CHAPTER 1
INTRODUCTION

1.1 BACKGROUND

Development, creation and sharing of knowledge are as old as the human history itself. For millions of years, human beings had very limited ways of sharing knowledge to the next generation. In fact knowledge was passed verbally from one person to another. In India, this verbal passing of knowledge is mentioned in our old texts in the form of guru – shishya parampara where knowledge was passed from teacher to the student verbally. As per Toffler & Toffler (2006), 35000 years ago, the first major event took place when man drew a picture on the wall of a cave to mark some important event. This was the first pictograph drawn by the man. With the passage of time, man learnt to write and knowledge was passed on in the shape of leaflets, parchments and books. At that time knowledge was purely theoretical and philosophical in nature, though certain knowledge forms such as knowledge of warfare, managing kingdoms, knowledge regarding healing and herbs etc. had practical aspects. But knowledge in earlier times was concentrated with certain people or group of people. It was not imparted or passed on to everyone.

Both western and eastern philosophers focused on knowledge for living a spiritualistic and materialistic life. Along with the theoretical and abstract concepts, practical and operational knowledge also started becoming important. With the invention of printing press, widespread distribution of knowledge became possible. But even then there was no management of practical knowledge as it was left on the person who wanted to learn. Managing practical knowledge was implicit and unsystematic. Things began changing slowly and around 13th century, systematic method of passing knowledge came into picture with appearance of crafts-guilds and apprentice systems.

The industrial revolution changed the scenario and the emergence of factories and industries paved the need for systematic knowledge and it became more and more specialized as the time passed. Since then, there has been an exponential growth in scientific and practical knowledge (Mokyr, 2002). Over the past century, this process has accelerated owing to the rapid improvements in the information and communication technologies. The accessibility of the existing knowledge and that of
the persons who create knowledge has increased tremendously. Therefore, businesses today are looking at managing knowledge or the management of knowledge from their perspective. Most organizations are actively involved in managing knowledge by putting systems and processes in place for reducing costs and creating unique products and services (Vedpurishwar, 2009).

Knowledge as an important concept has been doing the rounds of academia for a long while now. Lot of discussions and attempts have been made to classify knowledge over the years. Knowledge is not only a management concept but has importance across different fields of study and has been defined with various dimensions. Thus, Knowledge has numerous classifications and distinctions depending on the field of study. As per Merriam - Webster dictionary, Knowledge is defined as the condition of knowing facts because of either experience or association. It can also be described as the thing that a person is aware of or have an understanding of. It is an understanding of a particular science, art, or some technique of doing things. In philosophy, the study of Knowledge is called Epistemology. The famous philosopher Plato defined Knowledge as "justified true belief". A statement is considered as Knowledge only if it meets three criteria of being justified, true, and believed. Based on Plato’s definition, Nonaka and Takeuchi (1995) defined Knowledge as not only a justified true belief but also something that improves the capacity of an entity for effective action. Scholars such as Davenport and Prusak (1998) argued that “Knowledge in itself is not new, but recognizing it as a corporate asset is.” Thereafter, Knowledge started being acknowledged as an intangible asset which needed to be managed more systematically. Visser (2002) contended that theories of knowledge are philosophical in nature and generally vague. Therefore, Knowledge is difficult to observe as an empirical phenomenon. Moreover, being intangible in nature, it is also difficult to replicate, is unique and cannot be easily purchased in the market (in terms of well experienced employees). (Davidson and Voss, 2002)

1.2 KNOWLEDGE, INFORMATION AND DATA

Before discussing Knowledge Management as a concept, it is important to consider the difference between Knowledge, Information and Data. In fact, many experts address the question of defining knowledge by differentiating between knowledge, information, and data (Earl, 1994; Arrow, 1996; Davenport & Prusak, 1998). Prior to this, Knowledge was considered as a means to meet the desired objectives and
researchers such as Russell (1926); Schank and Abelson (1977); and Newell (1982) described Knowledge as something that helps a reasonable entity to act in a rational manner to reach the desired end goal. Davenport and Prusak (1998) distinguished between data and information by describing information as a specific data that helps in decision making, which is created when data is contextualized, categorized, calculated and condensed. On the other hand knowledge has more value as it develops over time, is able to assimilate different types of information and build a pattern amongst them. Similarly, Probst (1999) defined Knowledge as the cognitive skills and abilities of the individuals which they apply to solve problems and tasks.

Another author Theirauf (1999) presented differences between Data, Information and Knowledge by using a pyramid. According to him, data is the lowest point of the triangular pyramid; is unstructured and can be described as a collection of various facts and figures without any particular pattern or context. On the second level is the information, which is more structured and specific to needs. The final level at the top is knowledge which is defined as something making sense or rather "information about information". Knowledge can be described as a mixture of experience, contextual information and intuition that prepares and provides a basic framework on which new experiences and information can be evaluated, added or retained. Based on the above discussion, the major perspectives on Knowledge can be identified as: a state of mind; having access to information; an object; as a capability and as a process (Alavi & Leidner, 2001). These have been summarized in Table 1.1 below.

Table 1.1 Knowledge Perspectives

<table>
<thead>
<tr>
<th>Perspective</th>
<th>Underlying theme</th>
<th>Promoters</th>
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<tr>
<td>1. As an object</td>
<td>This perspective views knowledge as an object. It objectifies knowledge as a thing. As a tangible thing, knowledge is an object that can be modified and kept in a certain location. The key issue is therefore the creation and management of knowledge banks.</td>
<td>Russell, 1926; Carlsson et al. 1996; Sveiby, 2007.</td>
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<td>2. As a capability</td>
<td>Under this view, knowledge can be described as a capability with the potential for influencing future action. It is the capacity to use information, interpret information and to ascertain what information is necessary in decision making.</td>
<td>Carlsson et al. 1996; Watson, 1999; Alavi and Leidner, 2001</td>
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<td>3. As a state of mind</td>
<td>Knowledge has been described as “a condition or fact of knowing”. As per this view individuals should focus on expanding their personal knowledge and applying it to the needs of the organization.</td>
<td>Schubert et al. 1998; Davenport and Prusak, 1998.</td>
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<td>4. As a condition of having access to information</td>
<td>According to this view, organizational knowledge must be organized such that it facilitates access to content and its retrieval as well. This places emphasis on accessibility of knowledge.</td>
<td>McQueen 1998; Serrat 2008</td>
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<td>5. As a process</td>
<td>The process perspective focuses on the applying of expertise to the organizations needs. Thus, knowledge can be viewed as a process of simultaneously knowing and acting.</td>
<td>Zach 1998a; Frost 2014</td>
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Adapted from : Alavi & Leidner, 2001
For long many businesses have confused information to be knowledge and vice versa and this is the reason most initial Knowledge Management approaches failed to deliver. According to Serrat (2008) data and information are much more elementary as compared to knowledge while knowledge itself is a more primitive part of wisdom. Data and information can either be random or totally specific, and are limited in nature. Knowledge integrates reason, values, intellect, intuition and also implies ‘know-how’ and understanding. Each individual possesses the ability to interpret new experiences and information and has standards by which the individual evaluates this new information from the environment. Knowledge can therefore, be described as the combination of these experiences of the individual. As per Vedpurishwar (2009), knowledge helps people to manage difficult situations, to be able to predict ramifications of actions; evaluate outcomes; and thereby revise the responses to the circumstances. More recently, Knowledge has been described as an entity that originates in the mind of knower and is used and applied in the mind itself (Frost, 2014).

