CHAPTER – I

INTRODUCTION AND BACKGROUND

Introduction

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Summary
Introduction

Knowledge management is essentially about facilitating the processes by which knowledge is created, shared and used in organizations. Business schools have been using information for years to improve the efficiency of academic services and effectiveness of academic programs. In order to seek better outcomes, increasing number of business schools are investing into technology enabled knowledge resources. But the business schools are finding that technology implementation does not necessarily improve decision-making nor does it necessarily improve outcomes. This chapter (Chapter 1) aims at providing review of knowledge and knowledge management (KM) concepts to investigate the different areas of KM, identify the subject of barriers and facilitators that has shortcomings and gaps to fill, and provide conceptual background that helps to develop and understand the research KM model. The chapter commences with reviewing various definitions of knowledge in the KM literature, stressing its differences with data, information and wisdom, identifying knowledge categorization methods used by different researchers, and describing relationships between the different types of knowledge. After that, the concept of KM will be described. Motivations that may encourage organisations and people to apply and use KM will be discussed. Challenges and difficulties in implementing and applying KM will be explained. Finally, background of KM in Indian context will be presented.
1.1 Knowledge Management: An Introduction

When knowledge is identified and managed effectively, it contributes extensively to the growth of the organisation. Knowledge management is essential about getting the right knowledge to the right person at the right time. This strategy implies a strong tie to education system understanding of process to understand knowledge, how and where that knowledge is available to cover organizational functions. This strategy also helpful in ensuring, initiatives are accepted and supported by interim leaders, administrative authority members in organization. Knowledge management is knowledge creation only, or could be done by knowledge sharing also with colleague with centralized storage point, and refinement by data mining tools. There are many different definitions of KM, and each definition encompasses different aspects of KM, such as development, implementation, workflows, people and technology. Knowledge management deals with three facets of knowledge: the tacit knowledge of its members, which includes their expertise and practical experience, explicit knowledge which includes databases, documents, policies and procedures and embedded knowledge which is sheltered in structure, culture and KM processes of the organization. This chapter defines a set of terms related to these aspects of KM. Each term includes related and sequential meanings relevant to KM.

1.1-1 Knowledge

There is no single, absolute definition of the term knowledge. There are, however, several accepted definitions. Knowledge is commonly described in terms of information and data. Knowledge as a product built from data and information.\(^1\) (Empson, L.;2000)
It is perhaps easiest to understand knowledge in terms of what it is not. It is not data and it is not information. As everyone know data are raw facts and figures. Data becomes information when it become meaningful by properly summarized, analyzed, and placed in context. Knowledge can therefore, be seen as information that comes laden with understanding, finding and opinion, insight and standards.

According to (Empson;2000), without knowledge, data has no unifying purpose, and information is data without relevance. (Tuomi I;1999)², suggests just the inverse by stating that knowledge comes first. He wrote that knowledge must exist before information can be formulated and data can be measured. Accepting knowledge as a prerequisite for data and information is critical to this argument. Tuomi’s position assumes that knowledge exists first; then, when articulated and structured, it becomes data and information, even when there is no user (Alavi & Leidner;2001)³. Empson and Tuomi view knowledge, data and information in a hierarchical arrangement. (Davenport & Volpal;2001)⁴, defines knowledge within a social or organizational context. (Alavi and Leidner ;2001) highlights the need for social construction of knowledge by stating that the transformation of data to information to knowledge is not possible without the dimension of context, which determines the usefulness or interpretability for the knowledge user. Similarly, Crawford and Hasan(2000)⁵ present a theory suggesting that data, information, and knowledge correspond to the needs of human activity. The human activity is expressed as the relationships between the subject (knowledge user) and the object (information or knowledge). Both the social context and the organizational context theories define knowledge usage as unique to the environment of the knowledge user. (Davenport and Prusak;2001) describes knowledge within the user’s context as “A fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and
information.” Organizations often using embedded knowledge which is not only in documents or repositories but also these practices are used in organizations. The implication of this description of knowledge is that only knowers sharing a common background or context, which helps make the connection between the people who need the knowledge and those who have it to share, can arrive at the same understanding of data or information (Alavi & Leidner;2001).

Another approach to defining knowledge distinguishes two types of knowledge:

*Formal knowledge* is explicit knowledge, which can be articulated in language, transmitted among individuals, and documented (Nonaka;1994), (Twiana;1999).

*Informal* or tacit knowledge, on the other hand, is personal knowledge, rooted in individual experience and laced with personal beliefs, perspectives and values (Nonaka, Twiana;1999). When knowledge is quantifiable, countable, and organized, it is assumed to be measurable, controllable, and therefore formalized (Twiana;1999).

