (2003). Linking human resource management & knowledge management via commitment: A review & research agenda. *Employee relations*, 25 (2), Available from http://wwwemeraldinsight.com [Accessed 4 September 2012].

Leopold, M Harrison, P. and Watson, L. (2005). Strategic Human resource management. New Jersey: Prentice-Hall.

Lengnick-Hall, M.L. & Lengnick-Hall, C.A. (2003). Human resource management in the knowledge economy. San Francisco: Berret-Koehler.

Lengnick-Hall, M.L. & Lengnick-Hall, C.A. (2005). HR's role in building relationship networks.

Little, S. and Ray, T. (2005). Managing knowledge: An essential reader, 2nd ed. London: Sage Publications.

Miles, MB. & Huberman, AM. (1994). Qualitative Data Analysis (2nd edition). Thousand Oaks, CA: Sage Publications.

Millmore, M. et al (2007). Strategic human resource management: Contemporary issues. Prentice-Hall: Harlow, England.

Nonaka, I, Toyama, R and Konno, N. (2000). SECI, Ba and leadership: A unified model of dynamic knowledge creation.

Prusak, L. (1999). Knowledge in Organisations, Boston: Butterworths Heinemann.

Prusak, L. (2001). Where did knowledge management come from? *IBM Systems Journal*, 40(4): 1002-1007.

Sax, B. (2005). All that knowledge, so what? Scholarship in the digital university. *On the Horizon* 13 (4). Available from www.emeraldinsight.com [Accessed 28 October, 2013].

Saint-Onge, H. and Wallace D. (2003). Leveraging communities of practice for strategic advantage. Boston, MA: Butterworth-Heinemann.

Shukla, A. & Srinivasan, R. (2000). Knowledge management architecture In: Reddy, Y.K.R. ed. Going global: Leveraging the human potential. New Delhi; Tata McGraw-Hill Publishing, 130-143.

Thompson, M. (1992). Pay and Performance: The Employer Experience, IMS, Brighton.

Torrington, D., Hall, H. and Taylor, S. (2005). Human resource management, 6th ed. Harlow, England: Prentice Hall.

Wenger, E, McDermott, RA & Snyder, W. (2002). Cultivating Communities of Practice: A guide to Managing Knowledge, Harvard Business School Press: Boston, MA.

Williams, L,Turner, N.and Jones, A. (2008). Embedding universities in knowledge cities. Available from http://www.theworkfoundation.com/assets/docs/publications/208_ideopolis_education 061208.pdf [Accessed 30 October 2013].

Zikmund, W.G. (2000), Business Research Methods, 6th edn, Harcourt College Publisher, Fort Worth, Texas.