1.3 KNOWLEDGE MANAGEMENT

Knowledge Management (KM) as a concept started being developed in the early 1980s. The first use of the term Knowledge Management (KM) is reported at a European management conference (1986) sponsored by International Labour Organization. By 1990s, experts such as Nonaka and Takeuchi, (1995); Spender (1996a, 1996b) and Cole (1998) started advocating a knowledge based perspective of the firm in the strategic management literature. This replaced the earlier resource based perspective of the organizations which had been promoted by authors like Penrose (1959); Barney (1991); and Conner (1991).

According to this view, the knowledge based resources were usually difficult to identify and recreate. But once created, these knowledge assets were liable to produce long-term sustainable competitive advantage. In 1995, Nonaka and Takeuchi stressed upon the importance of developing and harnessing organizational knowledge for the long term effectiveness of any organization. Then Beijerse (1999) showed that organizations will be able to become more profitable, competitive and efficient by adopting a Knowledge Management approach. Knowledge Management was recognized as an important dimension of information revolution. But not all scholars were of the same view and certain experts such as Skyrme (1997), Grey (1998) and
Zack (1999) argued that Knowledge Management is nothing new and is the same as information management.

Knowledge Management is essentially a process of accumulation of new and existing knowledge and its transfer and dissemination to the whole organization. According to Mahesh and Suresh (2004), different members possess different kinds of knowledge in an organization. Knowledge Management practices can help in effectively transferring the knowledge between these members as and when they need it to carry out their responsibilities in the organization. Similarly, as per Serrat (2008), Knowledge Management involves capturing content that is useful and relevant; that identifies and describes the knowledge; accumulating and storing this content; retrieving and using the content by the employees such that the knowledge is constantly in flow. It can be therefore, be noted that Knowledge Management is simply a process where tacit and explicit knowledge owned by employees in an organization is identified, collected and converted into a more useful form such that it is available to all the other employees in the organization as well.

It has been observed that "Knowledge Management" as a term has been loosely applied to quite a varied spectrum of activities that have been used to create, transfer or exchange and manage or enhance knowledge assets within an organization. Therefore, there is no widespread agreement on what Knowledge Management actually is. Some of the important definitions of Knowledge Management given by different authors are presented below.

In 1994, Davenport defined Knowledge Management as a process that helps to capture, distribute, and effectively use knowledge in an organization.

As per Nonaka & Takeuchi (1994), Knowledge Management is the capability of a company to create new knowledge, disseminate it throughout the organisation and apply it in products, services and systems.

According to O’Dell (1996) Knowledge Management is a systematic method to not only ascertain useful knowledge but also to understand and use it to create value in an organization.

In 1998, Davenport & Prusak described Knowledge Management as the process that helps to increase the efficiency of knowledge firms through creating and assimilating knowledge and then coordinating and transferring it to each level of the organization.
Seeman et al. (1999) defined Knowledge Management as a system where the processes, tools, and structures were designed in such a way that they facilitated the increase and renewal of knowledge and also helped in sharing and improving the use of knowledge in Social, Human and Structural elements of intellectual capital.

According to Swan et al. (1999) Knowledge Management is a process that generates, acquires, captures, and then shares and uses knowledge, to improve learning and Organizational Performance.

Tiwana (2000) defined Knowledge Management as an ability of a business organization to generate and retain higher value from core business competencies.

Tiwana and Ramesh (2001) came up with yet another definition of Knowledge Management where they described it as a discipline that helps businesses to solve problems by generating and delivering new and innovative products or services. It also manages and improves relationships with existing and new customers and suppliers, and helps to improve processes and work practices by suing new knowledge.

According to Rubenstein and Geisler (2003), Knowledge Management acts as a buffer against difficult and sudden environmental changes by helping the organization to adapt quickly to new environment, and ensure its survival by improving its competence.

Similarly, Mahesh and Suresh (2004) described the primary goal of Knowledge Management as the key to facilitate the transfer of knowledge from those who possess it to other members of the organization who need it to carry out their business activities effectively.

As per Edwards et al. (2005) Knowledge Management deals with the process of creating value from the intangible assets rather than the tangible assets of an organization.

Xu and Quaddus (2005) described Knowledge Management as a process that helps the organisations to not only collect but preserve, but also apply what their employees know (the tacit knowledge) about their jobs; about processes and about procedures in the organization.
According to Lakshman (2007), Knowledge Management is a capability of an organization to generate, capture, assimilate, and utilize the collective knowledge of an individual, project or a team to improve its overall performance.

Rosmaini, Tasmin and Woods (2007) defined Knowledge Management as a system that is based on socio-technical theory and supports the sharing and integration of knowledge among organizational structures to generate more innovative, newer and value added products and services for the organization.

According to King (2009), Knowledge Management can be defined as the system that helps plan, organize, and motivate the employees and processes in the organization to make sure that its intangible or intellectual assets are enhanced and effectively employed.

Dalkir (2011) defined Knowledge Management as the systematic integration of processes, technology, structure and employees of an organization such that it adds value through learning and innovation.

Gerard and Gerard (2015) defined Knowledge Management as a process that creates, shares, uses and manages the knowledge and information of an organization.

1.4 CLASSIFICATION OF KNOWLEDGE

As the research in this area increased more and dimensions were added to the literature. To understand Knowledge Management better, researchers started to identify different types of knowledge. Experts agree on three types of knowledge – Explicit, Implicit and Tacit.