As a result, various descriptions of knowledge have been limited to a capture, codify, store and transmit theme and are criticized for failing to identify the complexity of tacit knowledge, which cannot be as easily articulated or formalized (Alavi & Leidner). Like many authors, (Platts and Yeung;2000) uses (Polanyi;2004) definition as a basis for developing their own schemes of examining knowledge. Platts and Yeung suggests that it is inaccurate to presume that tacit knowledge is articulated and readily accessible to the knowledge user. They assert that tacit knowledge is problematic because its subjective and intuitive nature makes it difficult to process in a logical manner. Much of what makes people use knowledge is the need for social, cultural, and communicational meaning that allows knowledge to be harnessed and shared. The
differences between explicit and tacit knowledge suggest that structural approaches could enable the development of certain categories of knowledge.

It is important to remember that knowledge management is not about managing knowledge for knowledge's sake; the overall objective is to create value and to influence, recover, and filter the firm's competences and knowledge assets to meet organizational goals and targets. Knowledge Management could be implement with different dimensions including:

**Organizational:** The right processes, environments, culture, and systems.

**Managerial/Leadership:** The right focus, strategy, implementation, etc.

**Cultural:** The organizational culture, as well as national culture for multinational firms, influences the way people interact, the context within which knowledge is created, the resistance they will have towards certain changes, and ultimately the way they share (or the way they do not share) knowledge.

**Technological:** The right systems, tools, and technologies - properly implemented.

**Political:** The support to implement and sustain initiatives that involve all organizational functions; could be costly in term of money and time.

Typically, failed initiatives have often placed an undue focus on knowledge management tools and systems while neglecting the other aspects. Three dimensions are selected in this research individual, organizational and technological.
1.1-2 Perspectives on Knowledge, Information, Data

In everyday language we use knowledge all the time. Sometimes we mean know-how, while other times we are talking about wisdom. On many occasions we even use it to refer to information. Part of the difficulty of defining knowledge arises from its relationship to two other concepts, namely data and information. These two terms are often regarded as lower denominations of knowledge, but the exact relationship varies greatly from one example to another. Within more technologically oriented disciplines - particularly involving information systems - knowledge is often treated very similarly to information. It is seen as something one can codify and transmit, and where IT plays a pivotal role in knowledge sharing. For instance, the encyclopedia at fact-archive.com defines it as: "information that has a purpose or use." This kind of simplistic view of knowledge was particularly widespread during the 90s when information technology became increasingly more common. However even today, some KM systems are little more than information management systems using knowledge as a virtual synonym for information. To illustrate, (Thuroff, M & Hiltz, S.R. 1996)\(^{10}\) defines the three components as follows: data is the lowest point, an unstructured collection of facts and figures; information is the next level, and it is regarded as structured data; finally knowledge is defined as "information about information". However, increasingly one sees definitions that treat knowledge as a more complex and personal concept that incorporate more than just information. The Longman online dictionary has one definition that begins to approach the way that knowledge is usually regarded within KM. It states "the information, skills, and understanding that you have gained through learning or experience." Although still closely associated with information, concepts like skills, understanding, and experience begin to surface.
Defining Data, Information, and Knowledge

**Data:** Facts and figures which relay something specific, but which are not organized in any way and which provide no further information regarding patterns, context, etc.

**Information:** For data to become information, it must be contextualized, categorized, calculated and condensed (Davenport & Prusak; 2001). Information thus paints a bigger picture; it is data with relevance and purpose. It may convey a trend in the environment, or perhaps indicate a pattern of sales for a given period of time. Essentially information is found in answers to questions that begin with such words as who, what, where, when, and how many. It is usually invaluable in the capacity of turning data into information, particularly in larger firms that generate large amounts of data across multiple departments and functions. The human brain is mainly needed to assist in contextualization.

**Knowledge:** Knowledge is closely linked to doing and implies know-how and understanding. The knowledge possessed by each individual is a product of his experience, and encompasses the norms by which he evaluates new inputs from his surroundings (Davenport & Prusak 2000).

