Abstract

Knowledge Management (KM) is the procedure of gathering, managing and sharing employees’ knowledge capital throughout the organization. This paper aims at developing a conceptual framework of Knowledge Management as well as focusing on its viewpoint over present and the near future. This is a desk-research. An attempt has been made to make a wide-ranging review of literature. It initiates with the review of literature on the aspects of knowledge, and then observes goals, attributes, cycles & process and the interests behind KM drivers and challenges involved in KM. Most of the organizations are suffering a common problem, that is, they do not know what they know. The idea of KM has been shifting rapidly and understanding of KM both from short and long term perspective is very essential to run the organization successfully. And this study presents the shifts & challenges of KM that our business world is going to face. Finally, it is concluded that if we become more conscious about KM from the present day then it will definitely show the way to reduce operating costs, faster time-to-market for new products, better customer service and many other bottom line benefits in much more advanced way. The paper does not purport to offer a definite solution, but to examine the context of effective knowledge management so that local companies can reap all the benefits of new system of KMs in practice.

Keywords: Knowledge management (KM), Building blocks, Process, Shifts & Challenges, Bangladesh.
1. Introduction

In a knowledge nation, “intangible” resources are the key factors of business victory. Knowledge is considered a strategic company’s resource, the source of competitive advantage and business success. The modern company recognizes the most business processes as a process of knowledge. Senge (1990) focused on the “learning organization” as one that can learn from past experiences stored in corporate memory systems. Beckman (1997) found that the knowledge is way for understanding all about information to actively enable performance, problem solving, decision making, teaching and learning of others. Increasingly, managers are becoming aware that knowledge resources are important to the survival of their organizations (Carneiro, 2000). As a result of this awareness, management is taking into account the value of creativity, which enables the transformation of one type of information to the other. Organizational success depends on the employee knowledge, experience, creativity activity, and qualification (Hana, 2013) and Hamel and Prahlad, 2002, added the capacity of the organization to unlearn, just as it is important for firm to learn or gather new knowledge so as to be able to do things differently.

Knowledge Management (KM) has now become a mainstream priority for companies of all sizes. Capturing a company’s most valuable Knowledge (asset) and distributing it effectively across the enterprise is a business critical issue for many help desk, customer support and IT departments. The systematic process of finding selecting, organizing, distilling and presenting information, improves an employee’s comprehension in a specific area of interest. KM, as emphasized by (Kalam A., 2004), helps an organization to gain insight and understanding from its own experience. Specific knowledge management activities help focus on organization on acquiring, storing and utilizing knowledge for problem solving, dynamic leaning, strategic planning and decision making. According to Gilbert J. B. Probst (1998), Knowledge Management (KM) is a field that arose with rapid practical intellectual strength for management. It is the process of gathering managing and sharing employees’ knowledge capital throughout the organization. Knowledge sharing throughout the organization enhances existing organizational business processes, introduces more efficient and effective business processes and removes redundant processes. It is a discipline that promotes a collaborative and integrated approach to the creation, organization access and use of an enterprise’s knowledge assets.

KM is not only about Knowledge Technology. KM must be an enabler to achieve strategic business objectives. Knowledge management is an audit of “intellectual assets” that highlights unique sources, critical functions and potential bottlenecks, which hinder knowledge flows to the point of use. The Gartner Group (2005) defines KM as a discipline that promotes an integrated approach to identifying managing and sharing of all of an enterprise’s information assets. These information assets may include database documents, policies, procedures as well as previously unarticulated expertise and experience resident in individual workers. Knowledge management issues include developing, implementing and maintaining the appropriate technical and organizational infrastructure to enable knowledge sharing. Broadbent (1997) defines KM as ‘a form of expertise management which draws out tacit knowledge, making it accessible for specific purposes to improve the KM: why do we need it for corporate performance of organization; about how the organization’s ‘know-how’ should be structured, organized, located and utilized to provide the most effective action at that point in time. The goal of knowledge management is a practical one: to improve organizational capabilities through better use of the organization’s individual and collective knowledge resources. These resources include skills, capabilities, experience, routines, and norms, as well as technologies. Surprisingly, despite the now-solid consensus on the importance of knowledge or “intellectual capital” to every company’s success, most companies actually manage knowledge very badly. Very few have clearly defined management roles, such as a Chief Knowledge Officer (CKO), or organizational structures for the management of knowledge as a resource. Few even have a shared knowledge language that allows efficient communication. However, attention to knowledge management is growing. Companies are recognizing that they compete in increasingly knowledge-intensive markets. To flourish and even to stay alive, they are forced to rethink the management of their organizational knowledge bases. Research on KM in the context of Bangladesh is very limited. A study on KM is considered imperative in the context of Bangladesh because it will make top management more serious about the importance of KM.
2. Objectives of the Study