1.4.1 Tacit Knowledge

Polanyi (1962) said that an important part of our knowledge is personal, that is, it cannot be accessed by others. This was later called the tacit knowledge which is inherent in people. It is basically intuitive, hard to define knowledge that is experience based and therefore personal in nature. As per Nonaka (1994), tacit knowledge is difficult to enunciate and has deep roots in personal commitment, action and involvement. Brown & Duguid (1998) described tacit knowledge as something that cannot be formalized or codified and named it as “know-how”. Similarly, Serrat (2008) argued that the tacit knowledge cannot be easily verbalized and is intuitive by nature. It was referred to as skills, experiences and insight. Evidently, tacit knowledge
is difficult to identify, articulate, or share and store in a way that can be used whenever needed. Botha et al. (2008) presented it as the knowledge found in the minds of people in the form of cultural beliefs, skills and expertise while Wellman (2009) described it as one of the most valuable source of knowledge which usually leads to most breakthroughs and new innovations in the organization. It also may manifest itself in the value system and attitudes of people. One of the major challenges in Knowledge Management is to gather and make this knowledge available across the whole organization.

1.4.2 Explicit Knowledge

The second type of knowledge is the explicit knowledge. It was defined by Brown & Duguid (1998), as something that is formalized and codified, and is known as “know-what”. Serrat (2008) described this knowledge as more easily identifiable which can be expressed directly in form of books, journals, drawings, or computer programs. Similar explanation was given by Botha et al. (2008), who defined it as the knowledge found in databases, memos, notes, documents, etc. and is much more easier to locate, identify, assimilate and used by people (Wellman, 2009). Since this type of knowledge can be easily handled by normal information systems and cannot generate lasting competitive advantage, it is sometimes considered as being less important than tacit knowledge (Cook & Brown 1999; Bukowitz & Williams 1999).

1.4.3 Implicit Knowledge

Some researchers have gone a step further and defined implicit or embedded knowledge as the third type of knowledge which is a mix of tacit and explicit knowledge. This is the knowledge embedded in work processes, organizational culture, products, routines, and structures etc. (Horvath 2000). Similarly, Gamble & Blackwell (2001) showed that implicit knowledge is placed in the manuals, ethics, organizational culture, codes of conduct, organization rules and processes.

Therefore, many experts such as Liebowitz (2001) believe that the focus of Knowledge Management is not only to create and assimilate new knowledge (both explicit and tacit) but also to share it across the whole organization so that it provides value addition and other such benefits for the organization. Knowledge Management is now acknowledged as a discipline that can be used to promote an integrated approach to identify, manage and share the explicit information assets of an
organization such as databases, documents, policies and procedures as well as the tacit assets such as unarticulated expertise and experience resident in individual workers (Wickramasinghe, 2003). Besides sharing the knowledge assets, it is also important to develop an ability to capitalize on these intellectual assets through proper transfer and dissemination. Seneviratne et al. (2010) described Knowledge Management as the process of getting the right knowledge, in the right place, at the required time. Another author Skyrme, (2011b) presented Knowledge Management as the process that manages vital knowledge in an explicit and systematic manner and helps to improve processes of generation, organization, sharing, utilization and application to comply with its business objectives. More recently, Alajmi et al. (2015) explained Knowledge Management as a process by which employees of the organizations identify new knowledge, accumulate, transfer and share the gathered knowledge, and finally generate the assimilated knowledge for action.

1.5 ORGANIZATIONAL LEARNING

Literature has shown that it is very difficult to differentiate between implicit and tacit knowledge as there is no clear cut boundary for the two types of knowledge. Therefore, Knowledge Management experts and organizations deal with and focus on only two types of knowledge -- explicit and tacit knowledge. The explicit knowledge is the codified knowledge that is found in documents, while the tacit knowledge is the non codified and experience-based or personal knowledge. Many experts of Knowledge Management and Organizational Learning literature discuss the interplay between the tacit and explicit knowledge and how they interact with each other to benefit the whole organization (Reber et al., 1991; Brown & Duguid, 1991) and described Organizational Learning as a bridge that connects work with new innovations. Similarly, Anantatmula (2009) explained that the underlying concept of knowledge creation and leverage is learning. This learning helps to improve the processes and create new knowledge. This knowledge can then be applied in the workplace for improved productivity and efficiency.

Organizational Learning as a concept has also been around for quite some time now. It was promoted initially by Argyris and Schon (1978). It gained prominence in 1990 when Peter Senge published his book titled ‘The Fifth Discipline: The Art and Practice of the Learning Organization’. Later on other experts such as Steiner (1998) and Yeo (2005) further enhanced Senge’s model of the five disciplines. Frost (2014)
described two major methods of researching and studying Organizational Learning. The first approach to Organizational Learning considers the whole organization as one complete unit and examines learning from that perspective. An organization is composed of the individual members of the organization whose individual learning adds up and contributes to the Organizational Learning. In the second approach, experts study Organizational Learning in terms of Communities of Practice (CoP). This term was first given by Lave & Wenger (1991). They defined Communities of Practice as groups of people who come together to share knowledge on mutual subject. When people interact and learn from each other in an informal environment, learning is said to take place. This is the platform where people share knowledge and information without any expectations or reservations.

Initially, experts such as Porter (1980) portrayed Organizational Learning only as an intentional process directed at improving effectiveness although Fiol and Lyles (1985) suggested that organizational effectiveness must be enhanced in order to claim that Organizational Learning has occurred. A number of studies such as Garvin (2000) and Calantone et al. (2002) show that the organizations whose levels of learning orientation are high, have shown a much greater degree of innovativeness than those who have low learning orientations. Moreover, literature indicates that there is a positive relationship between Organizational Learning and the Performance (including the financial performance) where performance was measured in terms of innovation and competitiveness (Lopez et al., 2005; Prieto and Revilla 2006; and Payanides, 2007). It was also observed that Organizational Learning could improve customer satisfaction as well as employee satisfaction, product quality, and organizational reputation (Jiang & Li, 2008; Goh & Ryan, 2008).

Although research has showed positive relationship between Organizational Learning and Organization Performance, the concept of how organizations learn is still a subject of debate among scholars and practitioners. As per Garvin (2000), when employees in an organization collectively modify a work practice to reflect new knowledge, individual learning and Organizational Learning is said to have taken place in the organization. But how much of the knowledge is retained for the next cycle is still debatable. Generally, there are two types of learning activities that take place in organizations. These are referred to as Learn-what activities that involve identifying existing knowledge and knowledge gaps and Learn-how activities
involving new knowledge discovery or assimilation, thereby allowing it to be used in a new form (Tucker et al., 2007).