<table>
<thead>
<tr>
<th>Information</th>
<th>Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processed data</td>
<td>Actionable information</td>
</tr>
<tr>
<td>Simply gives us facts</td>
<td>Allows making predictions, casual associations, or predictive decisions</td>
</tr>
<tr>
<td>Clear, crisp, structured and simplistic</td>
<td>Muddy, fuzzy, partly unstructured</td>
</tr>
<tr>
<td>Easily expressed in written form</td>
<td>Intuitive, hard to communicate, and difficult to</td>
</tr>
</tbody>
</table>


| Obtained by condensing, correcting, contextualizing, and calculating data | Lies in connections, conversations between people, experienced-based intuition, and people’s ability to compare situations, problems and solutions |
| Devoid of owner dependencies | Depends on the owner |

**Table 1.1 : The Difference Between Information And Knowledge**

In order for KM to succeed, one needs a deep understanding of what constitutes knowledge. Now that we have set clear boundaries between knowledge, information, and data, it is possible to go one step further and look at the forms in which knowledge exists and the different ways that it can be accessed, shared, and combined. Understanding the different forms that knowledge can exist in, and thereby being able to distinguish between various types of knowledge, is an essential step for knowledge management (KM). For example, it should be fairly evident that the knowledge captured in a document would need to be managed (i.e. stored, retrieved, shared, changed, etc.) in a totally different way than that gathered over the years by an expert craftsman. Over the centuries many attempts have been made to classify knowledge and different fields have focused on different dimensions. This has resulted in numerous classifications and distinctions based in philosophy and even religion.

### 1.1-3 Three Category of Knowledge

Within business and KM, two types of knowledge are usually defined, namely explicit and tacit knowledge. The former refers to codified knowledge, such as that found in documents, while the latter refers to non-codified and often personal/experience-based knowledge. KM and
organizational learning theory almost always take root in the interaction and relationship between these two types of knowledge. This concept has been introduced and developed by Nonaka in the 90's (e.g. Nonaka 1994) and remains a theoretical cornerstone of this discipline. Some researchers point out that tacit and explicit knowledge should be seen as a spectrum rather than as definitive points. Therefore in practice, all knowledge is a mixture of tacit and explicit elements rather than being one or the other. However, in order to understand knowledge, it is important to define these theoretical opposites. Some researchers make a further distinction and talk of embedded knowledge. This way, one differentiates between knowledge embodied in people and that embedded in processes, organizational culture, routines, etc.

Below an overview of three categories of Knowledge, as well as a short discussion on the way knowledge management systems (KMS) can/cannot be used to manage them is given.

**Explicit Knowledge**

This type of knowledge is formalized and codified, and is sometimes referred to as know-what (Brown & Duguid 1998)\textsuperscript{11}. It is therefore fairly easy to identify, store, and retrieve (Wellman 2009). This is the type of knowledge most easily handled by KMS, which are very effective at facilitating the storage, retrieval, and modification of documents and texts. From a managerial perspective, the greatest challenge with explicit knowledge is similar to information. It involves ensuring that people have access to what they need; that important knowledge is stored; and that it is reviewed, updated, or discarded. Many theoreticians regard explicit knowledge as being less important (e.g. Brown & Duguid 1998, Cook & Brown 1999\textsuperscript{12}, Bukowitz & Williams 1999\textsuperscript{13}, etc.). It is considered simpler in nature and cannot contain the rich experience based know-how that can generate lasting competitive advantage. Although this is changing, KM initiatives driven
by technology have often faced the flaw of focusing almost exclusively on this type of knowledge. As discussed previously, in fields such as IT there is often a lack of a more sophisticated definition. This has therefore created many products labeled as KM systems, which in actual fact are/were nothing more than information and explicit knowledge management software.

Explicit knowledge is found in: databases, memos, notes, documents, etc.

**Tacit Knowledge (Embodied Knowledge)**

This type of knowledge was originally defined by (Polanyi ;1966). It is sometimes referred to as know-how (Brown & Duguid 1998) and refers to intuitive, hard to define knowledge that is largely experience based. Because of this, tacit knowledge is often context dependent and personal in nature. It is hard to communicate and deeply rooted in action, commitment, and involvement (Nonaka 1994).

Tacit knowledge is also regarded as being the most valuable source of knowledge, and the most likely to lead to breakthroughs in the organization (Wellman 2009).

Using a reference by Polanyi (1966), imagine trying to write an article that would accurately convey how one reads facial expressions. It is quite apparent that it would be nearly impossible to convey our intuitive understanding gathered from years of experience and practice. Virtually all practitioners rely on this type of knowledge. An IT specialist for example will troubleshoot a problem based on his experience and intuition. It would be very difficult for him to codify his knowledge into a document that could convey his know-how to a beginner. This is one reason why experience in a particular field is so highly regarded in the job market.
Tacit knowledge is found in: the minds of human stakeholders. It includes cultural beliefs, values, attitudes, mental models, etc. as well as skills, capabilities and expertise.