The main objective of this study is to explore the concept of knowledge management from the perspective of today and tomorrow. The specific objectives are:

- To identify the views, attributes, process, drivers of knowledge management based on some previous studies.
- To examine the importance of KM from short and long term perspective.
- To identify the challenges associated with knowledge management.
- To suggest measures to make KM a success.

3. Methodology

The study is descriptive in nature. This paper is aimed at searching the existing literatures on knowledge management. This study is conducted on the basis of secondary data. The secondary data are collected from the published books, journals and research papers. Newspaper articles and the internet sources are also used. But the authors have interpreted the data in the light of the objectives mentioned earlier.

4. Literature Review

4.1. Definition: Knowledge

Knowledge is an innately human quality, residing in the living mind because a person must 'identify, interpret and internalize knowledge.' Myers (1996). Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. According to Davenport & Prusak (1998), in organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, processes, practices, and norms. Nonaka (1994) argued that the concept of knowledge is a multifaceted and with multilayered meanings. Hawryszkiewycz (2010), in support of Nonaka pointed out that knowledge is abstract in reality and hard to pinpoint at. However, Hawryszkiewycz (2010) argues that knowledge is more on knowing how to interpret information and providing new insight to solve problem at hand. Knowledge can be moved, stored and valued, others argues that it give people the feelings and thoughts that they can use to develop new ideas. Nonaka (1994) says that the ever increasing importance of knowledge in modern society calls for a change in our thinking regarding innovation.

4.2. Goals of Knowledge:

Gilbert J. B. Probst (1998) mentions that Knowledge goals point the way for knowledge management activities. These determine which capabilities should be built on which level.

- Normative knowledge goals deal with the creation of a "knowledge-sensitive" corporate culture, in which sharing and development of know-how create the preconditions for effective knowledge management.
- Strategic knowledge goals define organizational core capabilities and describe the future knowledge needs of the company. They determine the desirable competence portfolio for the future.
- Operational knowledge goals make sure that normative and strategic knowledge goals will be translated into action.

4.3. Explicit Knowledge and Tacit Knowledge

Servin, G. (2005) has classified Knowledge in organizations into two ways:

- Explicit knowledge is knowledge that can be captured and written down in documents or databases. This type of knowledge can be readily transmitted across individuals formally and systematically. For example- instruction manuals, written procedures, best practices, lessons learned and research findings.
- Tacit knowledge is the knowledge that people carry in their heads. It is much less concrete than explicit knowledge. It is more of an “unspoken understanding” about something knowledge that is more difficult to write down in a document or a database. Subjective insights, intuitions and hunches fall into this category of knowledge. It is deeply rooted in an individual’s action and experience. It is considered more valuable because it provides context for people, places, ideas and experiences. It generally requires extensive personal contact and trust to share effectively.
4.4. Definition: Knowledge Management