Some experts have argued that learning may not be a conscious decision nor does it need to be intentional for having taken place (Bower and Hilgard, 1981). It can happen unintentionally as well without a conscious thought. In 1997, Probst and Buchel reported that Organizational Learning helps in improving problem-solving, which in turn leads to increased capacity for action leading to enhancing the Organizational Performance. It was also observed that not all learning activities lead to better Organizational Performance. In fact, Steiner (1998) observed that there are three levels at which learning may occur -- individual, team and organizational levels. There is no clear consensus on the way these three types of learning interchange and transform into each other. It has been suggested that individual learning has an important role in contributing to Organizational Learning. But whether individual learning transforms to Organizational Learning has been the subject of research for quite some time. Moreover, it has been agreed that individual learning is a tacit knowledge and therefore quite difficult to change to explicit form for the use of organization. Hence, there needs to be an intermediate process which can help transform individual learning to Organizational Learning. This is where Knowledge Management comes into picture. It can be used to transform tacit knowledge to explicit form which is a more usable format. Researchers such as Elkjaer (2001) empirically showed that individual learning will not impact Organizational Learning unless there are some factors that can catalyze knowledge transfer beyond the barriers. Mirela and Aurelia (2010) argued that individual learning does not easily transform into Organizational Learning. Therefore, experts advise that a Learning based Knowledge Management process is necessary for acquiring existing knowledge and creating new knowledge and promote learning at individual and organizational levels.

1.6 DIMENSIONAL FRAMEWORK OF KNOWLEDGE MANAGEMENT

Over the years many researchers have studied Knowledge Management with various dimensions and factors. In this section, some of the more important frameworks have been discussed that serves as the base for concept of Knowledge Management.
1.6.1 Wiig’s Model

One of the very first frameworks is the **Wiig’s (1993) four step model of Knowledge Management Cycle** which is presented in figure 1.1. As per this model, the main use of Knowledge Management lies in making an organization intelligent and smart by helping in the creation of new knowledge, accumulation of useful knowledge, and then applying that knowledge for improvement in the performance. This KM cycle shows how knowledge can be created and used by both individuals or by whole organizations.

The first step is *Building Knowledge* -- This involves the activities that make products and provide services. These activities include obtaining, analyzing, reconstructing (synthesizing), codifying, and organizing knowledge from both external and internal knowledge sources. The second step of *Holding Knowledge* – involves remembering, accumulating and embedding knowledge in repositories. Knowledge is now held in more physical and usable forms, such as manuals, set of instructions, work documents, books and archives. In the next step of *Pooling Knowledge* – coordination, assembly, access, and retrieval of knowledge is done in usable forms through intranets and Knowledge Management portals. The last step is *Applying Knowledge* – which refers to knowledge being used in order to generate benefits and involves performing tasks, observing, analyzing, deciding and implementing.

![Figure 1.1 Wiig Model (1993)](image-url)
1.6.2 SECI Model by Nonaka and Takeuchi

Next is the SECI model of Knowledge Creation by Nonaka & Takeuchi (1995) which is presented in Figure 1.2. This model suggested that the organizational knowledge creation should be encouraged through four modes of knowledge conversion --- Socialization: Tacit to Tacit. Knowledge is passed on through sharing practices, guidance to juniors, imitation and observation. People help each other by sharing information, tips and tricks needed to get the job done, and their experiences with each other. The second step is Externalization: Tacit to Explicit. This is particularly difficult but quite important conversion mechanism. Tacit knowledge within individuals is converted into explicit form of manuals, books and documents etc. This helps to spread the now explicit knowledge much more easily than before throughout the organization. But most of the tacit knowledge cannot be easily codified or converted into readable format that can be understood by others. Next step is Combination: Explicit to Explicit. This involves using already available explicit knowledge and creating more useful or easy to use knowledge from it. It could be very specific for particular task or new knowledge for improvement purposes. The last step is Internalization: Explicit to Tacit. This refers to assimilation or ‘learning’ of new knowledge by users so as to improve their productivity and performance. When new knowledge is learnt by the user, it gets converted to his/her personal knowledge and this is how knowledge gets internalized. This is known as the SECI model of Knowledge Creation.

![SECI Model Diagram](http://www.tlainc.com/articl297.htm)
1.6.3 Socio – Technical KM Model

The Socio-Technical Model of Knowledge Management is based on socio technical perspective that focuses and lays emphasis on the interrelationship of the social and technical factors at the workplace. This perspective was first given by Trist and Bamforth (1951) when they used the term ‘socio-technical’ in their research. As per them, the whole organization system consisted of two sub-systems – the social and technical systems and it is difficult to ignore the interplay of these factors in the operating organization. The major work in this field was done by Pan and Scarbrough (1999) who extended the concept into the Knowledge Management paradigm and emphasized the importance of both social and technical factors in understanding the work performance of individuals. It was suggested that both technological and social factors and their inter-relationship will determine the style of Knowledge Management System that will work in the organization. These two factors interact with each other at three levels in any organization. These are:

*Infrastructure* – which represent the actual information and communication system of the organization that helps employees to communicate with each other. This is part of the technical sub-system.

*Infostructure* – This represents the formal organization structure and provides the basic rules and procedures on flow of information. The organizational hierarchy governs how information and knowledge is passed between employees. This is a part of social as well as technical subsystem and should be exploited by the Knowledge Management System to generate interest in contributing knowledge and information.

*Infoculture* – This refers to the Organization Culture and represents the formal and informal social interactions between people in the organization. This is the part of social subsystem and this part of the organization environment should be explored by Knowledge Management System to share and distribute knowledge.
1.6.4 KM cycles and Value Chain Models

Many authors added on to basic KM models by Nonaka and Takuchi (1994) or previously given KM cycles to give modified Knowledge Management processes for specific studies and domains. For example, Knowledge Management Cycle by Preece et al. (2001) focused primarily on improving the knowledge usage in an organization. This model makes use of two knowledge processes: *Knowledge acquisition process* -- that captures and creates required structured knowledge systematically and *Knowledge representation technologies* --that can be used to store the knowledge in databases that are different than prevalent relational conventional databases. The four stages of knowledge creation process were merged to form a two step model. Similarly, Weggeman (1997) and later Van Zolingen, et al. (2001) came up with the concept of knowledge value chain to describe the process of Knowledge Management. This value chain was comprised of five main steps: Determining the need for knowledge, Identifying available knowledge, Developing the knowledge for organization’s use, Applying the useful knowledge for improving processes, and Evaluating knowledge for its usefulness. The Knowledge Management process was described as continuous and cyclical in nature. This value chain is most effective
when the model is used at the organizational level. Similarly, Tranfield et al. (2002) developed a Hierarchal process KM model for innovation that consisted of following eight generic routines: search, capture, articulate, contextualize, apply, evaluate, support, and re-innovate.