*Embedded Knowledge*

Embedded knowledge refers to the knowledge that is locked in processes, products, culture, routines, artifacts, or structures Knowledge is embedded either formally, such as through a management initiative to formalize a certain beneficial routine, or informally as the organization uses and applies the other two knowledge types. The challenges in managing embedded knowledge vary considerably and will often differ from embodied tacit knowledge. Culture and routines can be both difficult to understand and hard to change. Formalized routines on the other hand may be easier to implement and management can actively try to embed the fruits of lessons learned directly into procedures, routines, and products.

Due to the difficulty in effectively managing embedded knowledge, firms that succeed may enjoy a significant competitive advantage.

Embedded knowledge is found in: rules, processes, manuals, organizational culture, codes of conduct, ethics, products, etc. It is important to note, that while embedded knowledge can exist in explicit sources (i.e. a rule can be written in a manual), the knowledge itself is not explicit, i.e. it is not immediately apparent why doing something this way is beneficial to the organization.

**1.1-4 Knowledge Management**

KM is about making the right knowledge available to the right people. It is about making sure that an organization can learn, and that it will be able to retrieve and use its knowledge assets in
current applications as they are needed. In the words of (Petrides, L. A. and Nodine, T. R.; 2003) it is "the coordination and exploitation of organizational knowledge resources, in order to create benefit and competitive advantage". Where the disagreement sometimes occurs is in conjunction with the creation of new knowledge. Wellman (2009) limits the scope of KM to lessons learned and the techniques employed for the management of what is already known. Yao, Kam and Chan has defined knowledge management as a systematic approach (involving information technology, human resources, strategy and organizational behavior) that views implicit and explicit knowledge as a key strategic resource and aims at improving the handling of knowledge at the individual, team, organisation and inter-organisational level in order to improve innovation, quality, cost-effectiveness. This research is also an attempt to follow the same systematic approach (individual, organizational behaviour and technological environment) for implementing KM process in business educational institutions.

Bukowitz and Williams (2006) link KM directly to tactical and strategic requirements. Its focus is on the use and enhancement of knowledge based assets to enable the firm to respond to these issues. According to this view, the answer to the question "what is knowledge management" would be significantly broader. A similarly broad definition is presented by Davenport & Prusak (2000), which states that KM "is managing the corporation's knowledge through a systematically and organizationally specified process for acquiring, organizing, sustaining, applying, sharing and renewing both the tacit and explicit knowledge of employees to enhance organizational performance and create value." Based on the discussion in the previous section, knowledge management definition is as follows:
Knowledge management consists of the initiatives and systems that sustain and support the storage, dissemination, assessment, application, refinement, and creation of relevant knowledge.

This definition of knowledge management is adequate, but it relies on an understanding of the word "relevant". In this case it implies a strong tie to organizational goals and strategy, and it refers to knowledge that is considered useful for some purpose.

One could also create a more specific knowledge management definition:

Knowledge management consists of the initiatives and systems that sustain and support the storage, dissemination, assessment, application, refinement, and creation of relevant knowledge.

It involves the understanding of: where and in what forms knowledge exists; how to make the right knowledge available to the right people; what the organization needs to know; how to best generate or acquire new relevant knowledge; how to promote a culture conducive to learning, sharing, and knowledge creation; how to manage all of these factors so as to enhance performance in light of the organization's strategic goals and short term opportunities and threats. Knowledge management must therefore create/provide the right tools, people, knowledge, structures (teams, etc.), culture, etc. so as to enhance learning; it must understand the value and applications of the new knowledge created; it must store this knowledge and make it readily available for the right people at the right time; and it must continuously assess, apply, refine, and remove organizational knowledge in conjunction with concrete long and short term factors.

Havens and Knapp are of the opinion that knowledge management promotes innovation, teamwork and effective decision making in organisation. However (Mundra N,Vashisth R ;2011) suggests that, in an attempt to scrutinize the reason behind organizations wanting to manage
knowledge, it would be necessary to examine KM processes. So, next section is explaining KM processes.

1.2 Knowledge Management Processes

Lank explained benefits of KM which allows employees to save time when searching for information and expertise thereby making highly paid professionals concentrate on their areas of expertise. Effective knowledge management processes make it possible for employees to expend resources immediately available to them to make more intelligent decisions. With inadequate resources, KM processes also make it easier for employees to do more work with less stress.