Each of us is a personal store of knowledge with training, experiences, and informal networks of friends and colleagues, whom we seek out when we want to solve a problem or explore an opportunity. Servin, G. (2005) recognizes that fundamentally, knowledge management is about applying the collective knowledge of the entire workforce to achieve specific organizational goals. The aim of knowledge management is not necessarily to manage all knowledge, just the knowledge that is most important to the organization. It is about ensuring that people have the knowledge they need, where they need it, when they need it - the right knowledge, in the right place, at the right time. Knowledge Management is the explicit and systematic management of vital knowledge and its associated processes of creation, organization, diffusion, use and exploitation - in pursuit of business objectives; Skyrmne (2011). Hislop (2009) defines KM as an umbrella term that captures any deliberate efforts to manage the knowledge of the employees which can be attained via various methods either directly such as use of particular information communication technologies (ICT) or indirectly through management of social processes and structuring of firms in a particular way. The weakness of this definition is that it points to internal source of knowledge only. More comprehensive definitions were offered by Plessis (2007) and Gloet and Terziowski (2004). Plessis (2007) defines KM as a planned structure approach to managing creation, sharing, harvesting and leveraging of knowledge as an organizational asset to enhance a company's ability, speed and effectiveness in delivering products or services for the benefit of clients in line with its business strategy. Gloet and Terziowski (2004) describe knowledge management as the formalization of and access to experience, knowledge, and expertise that create new capabilities, enable superior performance, encourage innovation, and enhance customer value. Organizational Perspectives on Knowledge Management Wiig K. (1993) considers knowledge management in organizations from three perspectives, each with different horizons and purposes:

i. Business Perspective - focusing on why, where, and to what extent the organization must invest in or exploit knowledge. Strategies, products and services, alliances, acquisitions, or divestments should be considered from knowledge-related points of view.

ii. Management Perspective - focusing on determining, organizing, directing, facilitating, and monitoring knowledge-related practices and activities required to achieve the desired business strategies and objectives.

iii. Hands-on Perspective - focusing on applying the expertise to conduct explicit knowledge-related work and tasks.

4.5. Key Attributes/Building Blocks of Knowledge Management

Based on actual experiences of the leading global KM case studies; Bhojaraju G. (2005), the components for KM can be broadly categorized into three classes:

People: Getting an organization's culture (including values and behaviors) "right" for knowledge management is typically the most important. Knowledge management is first and foremost a people issue; Servin, G. (2005). A key to success in Knowledge Management is to provide people visibility, recognition and credit as "experts" in their respective areas of specialization - while leveraging their expertise for business success; Bhojaraju G. (2005).

Processes: In order to improve knowledge sharing, organizations often need to make changes to the way their internal processes are structured, and sometimes even the organizational structure itself. For example, if an organization is structured in such a way that different parts of it are competing for resources, then this will most likely be a barrier to knowledge sharing; Servin, G. (2005). So, it is important for processes to be as clear and simple as possible and well understood by employees across the organization; Bhojaraju G. (2005).

Technology: A common misconception is that knowledge management is mainly about technology - getting an intranet, linking people by e-mail, compiling information databases etc. Technology is often a crucial enabler of knowledge management - it can help connect people with information, and people with each other, but it is not the solution. And it is vital that any technology used "fits" the organization's people and processes - otherwise it will simply not be used; Bhojaraju G. (2005).
development, distribution, preservation, and use of knowledge. An outer cycle consists of all these activities plus goal-setting and measurement.

This feedback cycle clarifies the importance of measuring the measurable variables in order to focus on goal-oriented interventions. Many knowledge problems occur because organizations neglect one or more of these building blocks and thus interrupt the knowledge cycle. For example, if the research results of the Market Research Department are not available to Product Development, this knowledge cannot be used in the process of product development. If the steps of an important problem-solving process are not documented, they may disappear from the organization's memory, making successful repetition of the process impossible.

4.6. Knowledge Management Process/Cycle

Recently there has been growing interest in the knowledge processes that underlie innovation. It is useful to consider these as two distinct but interconnected knowledge cycles; Skyrme, David J. (2002).

In the knowledge sharing cycle - shows the processes associated with gathering and disseminating existing knowledge, having a knowledge repository as its focal point. Although the activities in each cycle roughly follow the sequences shown, continual iteration through different levels of aggregation means that the actual paths between activities are rather more complex than those depicted.

In outline the innovation processes are:

**New ideas are created:** Knowledge networking stimulates the cross fertilization of ideas from different perspectives, and therefore often stimulates an innovation cycle.

**Codify:** Here a prototype design or a process description is developed. This embodies the idea into a more transferable form.

**Embed:** At this stage the prototype is further refined and its associated knowledge encapsulated in manufacturing processes and organizational procedures.

**Diffuse:** Products are distributed in the marketplace or processes are implemented throughout the organization. Their application then generates ideas for improvements, and so the cycle repeats.