1.6.5 KMPI Model

Lee et al. (2005) provided a new measure for assessing the Knowledge Management performance. It is known as the KMPI or Knowledge Management Performance Index. This metric was used to check the firm’s performance when Knowledge Management system is in use. It is assumed that organizations will try to create and build new knowledge only if, it will help them attain competitive advantage and create economic benefits. Therefore, a system was proposed where the economic value due to Knowledge Management process could be measured. According to this model, there are major five components of knowledge circulation process: Creation, Accumulation, Sharing, Utilization, and Internalization of knowledge. If the knowledge circulation process (i.e., knowledge creation, accumulation, sharing, utilization, and internalization) is efficient and effective, then it will improve KM performance. Knowledge Creation deals with creation and learning of new knowledge. It can be both tacit as well as explicit and its creation is enhanced by encouraging communication and cooperation of individuals from diverse backgrounds. Knowledge Accumulation refers to the process where all individuals in the organization must help to accumulate and add to the existing knowledge base thereby making it easier to obtain the relevant knowledge to help in their work and decision making whenever required. Knowledge Sharing involves sharing and diffusion of knowledge and hence contributes to modifying the work processes to improve performance. Knowledge Utilization refers to actual use of existing knowledge in the repository and it occurs at all levels of management activities in organizations. Knowledge Internalization involves employees and users learning about new knowledge and successfully applying it their work context. It is usually a consequence of Organizational Learning.

1.6.6 Knowledge Management Cycle

Heisig (2009) explored and identified various KM activities by using an empirical approach to manage organizational knowledge. Using a mixed methods approach, a
comprehensive content analysis of 160 KM frameworks was conducted. This formed the basis of the construction of a new integrated KM life cycle model given by Evans, Dalkir and Bidian (2014). The KMC Model contains seven stages of identification, storage, sharing, use, learning, improvement, and creation. The first step refers to the process of generating, and identifying new knowledge. The last step of Create is also part of this stage where new knowledge is created if the existing knowledge base does not contain the required information. In Store – focus is on storing the knowledge in the knowledge repository, once the knowledge has been created and found to be useful. The third step is Share – where the Knowledge that has been stored in the repository is now retrieved and shared as and when required. In the next step Use – knowledge is used as and when it is required such as for improving the work processes, productivity or the performance of the individual as well as the organization. The fifth step Learn – refers to the process of internalizing the knowledge when it has shown benefits. This leads to situations where individual as well as Organizational Learning takes place. In the next step Improve -- The learning that takes place in the previous steps is subjected to relevant checks to ensure that it is useful and needed by the organization. This knowledge is constantly monitored and updated to keep it from becoming obsolete.

Figure 1.4 The Knowledge Management Cycle (KMC) Model

Besides the various models of knowledge creation process, many studies were conducted to identify the various factors that have an impact on Knowledge Management initiatives and implementation in organizations. Moreover, experts were keen to see the results of Knowledge Management implementation especially on
Organizational Performance. To this end, major factors of Knowledge Management were identified that could potentially improve performance of an organization. A study by Lee and Choi (2003) provided seven major enablers of Knowledge Management as: Learning, Trust, T shaped skills, Collaboration, Formalization, Information technology support and Centralization. It was observed that organizational creativity plays a mediating role between knowledge creation and Organizational Performance. Similar studies by other experts identified Culture, Strategy, and Technology to be significant predictors of Knowledge Management effectiveness (Hussain et al., 2004); Leadership, Organization, Technology, and Learning as the four pillars of Knowledge Management architecture to improve Organizational Performance (Serrat, 2008); Leadership, Business Strategy, Collaboration, Training, Technology adoption, Business goals and Organizational culture as the enablers responsible for the effectiveness of Knowledge Management Systems (Bechina & Ndlela, 2009).

Organizational Learning was identified as one of the important consequence of Knowledge Management (Brown & Duguid, 1991). Experts observed that successful organizations create an environment where Organizational Learning is combined with Knowledge Management (Pemberton, 2000). Literature has also shown that Organizational Learning plays an essential role in improving Performance of an organization (Khandekar & Sharma, 2005; Lopez, et al., 2005). Therefore, it can be concluded that Knowledge Management and Organizational Learning complement each other and help in improving performance of an organization. Various authors agreed to the importance of studying and implementing Learning based Knowledge Management Systems to improve productivity, efficiency and performance of an organization (Nielson, 2006; Ferreira et al., 2011; Nafei, 2014).

1.7 KNOWLEDGE MANAGEMENT IN HEALTHCARE

In the information era, the knowledge driven sectors are showing rapid and exponential growth and knowledge is being recognized as its most important resource. With growing service sector comes plethora of problems for which there is a corresponding increase in the research work being done in this area. In 2005, Thorburn examined the role of knowledge activities in innovation, in the service sector in Australia. It was observed that although service organizations were spending only a small amount of turnover on knowledge based activities, they were important
in introducing innovations into those companies. Various authors have stressed upon implementing Knowledge Management concepts and principles in tourism and hospitality industry (Mistilis & Sheldon, 2005; Thorburn, 2005; Cooper, 2006). Similarly, it was observed that Knowledge Management has an important role to play in banking sector (Alrawi & Elkhatib, 2009). Another study in airlines sector showed that Singapore Airlines implemented a knowledge network to predict the supply and demand figures for flight tickets. Results indicate that the Knowledge Management System improved the sales of flight tickets (Goh, 2007). Hence, Knowledge Management tools and techniques are finding application in all domains. Different approaches are used in different sectors depending on the particular need but the underlying common theme is the same – managing organizational knowledge in a way so as to yield improved decisions and Organizational Performance.

Knowledge Management can therefore be regarded as an interdisciplinary management paradigm which encompasses the entire spectrum of knowledge activities -- knowledge creation, identification, codification, and dissemination (Choo, 1998). As per Choi and Lee (2002), the visible way in which Knowledge Management can manifest itself in an organization is by creation, identification, distribution and sharing. This new or modified knowledge and best practices are thereafter used for improvement in performance. Therefore, experts such as Serrat (2008) describe Knowledge Management as a method of tracking and accumulating the right knowledge and further distributing it to the people who need it at exactly the right time when it is required thereby, helping them to use this knowledge in such a way that that it helps to provide a boost to the Organizational Performance.