Knowledge management is usually concerned with capturing an organisation’s know-how and know-what through creation, collection, storage, distribution and application. This implies identifying and harnessing to collective knowledge of the organisation gained through experience and competencies. In this research, it is categorized into three themes Knowledge gathering, creation and diffusion. These KM processes are listed below:

- Knowledge Gathering
- Knowledge Creation
- Knowledge Diffusion

1.2-1 Knowledge Gathering

Knowledge gathering involve Knowledge discovery, detection and knowledge acquisition. Knowledge discovery & Detection deals with discovering the knowledge that a firm possesses all over the organization, as well as the patterns in the information available that hide previously
undetected pockets of knowledge. Once knowledge is created, it exists within the organization. However, before it can be reused or shared it must be properly recognized and categorized. It is important to note that the sources of knowledge that a firm has access to may extend well outside the organization. This can exist in both formal and informal settings. Information Technology can be used in this context both as a means of feedback, communication, and cooperation between partners, and also as a way to gather, analyze, and "mine" data and information. This process is useful for adoption of practices that make knowledge easier to detect.

Knowledge acquisition refers to the knowledge that a firm can try to obtain from external sources. External knowledge sources are important and one should therefore take a holistic view of the value chain. Some possible KM initiatives thus include:

- Collecting feedback
- Collecting and processing marketing related information
- Collecting suggestions
- Involvement in development/design

IT can be used in this context both as a means of collecting feedback and enhancing communication and cooperation between partners (the principles of knowledge sharing apply here within the confines of the specific relationship). It is also useful as a way to gather data and information regarding sales, trends, feedback, and so on, which can then be used to create new knowledge within the organization.
1.2-2 Knowledge Creation

The ability to create new knowledge is often at the heart of the organization's competitive advantage. Sometimes this issue is not treated as part of knowledge management since it borders and overlaps with innovation management. Knowledge creation according to the Nonaka's SECI model is about continuous transfer, combination, and conversion of the different types of knowledge, as users practice, interacts, and learn. Some researchers distinguish between knowledge and knowing, and suggest that knowledge creation is a product of the interplay between them. The shift in condition between the possession of knowledge and the act of knowing - something that comes about through practice, action, and interaction- is the driving force in the creation of new knowledge. Furthermore, in order for this interplay to be most fruitful, it is important to support unstructured work environments in areas where creativity and innovation are important. Knowledge sharing and knowledge creation thus go hand in hand. Knowledge is created through practice, collaboration, interaction, and education, as the different knowledge types are shared and converted. Beyond this, knowledge creation is also supported by relevant information and data which can improve decisions and serve as building blocks in the creation of new knowledge.

As stated earlier, knowledge management is fundamentally about making the right knowledge or the right knowledge sources (including people) available to the right people at the right time. Knowledge sharing is therefore perhaps the single most important aspect in this process, since the vast majority of KM initiatives depend upon it. Knowledge sharing can be described as either push or pull. The latter is when the knowledge worker actively seeks out knowledge sources (e.g. library search, seeking out an expert, collaborating with a coworker etc.), while knowledge push
is when knowledge is "pushed onto" the user (e.g. newsletters, unsolicited publications, etc). Knowledge sharing depends on the habit and willingness of the knowledge worker to seek out and/or be receptive to these knowledge sources. The right culture, incentives, and so on must therefore be present.

Successful explicit knowledge sharing is determined by the following criteria

- Articulation: The ability of the user to define what he needs.
- Awareness: Awareness of the knowledge available. The provider is encouraged to make use of directories, maps, corporate yellow pages, etc.
- Access: Access to the knowledge.
- Guidance: Knowledge managers are often considered key in the build-up of a knowledge sharing system (Davenport & Prusak 2000, Grossman, M. (2006)\textsuperscript{17}. They must help define the areas of expertise of the members of the firm, guide their contributions, assist users, and be responsible for the language used in publications and other communication material. This is so as to avoid an information/knowledge overload.
- Completeness: Access to both centrally managed and self-published knowledge. The former is often more scrutinized but takes longer to publish and is not as hands-on (and potentially relevant). Self-published information on the other hand runs the risk of not being as reliable.

IT systems have proved extremely useful in aiding or performing many of these functions. IT is useful in most stages of the knowledge sharing process, and it is used for content management as
well as data and text mining (looking for hidden knowledge, relationships, etc. within data and documents).

1.2-4 Knowledge Diffusion

Knowledge diffusion must be followed by an action to make the whole process of knowledge creation valuable, which can be done by sharing knowledge via conferences, seminars, technical training, sharing individual experiences. These events could be helpful to upgrade teaching-learning process and enhancing communication among academia. Knowledge diffusion is totally dependent on knowledge organization and knowledge reuse which are another important process for knowledge diffusion. The idea that firms should categorize their knowledge assets is not a new one (Lindeman, K., Schroeder, R.G., & Sanders J.;2010). In order to determine what resources they have at their disposal and to pin point strengths and weaknesses, management needs to organize the knowledge into something manageable. Knowledge organization involves activities that "classify, map, index, and categorize knowledge for navigation, storage, and retrieval". (Markus;2001) assigns the role of preparing, sanitizing, and organizing this knowledge to a "knowledge intermediary". This may be a knowledge manager or it may also be the actual producer of the knowledge. The point is, that in order for knowledge to be shared (either for reuse in a business situation or as a tool for knowledge creation), it must be prepared in such a way that it can be identified, retrieved, and understood by the knowledge user.