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**Collect:** Existing knowledge is gathered either on a routine basis or as needed. Often its existence is formally recorded in a knowledge inventory or knowledge map.

**Organize/store:** The knowledge is classified and stored, often using an organization or industry specific thesaurus or classification schema. This makes subsequent retrieval easier. This process usually involves information professionals or librarians.

**Share/disseminate:** Information may be sent routinely to those people who are known to be interested in it - this is information 'push'. Meetings and events act as vehicles to share tacit knowledge.

**Access:** Information is made easily accessible from a database, for example over an intranet. Users access it as they need it - this is information 'pull'.

**Use/exploit:** The knowledge is used as part of a work process. It is refined and developed.
use, additional knowledge is created and the cycle repeats itself.

Over and above Krstic (2007) argues that knowledge management is not only associated with managing knowledge as a resource, but also to manage business processes that take place using that resource. It should involve the analysis of existing knowledge as a resource, as well as defining the objectives regarding the generation, protection and application of new knowledge, then transfer, exchange and dissemination of knowledge, effective use of knowledge and performance measurement. The knowledge management process aims to support innovation and encourage the free flow of ideas through the company; Tisen et al. (2006). It helps increasing revenues (because the products and services are delivered to market faster) and reducing costs (because it eliminates redundant and unnecessary business processes).

In our day, the term KM has been remained the same but not the ideas about it. As it is being used as more advanced means day by day. In most of the organizations, KM has become the gizmo to get stability in the competitive market. To match with the demanding market, organizations need to focus on today’s KM concept as well as tomorrow’s perspective to cope up with the future. Most of the organizations are suffering a common problem, that is, they do not know what they know. Therefore, this study has been conducted to discover the viewpoints of KM as it is related to the better utilization of knowledge in the business field. And this study will also help us explore the shifts & challenges and get better thought about how KM concept which can be used in near future at corporate world.

5. Knowledge Management - Today

Today many companies and individuals are genuinely trying to better understand the contribution of knowledge to business success. And the major business drivers behind today’s increased interest in and application of KM lie in four key areas according to Kimiz Dalkir (2009).

i. Globalization of business. Organizations today are more global- multisite, multilingual, and multicultural in nature.

ii. Leaner organizations. We are doing more and we are doing it faster, but we also need to work smarter as knowledge workers, adopting an increased pace and workload.

iii. "Corporate amnesia." We are more mobile as a workforce, which creates problems of knowledge continuity for the organization and places continuous learning demands on the knowledge worker. We no longer expect to spend our entire work life with the same organization.

iv. Technological advances. We are more connected. Advances in information technology not only have made connectivity ubiquitous but have radically changed expectations. We are expected to be “on” at all times, and the turnaround time in responding is now measured in minutes, not weeks.

There are over 30 case studies in Creating the Knowledge-based business, which are done by Skyrme, David J. and Debra M Amidon (1997). In analyzing many case studies, a number of commonly recurring drivers are found:

Dispersion - the organization is dispersed over several geographic locations. This makes it more necessary to find out what is already known elsewhere to avoid "reinventing the wheel".

Restructuring - constant reorganizations mean that the relationships in which informal knowledge is shared are often broken; some organizations e.g. the US federal government, have a demographic situation in which many experienced and knowledgeable staff will reach retiring age within a short period of time.

Complexity / interdependencies - many organizational activities require inputs from other departments and their own activities may impact others.

Improving business performance - by sharing 'best practices' across an organization, the performance of the less well performing units can be brought closer to that of the best.

Customer relationships - the higher value placed on good customer service and customer relationships puts a premium on customer knowledge - understanding their needs, bringing together customer information into a single place, and using the knowledge so acquired to develop better products and services

Need for innovation - faster, better, cheaper (a common mantra within business) is the result of more effective innovation; this requires an innovation system that converts knowledge (ideas) efficiently and effectively into products, services and processes.
Better enabling technology - the growth of functionality of the Internet (including collaborative workspaces, discussion groups, content management systems and portals) makes it easier to assemble and share information across organizational boundaries.

Minimizing uncertainty and risk - better access to relevant knowledge will help managers make better decisions and so minimize various risks that may confront the business.