Healthcare has been identified as one of the key service sectors and an area that is poised for significant growth in the next few decades. Due to this, healthcare sector is undergoing tremendous transformation and is in the state of continuous change. The ever changing technology, new drugs and better cures for diseases, improved tools and techniques – all of these contribute to this constantly changing scenario. In fact, research in healthcare sector is poised at the most interesting threshold and moving at a fast pace in a knowledge intensive environment, in addition to being promised as one of the most beneficial to the humanity.

With knowledge being recognized as a critical resource in all organizations, the importance of testing out the Knowledge Management concepts and theories in this
domain is being emphasized so that there is a competent, effective and efficient healthcare management in place (Jackson, 2000; Montani & Bellazi, 2002). Experts fear that healthcare knowledge has not been utilized properly even though; large amounts of important information are available to healthcare practitioners. This could happen due to variety of reasons and as per Ryu, Ho and Han (2003), the specific knowledge required at the point of care, is mostly unavailable to them. Moreover, healthcare organizations have also been not without fault and have been distinctly slow in adopting new approaches to assimilate and share knowledge. The sheer amount of healthcare knowledge available to practitioners compounds the problem manifold.

As Abidi (2007) pointed out, not only is healthcare knowledge being produced at an exceptionally high rate, it is also used and updated by a large range of healthcare stakeholders across multiple disciplines. These include doctors, paramedical staff such as nurses, hospital administrators, patients and their care givers, and policy makers in organizations and governments etc. Therefore, many healthcare organizations are beginning to realize the importance of managing medical knowledge for better results and patient care. The healthcare industry is taking small steps towards Knowledge Management but is still a bit cautious in its approach. Hence, little systematic work has been done till now to move into a new era of managing knowledge. Moreover, experience in manufacturing and IT sectors have shown that in order to apply Knowledge Management techniques in industrial environment, Information technology support and various other techniques and tools need to be adapted for Knowledge Management. The same will also hold true for healthcare industry.

The healthcare profession is now confronted with a dramatic rise in medical knowledge. Genetic research, new drugs, and an expanding field of research in new areas of biotechnology and biomedical engineering are creating a strong need to manage this avalanche of knowledge. Both the forms of knowledge – tacit as well as explicit are required in establishing a new Knowledge Management System and especially so in healthcare industry. Therefore, industry experts have further classified explicit knowledge into internal explicit and external explicit knowledge (Zack, 1999). The Internal explicit knowledge is found in medical research reports and journals used by healthcare practitioners. It is the knowledge most used by the doctors
and physicians to treat the patients and provide care. The external explicit knowledge includes the policies and medical practices that govern the practicing physicians and other such legal and governmental publications that do not directly affect patient treatment methodology. Tacit knowledge, on the other hand is the highly personal knowledge, expertise and wisdom residing inside in the brains of medical doctors, for e.g. cancer specialists, brain surgeons or heart specialists. Since this skill and expertise lies inside the brains of the individuals, there is no foolproof system for sharing this skill effectively and generally it does not take place except at conferences – both industry or academic.

With increase in medical knowledge, the need for specialization has increased. Patient care is a team effort, with super specialists working in complete tandem with primary healthcare providers to give proper patient care. But these primary care givers do not get sufficient opportunities to interact with the super specialists and are not at the same page in terms of new technologies and methods of treatments. There is a distinct gap between the knowledge of these two important players in healthcare both in government as well as private practice (Dean, 2002). Therefore, it is very important to share relevant knowledge and useful information regarding latest methods and decisions of treatment (Eisenberg, 2002).

Intellectual capital or Knowledge is treated as an intangible yet managed asset in Knowledge Management literature. The primary care takers or players in healthcare institutions are the doctors, nurses and other paramedical staff. In the pre information era, hospitals did not need to worry about their intellectual assets and usually, these intangible knowledge assets such as the physicians, nurses etc. were lost when they left the hospital (Chase, 1998). This happened either through employee attrition and high turnover rates or when they were let off due to cost saving measures. Conklin (1998) argued that since the skill and expertise of doctors, nurses etc (the intellectual assets of the hospital) have direct impact on improvement of patient healthcare delivery, it makes sense to incorporate policies and strategies to retain these skills, expertise and experience of healthcare providers at all levels in the healthcare institutions. Therefore, experts emphasized on focussing the Knowledge Management Systems in healthcare institutions on paying equal attention to managing both tangible and intangible knowledge assets for improving learning and thereby provide better patient care (Oxbrow, 1998).
In knowledge era, employees are the most important intangible asset of the healthcare organizations. Therefore, one of the most important objectives of a Knowledge Management System is to create a system that stops intellectual knowledge of a hospital from being lost by way of attrition or become obsolete due to lack of new knowledge (Elliot, 2000). Retention of highly skilled employees is not the only important thing in providing good patient care. It is also imperative that the highly skilled employees share their expertise with other healthcare providers at lower and mid level of hospital administration. As Burca (2000) pointed out, a Knowledge Management System in hospitals will only be successful if a knowledge-sharing environment is created in the workplace and important information is timely and adequately shared from top to bottom. It has been stressed by researchers such as Atkins et al. (2001) that the inherent knowledge of the employee (which is tacit and intangible) can help in nurturing innovations in change management, advance planning, and hospital culture. As a result, healthcare institutions that foster a knowledge sharing environment show improvement in learning of its employees in addition to reduction in cycle time, reduced costs, higher employee satisfaction levels and a definite improvement in overall organization performance.

Earlier, cost of treatment and proper patient care were the most important success factors in a healthcare institution. Now, as improvements in technology are made, the requirements of healthcare administration have changed. There is a greater emphasis on better patient service and the parameters of success have been redefined. Besides the need for quality patient care, there is an urgent requirement to prevent the onset of diseases in the first place. Moreover, with people in general becoming more health conscious, healthcare providers are expected to help in providing patients a way to good health in everyday living. With this, there is an inherent need to focus on knowledge assets and to identify and spread best practices in the health care organizations (McGlynn et al. 2003).

Healthcare in the 21st Century is facing large forces of change. The major forces of change are -- an informed and more empowered user; the need for adapting and using e-health; and a visible shift in healthcare delivery from only providing cure and treatment of diseases to the prevention of diseases. In addition to having to contend with these forces, the cost of delivering quality healthcare is increasing exponentially. Hence, it is essential to reduce the working costs in any healthcare organization.
Moreover it is equally important to provide an efficient, effective and quality healthcare treatment to patients. Research has shown that there are inconsistencies in health care practices because of which there is an enormous variation in the quality of treatment received by different patients (Wennberg, 2002; McGlynn et al. 2003). New business and technological advances have the potential not only to reduce this expenditure but can also help in providing equitable care to all sections of the society. The new knowledge driven systems can also make it possible to achieve high value, high quality and good accessibility to healthcare delivery systems. Thus, the adoption of advanced strategies such as the Knowledge Management strategies, improved processes and techniques in the hospitals will help in meeting the latest challenges in this industry.

Various experts have demonstrated that by adopting established protocols, best practices and procedures, it is possible to reduce variations in providing quality care and consequently reduce the number of errors made during patient care (Everdingen, 1993). Therefore, it is necessary that all stakeholders have access to latest information and knowledge. Another major cause of medical mistakes is the lack of cooperation between various professionals involved in the healthcare delivery process. It is believed that implementation of Knowledge Management Systems can lead to better cooperation and coordination between various stakeholders of healthcare process (Dieng-Kuntz, et al., 2006).

A large number of people are involved in decision making in hospitals -- medical specialist, nurses, technicians, other paramedical staff and patients themselves. Experts have argued that using Knowledge Management can help improve decision making, and by making informed decisions, one can also increase the quality of patient care (Friedman et al., 2001). Moreover, when everyone has access to the latest guidelines and procedures, it can improve productivity and avoid duplication of efforts. It was observed that many times, the decisions in emergencies and critical care units are made during stressed and uncertain environment where knowledge, time and other resources are constrained (Bodemer et al., 2015). It is important to take help of clinical decision making tools to support physicians during such difficult situations. It has also been reported that using Knowledge Management techniques, hospitals can support clinical decision making thereby creating an opportunity to improve patient care and also minimize the disparity in the healthcare delivery system (Simon, 2016).
Another important aspect of the learning capacity and improving patient care concerns the ability to learn from one another’s mistakes. As per Everdingan (1993), not only the records of good incidents and accidents important, a culture in which incidents and accidents are actually reported is equally important. Therefore, it can be argued that organization culture of sharing and learning is an important part of Knowledge Management System. Knowledge Management initiatives, in addition to making informed decisions, will also result in an improvement due to a uniform procedure and an increased learning capacity due to a sharing organization culture. This will eventually lead to improved communication with the patients thereby providing an improvement in the overall quality of the care provided.

It has been observed that the literature on Knowledge Management in healthcare can be converged on three main areas: The nature of healthcare knowledge (which has been confined to electronic healthcare records); Tools and techniques of Knowledge Management Systems (knowledge warehouses and databases); and factors facilitating KM implementation along with barriers to KM adoption (Nicolini et al., 2008). In general, Organizational Performance is discussed in terms of financial figures, profitability or employee satisfaction and turnover rates. In healthcare organizations, it is not possible to rely on same measures of performance. In these organizations, performance is measured in terms of patient satisfaction, quality of patient care along with parameters like efficiency, mortality rate and accessibility (Alhashem et al., 2011).

It is obvious that overall organization performance in healthcare is not completely dependent on these financial parameters. Therefore, these highly professional institutions need people with specialized knowledge (an important resource that cannot be measured in monetary terms) which needs to be constantly updated, shared, and leveraged (Van Beveren, 2003). It can be said that knowledge in healthcare institutions is an unarticulated expertise based on experience of the healthcare provider; while Knowledge Management in healthcare is a process that helps to identify and create, share and distribute the healthcare knowledge as well as its knowledge assets (Wikramsinghe, 2003). Knowledge Management in healthcare can also be described as a systematic process of improving Organizational Performance and growth by aligning the various dimensions of work processes, people (knowledge
assets), technologies, leadership and environment to optimize information, cooperation, expertise and experience (Guptill, 2005).

The focus of healthcare Knowledge Management is to provide superior healthcare delivery by creating and utilizing healthcare knowledge and improving the quality of patient care. It has been seen that this is not so easy to achieve because of the complexity involved in providing the healthcare to the patients. The complex issues involved in healthcare Knowledge Management range from dealing with a large variety of knowledge resources, diverse medical stakeholders having different requirements, capabilities and expectations, ever improving cutting edge technology, newest and latest medical protocols, to unique clinical situations which require specialized manipulation of the healthcare knowledge.

Networking is one of the ways in which healthcare professionals have been sharing clinical knowledge in the past. As Conner (2001) stated that professional networks have existed amongst medical professionals for long, but now the healthcare institutions are realizing their potential as the source of knowledge sharing which can prove helpful in improving learning and performance. Communities of Practice are one such network of medical professionals through which clinical knowledge and clinical evidence is shared without being hindered by professional boundaries (Addicott et al., 2006). Since knowledge sharing is an integral part of KM System, the potential of social learning practices can be utilized by implementation of Knowledge Management in healthcare institutions.

Based on the above discussion and previous literature, it can be stated without doubt that there are distinct advantages in implementing Knowledge Management solutions in healthcare sector. But it is not simple to adopt KM technologies in a complex environment in which healthcare professionals operate daily. It is equally important to understand and realize the various barriers and difficulties in adoption and implementation of Knowledge Management Systems in healthcare. Research has shown that many organizations confuse Knowledge Management Systems with information systems and although technology is a major part of any KM initiative, it is not the only enabler of Knowledge Management (Russell et al., 2004). Moreover, it has been seen that KM systems encourage sharing of both tacit and explicit knowledge, but transfer of tacit knowledge is not easy (Quinlan, 2009) and
organizations indeed face a lot of issues in encouraging employees to share their inherent knowledge.

Kothari et al. (2011) divided the major Knowledge Management barriers into two types – Individual barriers and organizational barriers. Barriers based on organizational level include over dependence on technology (Jones, 2003); lack of immediate and observable benefits (Lien et al., 2007); lack of culture of trust and sharing (Yeung et al., 2007) etc. The individual level barriers included lack of technological skills (Loyarte & Rivera, 2007); unwillingness to share information and knowledge for fear of losing position (Franco & Mariano, 2007); resistance to change (Balogh et al., 2008); information overload (Burley & Pandit, 2008) etc.

It is observed that both organizational and individual barriers need to be eliminated before a successful Knowledge Management System can be implemented. Both organizational and individual concerns are complementary to each other as overcoming organizational barriers help an individual in getting involved in sustainable knowledge sharing activities. Therefore, it is important for KM practitioners to look for solutions to overcome these barriers and actively facilitate Knowledge Management enablers for proper implementation of KM systems in healthcare institutions. With rise in both private and governmental support to healthcare sector, more and more hospitals and medical homes are focusing on the increasingly important question of how to improve healthcare delivery to the patients. Knowledge Management is being recognized as one of the key approaches in managing the complex healthcare delivery issues. Healthcare is a knowledge intensive industry; hence, creation and identification of new knowledge and Organizational Learning are two very important aspects of Knowledge Management in these organizations. Experts such as Gupta and Govindrajan (2000) showed that healthcare organizations are now focusing on their intellectual capital or the knowledge assets to promote learning and hence improve their organization performance. Moreover, the healthcare institutions need to foster knowledge sharing and innovation to develop their institutional knowledge (Lee & Hong, 2014). Therefore, it is critical for healthcare institutions to develop innovative strategies that can help manage clinical knowledge (Gagnon et al., 2015).
1.8 RATIONALE OF THE STUDY

With advances in information technology and information revolution, there is a tremendous amount of information available on any topic. This trend is especially true in more knowledge intensive industries such as healthcare. Therefore implementing and adopting any knowledge based system or for that matter even information related system in this sector is complicated and presents a real challenge. The healthcare sector presents myriad of challenges in terms of rapidly increasing health care costs, issues of ethical medical practices, impact of medical errors, ever changing and increasing availability of medical information and the generally complex nature of the healthcare processes.

Experts believe that healthcare sector has a very complex structure (El Morr and Subercaze, 2010), as it involves large number of primary players who are directly involved such as physicians, specialists, nurses, radiologic technology technicians, lab technicians, counsellors, etc. In addition there are many other secondary stakeholders who have indirect involvement such as hospital and clinic administrators, pharmaceutical companies, health care insurance companies and biomedical and pharmaceutical research communities, etc. It is but natural that all these collaborate to provide good healthcare delivery to the patients. Therefore, they all need to be on the same platform and have access to the latest updated knowledge and happenings in the healthcare field. Therefore, establishing and using Knowledge Management techniques becomes absolutely necessary for sharing, communicating and augmenting knowledge in health care sector.

There is a growing need to manage the increasing amount of clinical data and information that is available to medical practitioners these days. It has been indicated that rather than help, the information overload ends up overwhelming the person looking for it. As experts point out, the healthcare knowledge is fragmented and scattered over departments, groups and communities (Gray & de Lusignan, 1999). In addition to being spread over, the amount of this knowledge is expected to increase by four times during a physicians life time (Heathfield & Louw, 1999); and there are over "10,000 known diseases, 3,000 drugs, 1,100 lab tests, 300 radiology procedures, 1,000 new drugs and biotechnology medicines in development and 2,000 individual risk factors" (Pavia, 2001). Similar studies by Masys (2002) showed that with the improvements in biomedical knowledge, 50% of current hospital admission...
requirements will be replaced by new pharmaceutical drugs and compounds in the next few years. It cannot be expected that a physician will be able to keep track of all these along with his/her routine tasks. Thus, it becomes essential for doctors and other medical staff to update their knowledge as frequently as possible. In addition the amount of published literature is going up day-by-day. In 2009, Medline contained 21.6 million citations and, on average, about 40,000 new entries were being added per year. As of March 2016, 5,633 journals are currently indexed for Medline. Therefore, it can be assumed that it is simply not possible for the physicians and the other medical stakeholders to possess and be updated regarding all the knowledge in their domain of their specialty (Hall and Walton, 2004).

Another issue plaguing the healthcare sector is the amount of medical errors that occur in hospitals and medical homes. As per a report by The Institute of Medicine, USA (1999), there are more than 98,000 deaths each year that can be attributed to medical errors. Although a number of studies conducted on them show that there has been a decrease in errors by physicians, it still amounts to quite a large number (Dawes and Sampson, 2003). Similarly there have been numerous instances of patients having adverse reactions to drugs because of wrong drug prescriptions and numerous complaints by patients that sometimes the common laboratory tests ordered by physicians are clinically unnecessary. Therefore, it is important that doctors and physicians should be able to understand and interpret clinical information correctly, especially when there is a huge amount of information available to them (Dwivedi et al., 2007). With lots of information available for patients, there is now an increasing demand for effective and accountable clinical practices and decisions, improved health outcomes, and provision for superior health delivery. (Abidi, 2007)

In India, Healthcare sector is amongst one of the most progressive and largest service sectors. As per the industry reports, the healthcare market in India is approximately US$ 100 billion and by year 2020, it is expected to grow by another 180 billion US dollars to reach 280 billion US dollars (Ibef, 2016). The healthcare market is expected to grow at 23 % of CAGR (Compound Annual Growth Rate) for the period 2015-2020. Indian government is also taking steps to meet this upsurge in this sector. It has set up NITI Aayog (National Institute for Transforming India) to upgrade country’s public health system by taking steps such as promoting competitiveness between public sector hospitals and private hospital; and using private doctors to overcome the
shortage of primary healthcare doctors. In fact, Indian government is the highest spender (that is 5.25% of the GDP) on healthcare amongst the developing countries. Despite this, the public sector is contributing only around 15-20 per cent of the required investment in the healthcare sector. Reports show that India’s healthcare infrastructure is still not up to the required mark and is lagging behind despite the economy’s growth. Thus, private healthcare institutions have come up in vast numbers to fill up this gap in infrastructure. With such a large investment, this sector is poised for growth in the next few years and it becomes essential that strategies like Knowledge Management are being used for optimal resource utilization and improvement in healthcare delivery process.

Evidence in literature shows that experts are now keen to embrace Knowledge Management tools and techniques to bring about the necessary change required for improved healthcare services. There is now an urgent need to analyze the healthcare knowledge paradigms and identify various dimensions that will facilitate improved hospital performance. Dwivedi et al. (2005) observed that healthcare organizations are trying Knowledge Management practices to cut costs, reduce errors improve healthcare delivery and better the performance. It is important to study and understand the process of adoption and implementation Knowledge Management practices in these organizations.

Academicians and experts have only recently started exploring the Knowledge Management concepts in healthcare context. Most of the studies in the past have focussed on bringing up theoretical models on the implementation of tools and techniques for knowledge sharing and dissemination but there is a lack of empirical studies on its outcomes such as improved Organizational Learning and better hospital Performance in healthcare sector. Moreover, there are not many research studies regarding Knowledge Management in Indian context either conceptual or empirical with reference to the Healthcare sector. This study therefore aims to fulfil this very crucial gap in healthcare sector in India.
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