Knowledge reuse is the process through which knowledge is captured, validated, stored, and retrieved. Through the reuse of knowledge, organizations may exploit internal capabilities and improve the effectiveness of their exploration activities (A. Anand, M.D Singh;2011).
Knowledge reuse processes emphasize the centrality of knowledge within an organization by aligning information systems and communication technologies with human activity and organizational mechanisms, such as learning processes and organizational structures. Knowledge reuse by a person accessing the documented (explicit) research of someone in a different part of the organization requires that the producer created the documents, that either he or someone else prepared them so that they may be understood and retrieved, and that the knowledge consumer retrieved and used it. In other words the roles were filled by two or three people and the process included explicit knowledge capture and sharing across the organization. Alternatively, in another scenario someone may want to use their own documentation later on. For tacit knowledge, the role of intermediary could be defined as the expert himself - since expert must present the knowledge (through practice and socialization) in a useable way to his student, teammates, etc. To sum up, someone has to produce the knowledge, someone has to make this knowledge available, and someone has to search for and use this knowledge. This implies not just the capability, but also the willingness to share, to search, and to retrieve. These processes are beneficial for implementing KM in Educational Institutions also. It is defined by below given diagram.

![Figure 1. Integrated KM cycle (Dalkir, 2005)](image)

Figure 1.1 Integrated KM Cycle
Knowledge Management processes which are explained above are always plays an important role in implementing knowledge management in any organisation. This research has selected three KM processes (Knowledge gathering, Knowledge creation and Knowledge Diffusion). Although, it is believed knowledge management is very much important in all sectors for improving productivity in organisation, not much research has been done in Indian B schools. This study focus on business schools in Delhi & NCR only. Using knowledge assessment tools in B-schools, three dimensions of process knowledge gathering, creation and diffusion are measured in three themes individual, organizational and technological.

1.3 KM in Educational Institutions

The Educational Institutions are becoming global as universities attempt to international their curricula and offer high quality programs to students. Academic sector also face demands from industry. Firms want flexible and adaptable knowledge workers. Institutions also expected to produce people who can lead, who can produce new knowledge, who can see new problems and imagine new ways of approaching old problems.

Universities have a role to prepare people to go beyond the present and be able to respond to a future which cannot be imagined. There is also an increase of interest towards KMS in organizations and academia. Institutions have realized that KMS could play an important role in their organization. A university’s administration and managerial responsibilities include institutional marketing, attracting prospective students, supplying information about university resources and programs and providing a rich information-filled environment for decision-making. The need to increase productivity, quality and access to knowledge while meeting the challenges of competition with other universities has led administrations to consider various management
programs. Knowledge management could be the enabling activity capable of bringing about transformative change. KM is required to incorporate management processes through the leadership’s vision and strategy, implement internal processes demonstrating for making simple procedures and policies and encouraging KM process for a learning organization that ensures continued vitality of KM processes within the institution which reflects understanding and involvement from the faculty and staff, in turn enhancing the learning and growth of the institution.

The university possessed a wealth of knowledge accumulated from an extensive consultancy work, pedagogical reports, patents and experience of its existing faculty. However, there was a need to develop a mechanism for growing both tacit and explicit knowledge bases. The incentive for KM came from the university’s quest to acquire, share and preserve knowledge and also to avoid the loss of knowledge as its senior faculty retired. One of these objectives is to transfer knowledge to students, through exchanges between students and educators, through exchanges between students and books or other resources, and through exchanges among students themselves, etc. As organizations, however, educational institutions face challenges about how to share information and knowledge among people within the organization. This is the central focus of the thesis.

Knowledge management builds upon a human-centered approach that views organizations as complex systems that spring from the unique organizational contexts in which they are developed. It is still a promising organizational practice, so as of yet there is no agreed upon definition for knowledge management. Therefore, it is generally described as broadly as
possible, as a process of gathering knowledge, creating knowledge from existing knowledge, sharing it with others, dissemination of knowledge is called knowledge management, it is always helpful to enhance learning and performance in organizations. Knowledge starts as data, raw facts and numbers. Everything outside the mind that can be manipulated in any way can be defined as data. Information is data put into context of relevance to the recipient. It is a collection of messages and readily captured in documents or in databases.