Regulation - quality of information and reporting is increasingly required by regulatory bodies; a good approach to knowledge management will allow such information to readily accessed (c.f. the requirements of Freedom of Information legislation in various countries).

6. Knowledge Management - Future

The future of KM is one where people and advanced technology will continue to work together, enabling knowledge integration across diverse domains, and with considerably higher payoffs. The future of KM will clearly be exciting due to the new opportunities and options, but interesting challenges definitely lay ahead for knowledge managers. Skyrme, D. (1998) has identified 10 shifts in knowledge management.

1. From a Dimension of Other Disciplines to a Discipline in its Own Right: It will be a subject of degree courses and a profession distinct from information management.

2. From Strategic Initiatives to Routine Practice: The Chief Knowledge Officer (CKO) of the future will embrace some of the functions of today’s HR managers and CIOs.

3. From Inward Focus on Knowledge Processes to External Focus on Knowledge Businesses: Companies will identify how their knowledge assets can be recombined to create new knowledge-based businesses. For example, an engineering/manufacturing company might create an engineering consultancy business; many computer manufacturers have shifted their focus to IT services.

4. From Best Practices to breakthrough/advance Practices: Rather than improve incrementally, companies should strive for factor ten improvements in key areas, like time-to-market and functionality per unit cost. This looking for five or ten per cent gains through process improvement and it will be left behind those looking for factor of ten or twenty gains. Consider those innovations that consumers are now enjoying: email airline tickets, spectacle prescriptions in an hour, introduced as a result of such breakthroughs.

5. From Knowledge Codification and Databases to Trade able Knowledge Assets: Many other companies are now realizing the opportunities from trading their databases e.g. fleet car managers are now trading privileged information on car reliability with partners.

6. From Knowledge Processes to Knowledge Objects: Just as computer applications are going object oriented, so too will the application of knowledge. We will package knowledge as objects (that might include an information record, a multimedia clip, and access to a person) that can be manipulated and transmitted in different ways. There will be knowledge markets for them - precursors e.g. for intellectual property design rights, already exist.

7. From Knowledge Maps to Knowledge Navigators/Agents: Maps are static representations of objects, and without extensive real time map making capability (which could happen in the future) we need other ways to find existing and emerging knowledge. These will be human brokers (people with know-where and know-who) and intelligent software agents.

8. From Knowledge Centers to Knowledge Networks: Although aggregating knowledge and knowledgeable people at knowledge centers gives critical mass, a more effective model may well be local nodes of expertise interconnected through human and computer networks i.e. the virtual knowledge center.

9. From Knowledge Communities to Knowledge Markets: Communities are emerging that provide an effective vehicle for knowledge exchange. But as knowledge acquires value, and becomes 'productized' as objects these communities will develop payment mechanisms and other trappings of a market place. The phrase “a penny for your thoughts” will have real meaning in future.

10. From Knowledge Management to Knowledge Innovation: Management implies custodianship and managing what you know - innovation is creating something new and better, and that surely must be the ambition of all existing knowledge managers.
7. Challenges for Managing Knowledge

Most often knowledge lies within an organization implicitly, out of sight, undervalued and underused. Often, it leaves the building when the employees walk out of the company along with them. Managing the flow of knowledge around an organization is a challenge. Shadbolt & O’Hara, Kieron. (2003) recognize that the Knowledge management process normally face six challenges at each stage of the process flow and failing to meet any of these challenges can spoil an organization's ability to use its knowledge assets to its best advantage. The six challenges are as follows:

1. Knowledge Acquisition: The challenge here is to get hold of the information that is around, and turn it into knowledge by making it usable. This might involve, for instance, making tacit knowledge explicit, identifying gaps in the knowledge already held, acquiring and integrating knowledge from multiple sources. Knowledge acquisition (KA) is a field which has reached a certain level of maturity. It began as part of the drive to build knowledge-based systems, and was a line of research devoted to developing methods and software tools to provide knowledge content for such systems.

2. Knowledge Modeling: Modeling bridges the gap between the acquisition of knowledge and its use. Knowledge model structures must be able to represent knowledge so that it can be used for problem-solving. One important knowledge modeling idea is that of ontologies, which are specifications of the generic concepts, attributes, relations and axioms of a knowledge base or domain. Ontologies can act as placeholders and organizing structures for acquired knowledge, while also providing a format for understanding how knowledge will be used.