When information is combined with experience, understanding, capability and judgment, etc., it becomes knowledge (i.e. what we know). Knowledge can be highly subjective and hard to codify. Knowledge can be shared with others by exchanging information in appropriate contexts. KM tools have played its major roles to support the KMS that consists of knowledge gathering, knowledge creation and knowledge diffusions (R.Vashisth, A Mehta ;2013). These all are KM technologies such as using advance technology for sharing knowledge portal access, mailing, search and retrieval system that are used to bring about certain operations and goals in the organizations. In this case, KM technology could involve more than one feature, but the more features it has, the better its functionality.

Knowledge management in education can be thought of as a framework or an approach that enables people within an organization to develop a set of practices to collect information and share their ideas which could be helpful to lead action to give better services and results. For educational institutions, the full promise of knowledge management lies in its opportunities for improving faculty and student outcomes. The crucial change in educational institutions is to improve student learning and outcomes. These are the general questions for which the practices of knowledge management are particularly helpful. In this thesis, we shall seek to address the
question on how to create and transfer quality knowledge through the practices of knowledge management and its possible impact on student learning outcomes.

Most knowledge management technologies focus on the actionable application of knowledge. This notion of knowledge for action directly applies to curriculum development and assessment. The knowledge gained from assessment is used to create and improve upon the curriculum which is comprised of courses, topics, instructional materials, presentations, assignments, etc. The association between knowledge management and assessment is also evident in learning. A major goal in successful knowledge management is to achieve learning by the people in the institution and thus involves the necessity for assessment. By testing student performance and by periodically reviewing their own curriculum, colleges, and universities evaluate what they have learnt in their own organizations. These evaluations could prompt students to modify their study behavior and faculty to refine the materials they present to the class. More importantly, assessment also motivates faculty and administrators to reconsider their policies and practices related to curricula in order to improve student learning outcomes. Knowledge management practices can also be applied to e-learning by creating quality learning materials. From students perspective every time students read a chapter of the e-learning materials and complete an interactive worksheet, the system, in turn, provides the educator with ongoing and trend assessment information about each student. This provides timely feedback for the student and educator. Educators see that the real value is in the assessments that are integrated into the learning process, and in the information about patterns of student learning. They can find out which e-learning materials and assignments were most appropriate and which ones were most troubling for specific groups of students in achieving their learning outcomes. Once the
educators are provided with this information, they can adapt their pedagogy and content in ways that make sense for their students to improve their learning outcomes. If they have access to a collaborative team discussing these issues school-wide, then the knowledge gained and is shared amongst other educators, which allows them to determine ways to improve student learning outcomes.

Different learning and teaching strategies are effective in varying degrees for different groups of students. Knowledge management practices seek to help educators and faculty gather data and share information about which teaching approaches are most effective for different groups of students in specific environments. Teaching and learning styles are the behaviours or actions that educators and learners exhibit in the learning exchange. Teaching behaviours reflect the beliefs and values that educators hold about the learner’s role in the exchange. Thus, the information gained will inform educators to adopt or adapt appropriate teaching and learning strategies for different groups of students to improve their learning outcomes.

Given the information, educators and faculty can discuss these kinds of questions within their own organization to design a revised curriculum based on the needs of their students, gather outcome information again, review the results, and share their results among a wider circle of colleagues. For educators and faculty as well as students, the knowledge management process promotes participation, interaction.

1.4 Background of KM in Indian context

The origin of knowledge management can be traced to Indian ancient time. From Kalyug to modern India, KM has been being used. In both Ramayan and Mahabharata, the war comes to an
end not with celebration of victory but with transmission of knowledge. In the Ramayan, Ravan lies mortally wounded on the battlefield and the monkeys are celebrating their victory, when Ram turns to his brother, Lakshman, and says, “While Ravan was a brute, he was also a great scholar. Go to him quickly and request him to share whatever knowledge he can.” The obedient Lakshman rushes to Ravan’s side and whispers in his ears, “Demon king, all your life you have taken not given. Now the noble Ram gives you an opportunity to mend your ways. Share your vast wisdom. Do not let it die with you. For that you will be surely be blessed.”