3. Knowledge Retrieval: When a knowledge storehouse gets very large, finding a particular piece of knowledge can become very difficult. There are two related problems to do with knowledge retrieval. First, there is the issue of finding knowledge again once it has been stored, understanding the structure of your archive in order to navigate through it efficiently. And second, there is the problem of retrieving the subset of content from the repository that is relevant to a particular problem.

4. Knowledge Reuse: One of the most serious barriers to cost-effective use of knowledge is that often knowledge bases or systems are constructed afresh. It is unusual for problem-solving experience or domain content to Knowledge Management: Why Do We Need It for Corporate be acquired and then reused, partly because knowledge tends to require different representations depending on the problem-solving that it is intended to do. Understanding the use and application of knowledge would enable more leverage to be gained from the knowledge already at hand, thereby increasing the returns on the investment in those knowledge assets.

5. Knowledge Publishing: The challenge of publishing or disseminating can be described as getting the right knowledge, in the right form, in the right place, to the right person, at the right time. Different users will require knowledge presented and visualized in different ways, and the quality of such presentation is not merely a matter of preference, but can radically affect the value of the knowledge to the user. Getting presentation right will involve understanding the different perspectives of people with different agendas, while an understanding of knowledge content will help to ensure that important related pieces of knowledge get published at the appropriate time.

6. Maintenance: The last challenge is to keep the knowledge repository functional. This may involve the regular updating of content as content changes (e.g. as price lists are revised). But it may also involve a deeper analysis of the knowledge content. Some content has a considerable longevity, while other knowledge dates very quickly. If a repository of knowledge it to remain active over a period of time, it is essential to know which parts of the knowledge base must be discarded and when.

8. Problems of KM in the Context of Bangladesh

According to Akkas (2014), there are factors that cause KM projects to fail in Bangladesh. These factors can demonstrate the dark side of this process for managers and reveal issues that may not be thought of or intentionally censored in the narration of successful experiences. Managers’ ignorance of these factors could jeopardize the KM projects and causes the eventual wastage of organizational resource. Researchers identified a number of important roadblocks that organizations typically face when implementing knowledge management programs. Respondents selected in the different organizations in Bangladesh have identified a good number of factors that cause abortion of KM initiatives.
depend on the voluntary contribution of employees. Therefore, management should be sensitive to the knowledge activities that are already going on within the company.

- Management needs to implement some organizational change in order to transform the corporate culture. Employees can have all sorts of reasons for not joining in and employees who see benefit in KM have a hard time changing the corporate culture accordingly.

- More funds should be allocated to create and distribute knowledge among the organizational members.

- KM needs to require a holistic and multidisciplinary approach to management processes and an understanding of the dimensions of knowledge work.

- KM should be the evolution of good management practices sensibly and purposively applied.

- KM requires a major shift in focus regarding the development and use of knowledge and information in increasing the effectiveness of any organization.

### 10. Conclusion

After having reviewed literature in KM, we conclude that the globalization brought the giant changes in business thoughts that had largely impact on many worldwide organizations. The organizations who want to endure in unpredictable markets should rapidly adapt to the new dynamics of KM. The knowledge is considered as strategic company’s resource, the source of competitive advantage and business success in the 21st century. To match with the challenging market, organizations need to focus on today’s KM concept as well as tomorrow’s viewpoint to cope up with the future. Most of the organizations are suffering a common problem, that is, they do not know what they know. The idea of KM has been shifting rapidly and understanding of KM both from short and long term perspective is very essential to run the organization successfully. And this study presents the shifts & challenges of KM that our business world is going to face. The result of more effective knowledge management has led to reduced operating costs, faster time-to-market for new products, better customer service, reduced risk and many other reported bottom line benefits. For successful implementation of the KM practice within an organization in Bangladesh.
it is essential that the KM organizational strategy is well defined and it should address issues such as organization’s goals and competitive advantage, access tacit knowledge, promote creativity, capture new learning and build a supportive culture.

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"Everyday is a bank account, and time is our currency. No one is rich, no one is poor, we've got 24 hours each." -Christopher Rice