Ravan responds by simply turning away. An angry Lakshman goes back to Ram and says: “He is as arrogant as he always was, too proud to share anything.” Ram looks at his brother and asks him softly, “Where did you stand while asking him for knowledge?” “Next to his head so that I hear what he had to say clearly.” Ram smiles, places his bow on the ground and walks to where Ravan lies. Lakshman watches in astonishment as his brother kneels at Ravan’s feet. With palms joined, with extreme humility, Ram says, “Lord of Lanka, you abducted my wife, a terrible crime for which I have been forced to punish you. Now, you are no more my enemy. I see you now as you are known across the world, as the wise son of Rishi Vishrava. I bow to you and request you to share your wisdom with me. Please do that for if you die without doing so, all your wisdom will be lost forever to the world.” To Lakshman’s surprise, Ravan opens his eyes and raises his arms to salute Ram, “If only I had more time as your teacher than as your enemy. Standing at my feet as a student should, unlike your rude younger brother, you are a worthy recipient of my knowledge. I have very little time so I cannot share much but let me tell you one important lesson I have learnt in my life. Things that are bad for you seduce you easily; you run towards them impatiently. But things which are actually good for always fail to attract you; you shun them
creatively, finding powerful excuses to justify your procrastination. That is why I was impatient to abduct Sita but avoided meeting you. This is the wisdom of my life, Ram. My last words, I give it to you.” With these words, Ravan dies.

There’s similar knowledge transmission after the Mahabharat war is over and the Kauravas are all dead. As the victorious Pandavas are about to assume control of Hastinapur, Krishna advises them to talk to Bhisma, their grand uncle, who lies mortally wounded on the battlefield. As a result of a blessing, death would elude him for some time. “Make him talk until his last breath. Ask him questions. He has a lot to tell,” says Krishna. Sure enough, when prompted, the dying Bhisma spends hours discussing various topics: history, geography, politics, economics, management, war, ethics, morality, sex, astronomy, metaphysics and spirituality. Bhisma’s discourse is captured in the Shanti Parva (discussions of peace) and Anushasan Parva (discussions on discipline) that makes up a quarter of the Mahabharata. After listening to their grandsire, the Pandavas have a better understanding of the world, and this makes them better kings.

After Ramayan, Mahabharat it has been seen that various emperors like Akbar, Chaderoap Talcher, Mauyra, Maharana Pratap also cultured management skills, policies by sharing knowledge with their seniors called (advisor).Chankaya also set an example and become great economist by using KM process only. Now it has been observe that usage of KM has become necessity in almost all sectors.
Long has this knowledge drain been recognised. Over the past decade, a whole new business process known as knowledge management has evolved that seeks to harness, store, transmit this knowledge. Every CEO agrees that it is a valuable business process, that investment in it is critical. Policies have been made, people have been hired and systems have been deployed. Unfortunately, for all the initial enthusiasm, implementation has been lacking. Unlike retrieving cash, retrieving knowledge from employees, both current and future, is not easy. Knowledge management is a necessity that can make all the difference between survival and an early demise. With the increase in information technology usage, many organisations in India have started knowledge management initiatives. Review of available literature on knowledge and knowledge management will leads us to conclude that the majority of the past experience and developments in the area of KM have so far occurred in western industrialized countries. The situation in Indian societies makes the applicability of KM different from the Western countries and requires further understanding. Apart from few book on KM by Indian authors and few article in top Indian management journals, there is no systematic knowledge management research is available in Indian context.

1.5 Organization of the study

This study is presented in six chapters. Chapter 1 introduces the study, highlighting the differences between knowledge and knowledge management and importance of understanding the knowledge management processes. This chapter is also showing knowledge management outcomes, and noting the lack of research in this area in India. Chapter 2 provides a review of literature related to knowledge management practices and its links with other areas of study. Empirical research and overview of research in educational institutions has been given in given
chapter. Indian research work on knowledge management in educational institutions also has been discussed in this chapter. **Chapter 3** discuss objectives of the study and research related problems. This chapter also showing limitations of the study as well as contribution of the this study to other researchers. **Chapter 4** details the methodology employed in the study by giving insights of data variables, sources of data, data procedures, testing the validity and reliability of the survey measures. **Chapter 5** presents the analysis of the data, including descriptive analysis, construct analysis, and hypothesis testing. Result of principal component analysis (PCA), finding and discussions of results also have been discussed with detailed summary. Finally, **Chapter 6** presents a discussion of the implications of the findings from this analysis, along with conclusions, restrictions, and recommendations for further research.

**Summary**

This chapter aimed at providing required background of knowledge and knowledge management (KM). The chapter started with discussing the processes of KM. Then, the chapter reviewed knowledge management in education system. Furthermore, the chapter reviewed background of knowledge management in Indian context to identify the methods and processes required to manage the different types of knowledge successfully. The review of knowledge classification highlights three important KM processes, i.e. knowledge gathering, knowledge creation and knowledge diffusion. Some issues are also identified for implementing KM in academic institutions. Brief summary of research is also introduced. Finally, organization of study is discussed.
REFERENCES:


