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2.1 INTRODUCTION

Literature review of related studies helps the researcher in identifying the topic on which one wants to do research, as it gives a clear picture of previous studies which have already been done on respective area. An in-depth understanding of experiences and findings of previous researchers would be quite useful in sharpening the area of current research. Thus this chapter discusses the existing available literature both in national and international context in this area.

The chapter is further divided into eight sections, section 2.2 describes research carried out in the field of knowledge creation, section 2.3 deals research carried out in the field of knowledge sharing, section 2.4 focus on research carried out in the field of knowledge codification, section 2.5 describes research carried out in the field of knowledge mapping, section 2.6 revolve around research carried out in the field of knowledge storing, section 2.7 underscore research carried out in the field of knowledge acquisition, section 2.8 presents research carried out in the field of KM and topic related literature and last section deals in identified gaps in literature.

2.2 RESEARCH CARRIED OUT IN THE FIELD OF KNOWLEDGE CREATION

The father of KM Nonaka (1994), describes four patterns of interaction involving tacit and explicit knowledge, in his study about dynamic aspects of organizational knowledge creation process. Findings of the research study says that organization play a critical role in mobilizing tacit knowledge held by individuals and provide the forum for a spiral of knowledge creation through socialization, combination, externalization and internalization. He further suggests all conversion modes interact in a dynamic and continuous entanglement to drive the knowledge creation process. He strongly feels that the role of individuals is essential actors in creating new knowledge.

Considering knowledge creation within innovative organizations, Miguel et al., (2007) indicate that the most innovative company make better use of the resources related to the well being of the employees. The less innovative companies shown to have less synergy with the market, either because they have favorable conditions regarding the innumerous competitors or because they present a less proactive attitude regarding the clients. They find that relation between the organizational values and the creation of knowledge deserves to role as moderators of cultural values in the relation between the organizational values and the creation of knowledge.
Robertson et al., (2003) studied about influence upon knowledge creation by professional consultancy firm. They investigated that such firms provides an important setting for examining such influences because their survival depends on their ability to mobilize and synthesize professional bodies of knowledge. They suggested that knowledge creation in science-based epistemic cultures may rely more on legitimating through scientific methods and hence the application of more tacit forms of knowledge, through experimentation.

Higgins and David (2006) elaborated theoretical assumptions of knowledge creation among post-industrial firms. The study describes domains of knowing and learning to understand knowledge as a stratified phenomenon of social knowing. They suggested that the Knowledge intensive firms (KIF) must concentrate on the effects on the types of knowledge that are most deeply involved in social reality and the roots of its structures, such as the perceptual knowledge of the external world.

Considering knowledge creation in construction organizations, Eliufoo (2008) characterize the knowledge creation process in construction organizations and explore to what extent organizations facilitate the process. The research methodology describes a case study approach which is adopted using four construction organizations as well as a knowledge creation model used as an analytical tool. The study provides an establishment of specific knowledge creation model through an empirical investigation of construction organizations.

Corti and Storto (2000) stated in their research about knowledge creation in small manufacturing firms during product innovation. Ninety one cases of technical problem solving, occurring during product innovation within thirty five small firms were studied. They advocated that two cognitive factors, context uncertainty and ambiguity, affect the amount and quality of knowledge generated during technical problem solving through the mediation of practices and behavior adopted in problem solving.

Jakubik (2008) studied about knowledge creation process within communities. He comment that the value of applying action research (AR) is rather exceptional in KM. However, it proved to be a good way of experiencing knowledge creation processes in communities”. The novelty of the study is in contributing to the KM theory by opening the black box of community knowledge creation by demonstrating in practice that people interacted and created knowledge in a specific community.
Pillania (2005) strongly feels that innovation is the guiding torch, which could make it happen in the knowledge-driven, services-led world economy. This research provides ideas on new knowledge creation in three selected sectors: software, petroleum and pharma. He finds that though people rate new knowledge creation as quite important for their organization, there is a lack of attitude towards knowledge creation. The positive things in the research are that employees are aware of the importance of new knowledge and the negative aspect is that new knowledge creation is not given as much importance as it requires. He suggests that the public sector in particular, needs to take a serious look at new knowledge creation in the present time of privatization and liberalization.

Voelpel et al., (2006) find in their research about organization innovation of knowledge resources that in order to leverage on innovation as one of the most important sources of competitiveness, business success and organizations have to abandon outdated organizational models and engage into mobilizing their knowledge resources. This research is the result of an eight year in-depth theoretical and practical research process mainly undertaken within Siemens AG, and is based on a total of 68 expert interviews conducted with distinguished experts in related field. This research shows how to mobilize organizations for innovation and, consequently, value creation by suggesting an advanced organizational model called the ‘mobile company’.

Malhotra, Gosain and Omar (2005) examined about enterprise supply chain’s knowledge creation process and information exchanged between supply chain partners that can lead to new knowledge creation in supply chains, even when learning from partners may not be an explicit goal. Using the conceptual framework focused on absorptive capacity, they were able to shown that both operational efficiencies and market knowledge creation could be achieved in this type of supply chain partnership.

Wu (2008) focus on knowledge creation in a supply chain. In his research he says key factors affect knowledge creation in a supply chain environment through the SECI modes and ‘ba’. The research shows that these critical factors facilitate different types of knowledge conversion process in order to achieve successful knowledge creation in a supply chain.

The research on a value creation perspective of KM by Renee, Earl and Ronald (2006) investigated that KM can be assessed from a value creation perspective. In this research, knowledge management and knowledge transfer processes were
considered within a value creation perspective. They developed a theoretical model which can guide the implementation and support to knowledge management and transfer processes within an organization. The model integrated the various forms of capital that make up the organization's intellectual capital. As a result, the proposed model establishes connection among the various schools, which emphasize one or other of the organization's forms of intangible capital as the driving force behind knowledge management.

Chen et al., (2005) advocate in their research about assessing value in organizational knowledge creation that to maintain competitive advantage, a firm's investment decisions related to knowledge creation are likely to be strategic in nature. The research demonstrates that the organizational benefit of knowledge creation processes should be well aligned with near-term tasks. They find the organizational benefits of consistent and frequent knowledge creation process participation increase over time as the match between skills and task complexities improve.

Azhdar, Rowley and Farhad (2006) review and explore the research methods, which have been used by scholars and researchers in the business and management field in recent years. They report the early bias in favor of positivism and quantitative methodologies, and evolving recognition of the potential contribution of phenomenological research design and qualitative methodologies. In this research methodologies adopted by 120 researches drawn from twenty leading management journals published between 1991 and 2000. The result of the research reveals that the majority of the authors and researchers were engaged in academic activities, with a few authors with some job role in industry. The majority of the contributors to research and publication in the field of management are senior academic staff.

Zahra et al., (2006) investigated in their research about role of trust in the new business knowledge creation process in established companies. They argued for a more balanced view of the implications of relational trust for new business creation in established companies and have noted that relational trust could overcome some of the problems associated with the social complexity, causal ambiguity, informational asymmetry problems and political tensions that arised in the various stages of new business creation.

These studies emphasized on knowledge creation perspective and explored more on innovation, culture, interaction, collaborative platform, relational network across the organization and information exchanged between supply chain partners in knowledge
creation process of organizations. These studies are focused on knowledge creations tools.

2.3 RESEARCH CARRIED OUT IN THE FIELD OF KNOWLEDGE SHARING

Bakker et al., (2006) investigated insight on the value of the trust in knowledge sharing and offer directions for future theory development. In this research they carried out a survey in large new product development projects, including 23 teams and 91 individuals. They suggested that trust is a poor explanatory of knowledge sharing. Team membership, on the other hand, has the largest effect on the density of knowledge sharing relationships.

Lin (2007) focuses on knowledge sharing with firm’s innovation capability. The research model based on survey of 172 employees from 50 large organizations in Taiwan. He indicates that employee willingness to both donate and collect knowledge enable the firm to improve innovation capability and the relationships among knowledge-sharing enablers, processes and firm innovation capability may provide a clue regarding how firms can promote knowledge-sharing culture to sustain their innovation performance.

Yao, Kam and Chan (2007) studied knowledge sharing in Asian public administration sector in their empirical research. They found that the senior management in the public administration sector should be made more aware of what knowledge management can do to help improve organizational efficiency and effectiveness. In this research interviews and survey instruments were used to collect data for qualitative analysis. Findings of the study contribute significantly to the knowledge and culture factor affect knowledge management in the public administration sector.

Research based on to use the socio-technical perspective to investigate customer knowledge sharing phenomena in web-based discussion boards by Lee et al., (2006), suggested that the enjoyment of helping others is the most frequently cited reasons for customer knowledge sharing in web-based discussion boards. Methodology of this research is based on exploratory study with 104 respondents was conducted to identify and categorize the key factors of customer knowledge sharing in web based discussion board. They further said that the lack of knowledge and self-efficacy is the mostly cited reason explaining to customers that do not want to share knowledge with others.
Research related to making use of knowledge sharing technologies, Beth (2007) underscore exchange of knowledge between individuals and enterprises accomplished by knowledge sharing technology and enabling tools provide communication and knowledge capture in the form of wikis, blogs, online repositories and instant messaging applications. He advocates enterprises can achieve a significant return on investment (ROI) by integrating collaborative technology into their daily operations and benefits would be measured in terms of increased productivity, improved performance and profitability.

Chua (2003) found in his research related to dynamics of knowledge sharing that the individual student’s perceived payoff of sharing knowledge was contingent on the knowledge sharing behavior of others. The methodology of the research includes an empirical study conducted among nearly 100 students in a local institute of higher education. He further explain that the perceived payoff of knowledge sharing characterized by a multi-person assurance game.

Wall (2006) presented an intranet based action points system in knowledge sharing practice strategy related research for NHS Clinical Governance Support Team’s (CGST) information products, with a focus on good practice eurekas and an integrated management system for storing knowledge and learning. He said that action points system is an effective knowledge management tool for storing, retrieving and monitoring the development of information into a range of products for sharing across the NHS.

There is more to knowledge sharing than the sharing of best practices, quotes Christensen (2007) in his research related to knowledge sharing closing of performance gaps. His research approach is both theoretical and empirical. He identifies four types of knowledge that are pivotal to share, professional knowledge, coordinating knowledge, object-based knowledge and know-who. He opines that direct attention do not solely sharing best practices but also knowledge bridging organizational interdependencies. He finds that best practices have dominated the discourse on what knowledge is to be shared. To become better at understanding and practicing knowledge sharing, he states that one must expand one’s view on what knowledge is being shared.

Sondergaard, Kerr and Clegg (2007) observed knowledge sharing in a strategic context through a socio-technical approach. The research highlight leadership.
organizational, and individual factors that are perceived to impact knowledge sharing. In this research a total of 20 semi-structured interviews were conducted and analyzed using a combination of matrix and template analysis. They found three sub-factors, trust, individual motivation and geographical location are as double-edged factors, i.e. their impact on knowledge sharing is complex in that they may act as both barriers and enablers.

Styhre et al., (2008) opined that literature on knowledge sharing needs to pay closer attention to the practices on the micro level in knowledge sharing, in the day-to-day collaborations among different professional groups.

Enders et al., (2007) describe about tacit knowledge sharing that researchers takes highly valid and respected model and applies it to individual tacit knowledge sharing. This research bridges a central organizational behavior/psychological theory with knowledge management research.

Al-Alawi et al., (2007) studied that trust, communication, information systems, rewards and organization structure are positively related to knowledge sharing in organizations. This research is based on interpreting the results of a survey and a number of interviews with staff from various organizations in Baharin from the public and private sectors. They advocated that people's beliefs and behaviors exercise strong influence in the performance of business organizations.

Han and Anantatmula (2007) commented that availability and usability of technology, leadership support and motivating structures influences on knowledge sharing. This exploratory study contributed to a deeper understanding of knowledge sharing with empirical data from two large IT organizations based on the non-executive employees' perspective rather than that of management.

Jacobs and Roodt (2007) had foreseen the significant negative relationship between knowledge sharing behaviour and turnover intentions. In this research the development of knowledge-sharing questionnaire contributes to fill a gap of existing measures. A cross sectional field survey design was used with a sample of 530 registered professional nurses in South Africa. They commented on the importance of tacit knowledge and explore that knowledge resides in the human minds of people.

Knowledge sharing related literature is more inclined towards value of trust, integration of collaborative technologies, built innovation inside the culture, action
point system, individual behavior, knowledge sharing behavior and other related factors of knowledge sharing.

2.4 RESEARCH CARRIED OUT IN THE FIELD OF KNOWLEDGE CODIFICATION

Hall and Hall (2004) advocate exploration of knowledge codification, particularly the emergence and use of codes and the ability to decodify them, provides a theoretical basis for explaining which enables and limits the communication of knowledge. They feel that there is a significant practical implication for the formulation of approaches to Knowledge Management and the role of information in knowledge transfer.

Singh and Zollo (1998) define the impact of knowledge codification. They found tacit knowledge accumulation significantly impacts performance when the experiences are highly homogeneous and knowledge codification improves acquisition performance in the context of high post-acquisition integration. They further concludes that regarding the level of integration of the acquisition, high levels of integration are positively related to acquisition performance.

Steinmueller (2000) analyze instances of knowledge codification for personal productivity, research documentation and workgroup applications through new software technologies. The result analysis reveals that the social processes governing disclosure and cooperation in codification processes are as necessary as technological capabilities for some of the most promising applications. He further suggests that the collective efforts should organize to pursue common goals that are governed by procedural authority to better understand of codification works.

Apostolou et al., (2007) presented the software system that has been developed and then explain how it can be applied in a methodology-driven manner. They observed that a comprehensive KM initiative should leverage the wealth of explicit and tacit knowledge residing in an organization.

Ancori, Bureth and Cohendet (2000) elaborate on the complex relationships between codified and tacit knowledge. The result of the research emphasizes importance of the context, the modes of conversion of knowledge and the role of knowing communities when analyzing the relationships between tacit and codified knowledge.
Vengel et al., (2000) observed in their study that organization will be able to improve the quality of law enforcement and decrease the time needed for implementing changes in legislation and regulations, when the knowledge capitalization/knowledge codification approach is combined.

Guzman and Trivelato (2008) explore that the transfer process of codified knowledge (CK) performed under two different approaches: the ‘socio-technical’ and the ‘top-down’. They argued that the socio-technical approach supports the transfer of CK better than the top-down approach. This research is an explanatory and qualitative case study based. The empirical evidence focused on the development of work standards following ISO 9000 norms at a steel work plant. Research find practical advice that can be taken up by practitioners. By focusing on different approaches to transfer CK, this study has filled a research gap in the CK transfer literature.

Gammelgaard and Ritter (2005) describe in their research that the knowledge retrieval means matrix is a useful instrument for managers to map and further develop their organizations for better utilization of the organizational memory.

Sorensen and Snis (2001) stated that more complex understanding of the interplay between cognitive and community models for knowledge management research on the social processes of classification can inform understanding of both the role of classification of knowledge for organizational innovation and the viability of providing ICT support based on codified knowledge. In this research two manufacturing cases are analyzed using particular perspectives from current theories on classification, namely the management of knowledge and organizational innovation. They suggested that knowledge codification is of great interest in developing incremental innovation. On the other hand, maintaining the exclusive character of innovations demands knowledge codification and its legal protection simultaneously.

Considering the ethics of knowledge transfers and conversions, Baskerville and Dulipovici (2006) suggested that organizational knowledge may fall under the intellectual property theory and organizations have the right to buy, sell and use their corporate knowledge as it suits their needs, while personal knowledge may fall under the personal privacy theory and individuals have the right to protect the security of their personal knowledge. They found knowledge management practices may differ with regard to the two types of knowledge.
Hall (2006) propose an idea in his research that knowledge needs to be codified is central to many claims that knowledge can be managed. This research draws on findings from research conducted around a KM project in a section of the UK post office, using a methodology of participant observation. He argue that a new conceptual approach is needed for the role of knowledge codification in knowledge management that emphasizes the importance of knowledge decodification. Such an approach would start with one's ability to decodify rather than codify knowledge as a prerequisite for knowledge management.

Gender and Leisure (2001) found in their research that the codification of knowledge is a product of both structural and cultural power and as such a combination of material and discursive analysis will required to examine the sociocultural nexus of knowledge production, legitimation and reproduction.

Knowledge codification related studies mainly based on codifying various type of knowledge for the benefit of the organizations. Some studies also identifies the relation between knowledge codification and knowledge acquisition process of KM tools.

2.5 RESEARCH CARRIED OUT IN THE FIELD OF KNOWLEDGE MAPPING

Corso and Mariano (2003) developed a supportive model to help companies to assess their own ability and to share experience concerning knowledge management in product innovation. Methodology of this research is based on the basis of evidence from 12 explorative studies. The result of the study conclude contributions of other downstream phases to innovation can be relevant and are not limited to providing feedback on experience collected for future application.

Driessen, Huijsen and Grootveld (2007) found that knowledge mapping and its use have been a research issue for some time and companies have also adopted knowledge mapping tools to support and stimulate knowledge sharing in their organizations and to help employees find the expertise they are looking for. They strongly feel that there is strong requirement of research related knowledge mapping tools in organizations.

Wexler (2001) suggest that effective knowledge maps take into account the who, what and why of the knowledge mapping process. The research conclude effective
knowledge maps help identify intellectual capital, socialize new members, enhance organizational learning and help anticipate impending threats or/and opportunities.

Easton, Zolkiewski and Bettany (2003) found particular interest of mapping industrial marketing knowledge are the tentative knowledge structure that emerges the depth of analysis from using multidimensional coding and the utility of the process of successive categorization.

Hellstrom (2004) review the functions and techniques of knowledge mapping and assesses these in the light of academic demands. In the results a focus group study is presented, where academic leaders were asked to reflect of the uses of knowledge mapping at their departments and institutes. He feel that there are numbers of suggestions to be made as to the rationale and conduct of knowledge mapping in academic.

Berg et al., (2005) stated that the most important lesson learned is that information needs of the different user groups seem to differ more than realized in the beginning. The knowledge developed in the project can be used by professionals who share the same subject, communities of practice and organizations.

Sharif, Love and P. E. D (2007) studied the propagation of knowledge and learning of a company in the manufacturing sector via the application of a knowledge mapping techniques. The research result conclude that the rationale for exploring knowledge and information systems evaluation in manufacturing is through empirically extrapolating explicit and tacit knowledge drivers and knowledge map will emerge for others to use during their technology evaluation.

Neha, Pradeep and Clark (2008) observed in their research related to an ontological approach of knowledge mapping that ontology’s are major tools enable management of vast amounts of data and information to create concrete knowledge structures, which aid users in exploring and understanding domain knowledge and provides a platform for knowledge mapping, knowledge search and retrieval.

Timothy (2005) states that extent racial / ethnic difference in prostate cancer result from differences in socioeconomic position (SEP). The research study concludes that understanding the causes of high prostate cancer mortality seen among black men remains the major challenge in the area of social disparities and prostate cancer.
Norlida and Barber (2004) explore that knowledge mapping of an organization's intranet as a form of a KMS can be used to promote the re-utilization of knowledge, which will contribute to the competitiveness of the organization. The result of the study illustrates and presents evidence of the need and suitability of a intranet system.

Yetter and Leigh (2008) observed that the writers and readers of early modern crime reports will likely always remain anonymous. The methodology presented in research shows that basic details offer some clue to their identity and moreover that the urban environment was not quite so vastly unknowable as sometimes suggested.

Liebowitz and Jay (2005) allude that in order to develop improved organizational and business processes through knowledge management, a knowledge audit should be conducted to better understand the knowledge flows in the organization. Result of study suggest coupling the analytic hierarchy process with social network analysis provides a novel approach for future knowledge.

Koh and Tan (2006) developed a new approach called the intelligence handbook, discover operational intelligence in order to map knowledge in a supply network with uncertainty.

Knowledge Mapping related studies are generally limited to the relationship of knowledge mapping, mapping tools and linkage with knowledge search and retrieval.

2.6 RESEARCH CARRIED OUT IN THE FIELD OF KNOWLEDGE STORING

Coakes (2006) quotes that the successful knowledge management need a sociotechnical approach where the social aspects of knowledge creation, storage and sharing need to be considered alongside the technical. He explains that it is now common in the knowledge management literature to lower the value of technology for knowledge sharing and to emphasize the human aspects of knowledge sharing. This research agrees with this perspective to illustrates that technology can be used successfully to assist in the knowledge sharing processes across time, space and virtuality.

Kevin (2001) discuss storing and sharing analytical data for maximum commercial benefit in Thermo Lab Systems, when it had announced its acquisition of
spectroscopy software specialist Galactic Industries Corp. He finds that Thermo Lab Systems' acquisition of Galactic Industries has resulted in the launch of a powerful single integrated application that looks set to position. Researcher believes that Thermo Lab Systems as a formidable player in the electronic record management software sector, eRecord Manager, enabler data-mining, viewing and comparison of data across the enterprise have no reliance on the original instrument data system to allow customers to benefit from genuine knowledge management.

Alan (2007) conducted a study about a storing process to storing produce at room temperature. The results of this research indicate that storage of watermelons at room temperature enhances the biosynthesis of certain carotenoids. Researcher suggest that the apparent beneficial effect of room temperature storage on taste and healthfulness should be balanced against the fact that produce stored at room temperature often spoils more rapidly.

Nathani (2005) concludes that an understanding of indigenous ways reveals different perspectives of viewing the world. Indigenous knowledge is essential to social, educational and ecological health. Researcher further suggests to preserve indigenous knowledge for future generations, one must recognize its transcendent qualities, its holistic nature, its reverence for the community and the earth and the dignity it holds for life and living.

Leah (2004) discusses storing knowledge and training, distinguishes at the container store, a Dallas-based retailer of storage and organization products. In findings of the research he says, "I don't think that a company that cares about its employees should do a benefits structure without doing a survey of employees".

Charles et al., (2000) elaborate that corporations around the world have identified the need for KM, however, they have not identified taxonomy of processes or a vocabulary to communicate these processes. This research addresses these needs by providing a procedural method for creating a sustainable KM system.

Chen and Hatzakis (2008) investigated the Knowledge Management (KM) issues by focusing on its KM enablers and process. The result of the study indicate that Chinese enterprises emphasized knowledge acquisition and the capacities of knowledge absorption, application, creation, sharing and integration as vital to sustaining competitive advantage. They observed that corporative organizational culture also has significant impact on the KM in those enterprises.
Kaima (2000) finds that in oral preliterate societies written records were only exposed to the people with arrival of Europeans. Much of the information before that had always been transmitted through word of mouth from generation to generation. Researcher further says traditional knowledge of Wantoat had been difficult to reconstruct but is believed to be handed down from generation to generation and the only possible eyewitness of it being the ancestors of the people. Researcher believes that the Wantoat concept of takwan which was used to create, store and disseminate information to next generation is one of the many information systems that have to be discussed and its value captured and preserved for next generation.

Addis (1992) opines that apart from work done in the area of expert systems, there has been little discussion of the problems of storing, the knowledge used by engineering designers. He found that the idea of the 'design procedure' introduced as the means by certain engineering design knowledge and skill can be stored, communicated, learned, researched and given its own history independent of engineering science.

Majority of knowledge storing related literature describe the relation among knowledge creation, storing and sharing. Some studies of knowledge storing process define the relationship of knowledge storing with knowledge absorption, application and integration process of KM.

2.7 RESEARCH CARRIED OUT IN THE FIELD OF KNOWLEDGE ACQUISITION

Zhu (1999) present an iterative, structured knowledge-acquisition process for extracting human understanding of relationships between a natural resource and its environment. He find that knowledge sets extracted a year apart were consistent with each other and the soil expert was more familiar with the relationships among soils and some environmental variables than with other environmental variables. He feel that although it was designed to extract expert knowledge for mapping natural resources as spatial continuation under a GIS environment, this knowledge elicitation process can be easily adapted to extract expert knowledge for other knowledge-based applications.

Beveren (2002) present a model of knowledge acquisition from definitions of data, information and knowledge. The result of this research shows that the model asserts that information is acquired through the sensors to the brain where it is processed with
prior knowledge and that new knowledge can be created from the processing of information within the brain only.

Politis (2005) found the relationship between credibility, the dimensions of power and a number of knowledge acquisition attributes. This research is based on questionnaire-based survey of employees from a number of organizations operating in the UAE. The findings have clearly shown that the management dimension of credibility has a positive and significant impact on the knowledge acquisition attributes of control and negotiation.

Wagner and Zubey (2005) presented various knowledge acquisition methods and showed that existing empirical research can be used for mapping between marketing problem domains and knowledge acquisition techniques. Methodology of this research is based on literature review of related topics. The findings suggest that it may be worth exploring some of the non-traditional knowledge-acquisition techniques when working on some types of applications.

Pinfold et al., (2008) describe the process undertaken to acquire the knowledge of an automated analysis system for Knowledge Based Engineering (KBE). They found that the creation of the system would have been enhanced if the researchers' creation had also undertaken the knowledge acquisition process.

Geoffrey et al., (1993) examined how the business products-marketing firm acquire knowledge about its customers. They forwarded two key premises regarding where customer knowledge acquisition efforts should lie and what the results of these activities should be.

Politis (2002) discussed that the problems associated with poor leadership and interpersonal skills manifest themselves in the loss of organizational knowledge and the expensive duplication of knowledge creation and acquisition, rising costs and reduced performance. A survey of 239 self-managing employees who are, or have been engaged in knowledge acquisition activities was carried out in this research. The results show that some of the transformational leadership dimensions enable followers knowledge acquisition. Furthermore, transformational leadership is not a pre-existing condition for achieving desirable performance of self-managing teams.

Lloyd and Jeffrey (2008) discussed knowledge acquisition in university and industry alliances. This research based on a survey conducted 104 industry and their industry
partners. Findings of the result indicate that partner trust predicts the successful acquisition of tacit knowledge but not explicit knowledge. The research suggested that a key quality of the organizational knowledge interface promote the successful acquisition of technological knowledge, both tacit and explicit is multipoint, real-time contact among technology experts of the partner organizations.

Park et al., (2008) investigated the influence of the foreign firm, through its interaction with the local partner, on the extent to which international joint ventures (IJVs) acquire knowledge and reach a higher level of performance. Finding of the study describe by using a sample of IJVs in Korea and contributes to the literature, firstly by examining and confirming the positive relationship between managerial knowledge acquisition from foreign parents and IJV performance, secondly by testing for the extent of foreign firm support and the relationship between parents with respect to both managerial knowledge acquisition and performance.

Jie (2006) finds the sources of knowledge acquisition for Chinese software engineers. The result of the research focuses on patterns of advice seeking relations within and across project team boundaries and highlighting the internet software technology forums as an important channel for technical information sharing across organizational boundaries.

Nancy and Curiosity (2007) examined the role of curiosity in the learning process: They examined literature on the topics of curiosity mindfulness and learning styles and develop propositions related to learning. These concepts are examined in light of the type of knowledge that is created and shared in organizations.

William and Thomson (2007) discuss that to impart Acquisition Solutions Inc. is moving knowledge management ‘from concept to theory to practice’ through an ability to connect, collect and collaborate at all levels, as part of the way we do business. The results of the study presents ten learnings, including the fundamental understandings that, ‘it is not about knowledge management, it’s about knowledge leadership’ as well as, ‘capture and reuse must be part of business operations and not something extra’.

Maliha and Vincent (2007) explore the use of knowledge management (KM) principles and technologies to improve the outcomes of software acquisition projects. The research is based on a study of two-dozen contracted projects and find that such
organizations face unique risks and hidden costs that are particular to software acquisitions.

Jessie, Yuh and Suh (2006) examined the geography of technological learning and knowledge acquisition among Taiwanese and Korean firms. The result of the research suggested that at the regional level, Korean and Taiwanese firms rely on local learning systems in the form of science parks to create favorable domestic agglomeration economies that were conducive for knowledge accretion. The research result indicated the extent that extra-local knowledge sourcing in the US was associated with the acquisition of new knowledge forms and a multicolor spatial strategy expected to help transform Asian learners from technology latecomer to technology newcomer status.

Research carried out in the field of knowledge acquisition inclined towards various knowledge acquisition techniques and processes.

2.8 RESEARCH CARRIED OUT IN THE FIELD OF KNOWLEDGE MANAGEMENT AND TOPIC RELATED LITERATURE

Mehta (2008) created KM enabled values by three global software companies after successful implementation of Knowledge Management. In this study data was generated based on 20 interviews with various individuals involved with the KM programs of these three companies. Interviews were conducted and analyzed by four coders who sorted the data into meaningful categories. The research provide evidence of various strategic, technological and cultural issues influencing the success of KM programs in global software firms. He strongly feel that software firms should develop specific capabilities to create KM-enabled value. The result of the study provide a practical help in the form of a worksheet for practitioners.

Greiner, Bohmann and Krcmar (2007) elaborate that an organization whose business strategy require process efficiency, should rely primarily on a codification strategy. This study is a case base study researching 11 German and Swiss companies. The knowledge management initiatives were categorized by six criteria (objectives, processes, problems, content, strategy, knowledge type) and their fit with the respective business strategy of the organizational unit was evaluated. The research suggest that a manager should aware of the objectives and business processes of the organizational unit and chooses the knowledge management strategy and objective in
accordance to the business strategy and objectives. The research contribute enhances understanding about the influence of organizational environment factors on the success of knowledge management initiatives.

Koh et al., (2005) propose a new knowledge management model for applying the knowledge management concept in call centers. Methodology adopted in this research is qualitative, namely ethnography. In this research a knowledge management model is developed by analyzing six models from literature review. The developed KM model suggest that knowledge management could be achieved by effectively managing the five roles of knowledge, namely knowledge acquisition, utilization, adaptation, distribution and generation.

Grossman and Bates (2008) presented an overview of knowledge capture in the biopharmaceutical industry, focusing primarily on the transition from study-based to electronic data capture (EDC) systems. The research draw biopharmaceutical industry literature and data from example clinical studies to describe the issues involved in transitioning to EDC in the clinical trials environment. The research suggest that the barriers to successful implementation are multifaceted, involving not only the information technology itself, but also user acceptance issues, lack of interoperability standards and regulatory compliance. This research warranted to better understand the factors that facilitate adoption of electronic knowledge capture systems in the biopharmaceutical industry.

Davies et al., (2005) observed that access to knowledge can be enhanced by using a set of innovative approaches and technologies based on the semantic web. In this research emerging trends in knowledge access are considered followed by a description of how ontologies and semantics. A set of tools are presented based on semantic web technology. The study present research in an emerging but increasingly important field, i.e. semantic web-based knowledge technology and describe the way technology can satisfy the demand for improved knowledge access, including providing knowledge delivery to users at the right time and in the correct form.

Haase, Volker and Sure (2005) advocate that the management of dynamic knowledge is crucial for many knowledge management applications. Their research present a framework for ontology evolution tailored to Digital Libraries, which makes use of two different sources for change detection and propagation. This research is based the first approach towards a common framework for ontology evolution on usage-driven and data-driven change discovery.
Cheng et al., (2004) suggested another dimension of research and application of knowledge management. They adopted a conceptual, multi-disciplinary approach in their research. The research provides some insights to policy makers in designing or developing global cities. Importance of this study presents a beautiful connection between knowledge management and growth of global cities.

A study about 'disciplinary roots of knowledge management' by Jasimuddin (2006), reflects that the development of knowledge management so as to argue whether knowledge management (KM) is a multidisciplinary field. To set the scene by reviewing and synthesizing the scholarly works and published practices of knowledge management, this research presents an overview of the recent and rapidly growing literature on knowledge management. Although the study do not attempt to detail the origins and the gradual development of the KM field, it contributes to improving theory, practice and pedagogy in the field of KM by articulating its origin.

Narteh (2008) explore theoretical underpinnings of knowledge transfer within developed-developing country based interfirm collaborations. He developed a theoretical model on knowledge transfer in interfirm collaborations. In this research the model distinguishes the sources of knowledge to be transferred and the antecedents to the knowledge transfer from the transfer process. The framework presented in the study provide a deeper understanding of the characteristics of transferors and transferees as well as their interaction and how these influence, knowledge transfer across firm borders. The model thus advance on the theory of knowledge transfer between strategic alliances partners and provide practical insights into the management of knowledge within alliances.

Doctor and Ramachandran (2008) describe a survey conducted to ascertain different considerations for implementing an institutional repository and the creation of the pilot institutional repository at the ICFAI Business School, Ahmedabad (India), using the Open Source DSpace Institutional Repository Software. They find that use of technologies like Institutional Repositories for capturing the intellectual capital and enabling knowledge sharing in academic institutions especially in developing countries like India are emerging. They suggest that the Institutional Repository is useful to the faculties, research staff and the institution. They believe Management Institutions, especially in India, should encouraged to develop Institutional Repositories for their intellectual capital and share knowledge.
Ergazakis, Metaxiotis and Psarras (2006) explain about ‘knowledge Cities in terms of knowledge based development’. Their research is an attempt to review and analyze in a coherent way that the current trends regarding KBD policies, as well as to examine the needs to be addressed by successful KBD strategies, based on a wide range of published works, including studies, books, reports and web sites. They find, there are many issues that contemporary KBD policies should address and new concept of knowledge cities fully corresponds to these needs. The distinguishing feature of this study is that it shows that the concept of a knowledge city is the most appropriate and advantageous model for a KBD strategy, fully complying with and satisfying their needs.

Naeve (1999) introduces the idea of a concept browsers. He presented browsers based on a strict separation of context and content. In these browsers contextual descriptions in terms of concept maps expressed in UML and viewing of the content components through various aspect filters. This research also presents an overview of the Garden of Knowledge (GoK) as an example of a KM and describes the basic design goals of the GoK project. The findings of the study introduces the concept of multiple scale narration and illustrates by an example that shows the browsing of an archive of components at multiple scales of resolution based on the dimensions of clarification and depth.

Kamtsiou et al., (2007) presented a new approach to developing a roadmap for technology enhanced professional training. A conceptual model of the road mapping process as a knowledge creation exercise is introduced and discussed in this research. The research find road mapping combine both a learning activity and a knowledge creation process for the community that builds the roadmap and the knowledge creation process in road mapping. Furthermore it relate with a continuous process where individuals and groups transcend their boundaries by acquiring a new context, a new view of the subject domain, and new knowledge.

Esouza (2006) explain the new frontiers of knowledge management research. This research is based on the researcher's experiences of putting together a compilation of writings by scholars on the future of knowledge management. The research outlines a research agenda for knowledge management. The research sheds light on critical problems that need to be examined in order to advance the field of knowledge management.
Wang, Peters and Guan (2006) propose implicit knowledge management practices in research groups using a theoretical model of knowledge creation. The goal of the research is to identify factors that contribute high knowledge productivity. This research is based on the findings of a study of German research groups. A total of 15 in-depth face-to-face interviews conducted with heads of German academic research groups in the field of physics. The study identified human resource management as the weakness of the German knowledge management practice. There seems to be an inherent contradiction between the goals of attracting promising students to a career in science and securing mobility. The survey thus has to be regarded as a pilot study. The research provides useful information on factors influencing knowledge productivity in research groups.

Plessis (2007) provide an overview of generic knowledge management critical success factors, in conjunction with an overview of the factors that has been found to be critical in implementation journeys in selected South African companies. Literature research was used in the design methodology of this research. The result of the research is that the factors contribute to successful implementation of knowledge management are highly dependent on the environment and specific context and can therefore not always be accurately predicted at the start of a knowledge management endeavor.

Jafari, Fesharaki and Akhavan (2007) investigated the role of knowledge management in aerospace industries to provide a framework for knowledge management efforts specially designed for aerospace industries towards a knowledge-based organization. This research provide a very helpful guideline for practitioners in implementing knowledge management throughout the organizations and especially in large scale ones. This study further open new lines of research and highlights implications for knowledge management efforts, including change management programs through KM tools.

Moustaghfir (2008) in his research point out to extend the ‘knowledge-value chain’, recently introduced in the management literature, by integrating the concept of dynamic capabilities. This research is based on a systematic review of the literature. The central objective of the research is to extend the work presented by Carlucci et al. with the concept of dynamic capabilities. Carlucci et al. introduce the ‘knowledge value chain’ as a model linking knowledge assets with firm performance. The study reveals that knowledge assets interact with each other through learning mechanisms and knowledge management processes enable the generation of new knowledge and
the development of organizational routines that form the building blocks of firm's competencies.

Tsui (2005) provide a summary of the major trends in the evolution of knowledge management (KM) technologies in the last five years. Drawing from a range of literature published in the academic and industry arenas including the studies accepted in the special issue, the researcher also applied his own personal experience and practice knowledge in the field to summarize the three major trends in the use of KM technologies for the workplace and individual knowledge workers. He find that the KM is becoming more and more just-in-time and large-scale KM programmes still prevail but, in future technical infrastructure and information content of these programmes also need to support ad hoc, spontaneous but intensive intra- and inter-organizational collaborations.

Cálad, Arango and Fonsegra (2007) explore the applicability of using concept maps in organizations where knowledge management is the goal. This research is based on the principles stated by Nonaka and Takeuchi about knowledge creation and conversion and on the work by Novak and Gowin on concept maps. The core idea in this study is to present the use of concept maps as a technique that facilitates, in some cases and supports in others. The research find that knowledge evolves through various stages, with particular characteristics that need to be acknowledged in order to be managed properly. This research promotes knowledge management in the enterprise itself.

Jang et al., (2002) found the connection between knowledge management (KM) and process innovation (PI). Findings of the research explain that KM seems to be concerned with building knowledge management systems (KMS). On the other hand, PI is regarded as an efficiency-oriented process redesign and re-engineering (or BPR), which seems to be nothing to do with KM. They suggested KM should be illustrated in terms of knowledge transformation path in the information space.

Oliver and Kandadi (2006) identified various factors affecting knowledge culture in some of the large organizations and suggest realistic strategies for developing knowledge culture. In this research in-depth case studies were conducted at six large distributed organizations to investigate and assess knowledge management (KM) practices and associated organizational culture. The study identified ten major factors affecting knowledge culture in organizations. These include leadership, organizational structure, and evangelization, communities of practice, reward systems, time
allocation, business processes, recruitment, infrastructure and physical attributes. Findings deviated from established notions in contemporary KM literature, especially in the issues such as organizational structure, leadership and reward systems.

Schwikkard and Toit (2004) commented on the findings of a knowledge audit conducted to determine the knowledge requirements of a large service-based enterprise in South Africa. The research objective of the knowledge audit was to identify and describe the current and future knowledge requirements of the enterprise. The research results indicate that employees have some basic knowledge and information needs that must be satisfied before any further investigations take place.

Huosong, Kuanqi and Shuqin (2003) developed a model of the enterprise's knowledge trees related to several knowledge management processes. They suggested that the gray dimension of enterprise knowledge relate in line with the model of enterprise knowledge and fractal dimension. The results of the study will benefit not only the design of KMS, but also the business model transformation of competitive advantage.

Olla and Holm (2006) describe the importance of knowledge management (KM) to the space industry. This research is based on drawing from a range of literature published in the academic and industry arenas, studies published in this area and also applied their (researchers) personal experience and practical knowledge. They find that implementations in KM within aerospace organizations and space industry have grown beyond mere technology thrusts and now include aspects of culture, people and process.

Hsu, Ren Ke and Yang (2006) presented a new model to avoid the content silo trap, to satisfy the knowledge management requirement and support the long-term perspective of developing academic, exhibition and education applications among various domains for museums. This research integrates content management and knowledge management. They found that digital archives programs in museums can apply the model presented in this study to satisfy the knowledge management requirement and support the long-term perspective of developing academic, exhibition, and education applications among various domains.

Geisler (2007) developed a typology of people and organizations based on structural interviews with 37 managers in three large manufacturing companies. He presented a model which describes the processing of knowledge in organizations. He find four
stages, generation, transfer, implementation and absorption and three types of transactors in knowledge, generators, transformers and users. The findings are the different motives animate the different transactors in knowledge and the distinct behavioral roles that these transactors assume in their organizations. This research contribute to the literature by proposing a new way of classifying the roles of people and organizations in their transaction in knowledge.

Bhardwaj and Monin (2006) elaborate the role of tacit knowledge play in shaping the knowledge base of the knowledge-intensive growing organizations using the storytelling method. Stories were collected from eight human resource professionals working in eight different knowledge-intensive growing organizations in New Zealand. They find that the technology is needed that would be able to effectively capture the multidimensional interplay of tacit knowledge with important subsystems of organization. Furthermore that knowledge being a strategic input in knowledge intensive growing organizations, there is need to address major concerns related to tacit knowledge that these organizations specifically face due to their knowledge-intensive nature.

Voelpel and Han (2005) explore knowledge-sharing and knowledge management practice in the context of a specific country and culture. They used an in-depth case-research approach focusing specifically on Siemens Share Net in China. A total of 35 interviews have been conducted with executives, general managers and line managers within different units at the headquarters in China. They suggest knowledge management needs to take the cultural dimension into consideration as culture decisively influences knowledge-sharing behavior and knowledge management needs to take the cultural dimension into consideration, as culture decisively influences knowledge-sharing behavior.

Lierni and Ribière (2008) determined the relationship between improving the management of projects and the use of knowledge management (KM). In this research a question supported by seven research hypotheses were postulated. A survey was used to collect data from 99 project managers randomly selected from the list of worldwide members of the project management Institute (PMI). The findings reveal the influence of KM on the improvement of the management of projects.

Sarabia (2007) analyze leadership cycles based on knowledge creation with learning and culture as key elements for reaching leadership. Following Ikujiro Nonaka's viewpoint about knowledge creation in Japanese firms, this research seeks to provide
a link between knowledge management and change in leaders. The developed analysis is theoretical and it links the real case of Hoshiden Electronics' homemade bread making machine to knowledge distribution in order to attain leadership and using Nonaka's knowledge interplay. The research provides a fresh look on leadership, presenting two types according to change in leaders is handled and every leader establishes his/her own knowledge cycle, knowledge amplification and knowledge modulation cycle. Researcher suggest that knowledge leadership cycles establish an insight for future studies and provide a theoretical framework for researchers and managers, identifying to develop a successful leader.

Hicks, Dattero and Galup (2006) found a new set of terminology and develop a five-tier knowledge management hierarchy (5TKMH) that can provide guidance to managers involved in KM efforts. The 5TKMH include all the types of KM identified in the literature, provide a tool for evaluating the KM effort in a firm and identified the relationships between knowledge sources and provide an evolutionary path for KM efforts within the firm. This research based on the discussions of the various hierarchies of data, information, knowledge and other related terms. They suggested that the 5TKMH supports a KM life-cycle and provide guidance to the chief knowledge officer and can be employed to inventory knowledge assets, evaluate KM strategy, plan and manage the evolution of knowledge assets in the firm.

Berten and Ermine (2006) describe briefly a set of four well-tried knowledge management tools allowing practitioners to analyze and structure, describe and represent, share and store and teach and transmit knowledge. Research focuses on selected tools now of general practice and becoming popular among the practitioners. The research explain that, originally out of the information science laboratories, the tools introduced here have been proved tested efficient and reliable after hundreds of real projects, no matter what type of industry and domain use them and now common practice should open the path to new models for the knowledge economy. This research reminds that knowledge management is no longer a solely academic issue since tools of the next generation is now available, beefing up the growing domain of the knowledge economy.

Singh (2007) provides a crystallization of ideas to avoid any confusion among students and LIS professionals. This study proposes to examine the issue based on a literature survey and the author's own teaching experience. She says that today, KM has become an important activity in all organizations, particularly in the corporate sector. As a result, intangible assets are playing the role of key drivers and technology
is a key enabler. Result of the research is that to be successful in the emerging knowledge economy, new processes, skills and techniques that help to generate, manage and handle new knowledge need to be developed and practiced adequately by information specialists.

Eppler and Burkhard (2007) explore the potential of visualization for corporate knowledge management. The employed methodology in this research consists of taxonomy of visualization formats that are embedded in a conceptual framework to guide the application of visualization in knowledge management. The findings show that there is much room for knowledge management applications based on visualization beyond the mere referencing of experts or documents through knowledge maps. They advocate encourage managers to look beyond simple diagrammatic representations of knowledge and explore alternative visual languages, such as visual metaphors or graphic narratives.

Yu, Gul and Yong (2007) identified the several key drivers for developing organizational KM capability and examining their relationships with KM performance. In the research data was collected from a questionnaire survey of 66 Korean firms. The structural equation modeling technique called Partial Least Squares method was chosen for analyzing the research model. They shows that despite the active interest in managing organizational knowledge as a strategic resource, most organizations do not yet understand the challenges involved in implementing KM initiatives. They found that KM drivers such as learning orientation, KM system quality, reward and KM team activity were significantly related to the organizational KM performance- knowledge quality and user knowledge satisfaction and KM team activity and a reward system have significant effects upon other KM drivers.

Chaudhry and Higgins (2003) reports on the findings of a study of knowledge management courses included in the curriculum of academic disciplines of business, computing and information. This study is based on a review of course descriptions selected from Web sites of universities in different countries. Findings of the research shows multidisciplinary nature of the curriculum and suggest a collaborative approach in designing and conducting KM education programs for providing a balanced coverage.

Darroch and Naughton (2002) examined link between knowledge management practices and types of innovation. This research is based on data collected from 443 New Zealand firms. In this research a knowledge management instrument, which
comprised three components and 16 factors was regressed against a three-factor innovation scale that captures incremental innovation, which changes consumers behavior and destroyed existing competencies. The results of this research show that knowledge acquisition and responsiveness to knowledge was more important for innovation than knowledge dissemination.

Smith and Duncan (2000) observed that the extent to which the organization capturing and sharing its knowledge and experience. This research outline approaches to knowledge capture and sharing within OILEX at present and discusses the recommendations those were made in ways of leveraging the organization's competitiveness for the future. This research suggest ways in which OILEX can benefit from individual experience through its transformation into group learning and discusses the implications for the company in adopting a programed of capturing and sharing learning. They found that learning leads to greater efficiency and productivity and different teams within the organization were able to draw on the learning of others to respond more quickly to problems and then transfer their learning back into the knowledge pool, thereby contributing to a constantly evolving 'memory bank' of experience.

Akhavan and Jafari (2006) determined critical issues for knowledge management implementation at a national level. A qualitative case study technique has been used in this research for data collection to gain insights into the topic being investigated. For that, "grounded theory" research approach has been selected, by which the collected data from real case studies (European countries) were categorized and analyzed through specific stages. The overall results from the real case studies were positive, thus reflecting the appropriateness of the proposed critical success factors. They suggested that the set of critical success factors act as a list of items for countries to address when adopting knowledge management (KM).

Cong, Li-Hua and Stonehouse (2007) examined knowledge management (KM) processes and its implementation in the public sector in China and seeks to identify success factors that influence KM and attempts to address various key issues in the process in a hope to raise awareness of KM as a potential solution to improve the performance in the public sector. The research based on a case study and research experiences. The study suggest that KM in the public sector still in its infancy and has a long way to go in the KM journey and identified a certain number of factors those are essential to the success of the KM initiative and program in the public sector.
Chen, Tong and Nagi (2007) explore inter-organizational knowledge management in complex products and systems. The research is based on reviews the literature of CoPS, inter-organizational collaboration and KM. This research tried to account for knowledge-related activities involved in CoPS development, identifying some challenges in CoPS innovation. They find that knowledge acquisition from network, knowledge integration and knowledge sharing in the network is the main inter-organizational KM activities in a CoPS context.

Peng, Hua and Moffett (2007) explore challenges and opportunities in knowledge management (KM) research trends in China. The research explains theoretical analysis of KM development and future trend in the West. The research is based on collection of data from two well known management database searching results for ‘China’ and ‘Knowledge Management’ and KM surveys in China and other web site and journals. The research finds that KM research in China has its own character and future directions and opportunities for China-related KM researches should adopt triangulated approach.

Rowley (2003) offers a model for understanding the future role of knowledge and information professionals. The research starts by exploring the concept of knowledge management and the strategies for its implementation in business organizations. This theme is developed into a consideration of knowledge management in the public sector. Finding of the result shows that there are three main roles for knowledge professionals namely managing knowledge repositories, facilitating of knowledge flow and communication and leveraging value generation capacity.

Mulder and Whiteley (2007) explain that the possibility for the capture of tacit knowledge. In this research a bounded environment expressed in terms of the published corporate goals and key business drivers. The results of the research support the idea that under bounded conditions, a shared sense of purpose and an iterative process ownership is possible, thus tacit knowledge could be captured.

Jambekar and Pelc (2006) purpose a framework that integrates key insights from the literature on knowledge creation, learning and problem solving in conjunction with mapping of customer needs into a closed loop model of knowledge processes in a manufacturing environment. The research is based on review of literature on knowledge creation and synthesis of a conceptual model that connects the life-cycle of knowledge and know-how with core product and business processes of a manufacturing company. The research recommend a four-stage approach that can be
utilized to create a firm-specific knowledge management system and this model is applied for design of a managerial dashboard system for manufacturing company.

Lee and Hong (2002) explain the concept of a KM life cycle, knowledge capture, knowledge development, knowledge sharing and knowledge utilization. They find that a key enabler for implementing an effective KM system is advanced information technology (IT). They suggested that applications of new IT support is necessary in each step of the KM practices within and between organizations.

Hari, Egbu and Kumar (2005) presented a computer-based awareness tool on knowledge capture underpinned by Kolb's experiential learning theory. The research based on the empirical study involved a total of 51 professionals from 26 SMEs in the construction industry. The result indicated that there is lack of awareness of complex issues associated with an effective knowledge capture process as well as ensuing benefits for SMEs in the construction industry.

Anantatmula (2007) identified attributes of KM effectiveness and establish their relation with business results. The research premise is that KM outcomes are difficult to measure but their contributions to organizational performance can be assessed. A literature review used to identify the attributes of KM effectiveness. KM professionals and practitioners were invited to participate and respond to a survey-based questionnaire to establish important attributes of KM effectiveness. Interpretive structural modeling (ISM) was used to develop and determine the underlying relations among these key attributes. Researcher finds leadership is the main driver for successful KM implementation. The research effort is an attempt to capture the mental model for successful KM implementation.

Tiago et al., (2007) determined whether the implementation of knowledge management (KM) is linked to e-business performance and identify the nature of the relationship existing in the different components of knowledge-sharing and application and internet-based KM. The research established a new model of the practices and results of the KM which has been tested in European companies. The research based on a structural equation modeling. The results explain that product innovation and external employees access to databases have a strong positive effect on the maximization of internet-based KM and that in it has also a positive impact on e-business performance.
Ismail et al., (2007) investigate the role of certain factors in organizational culture in the success of knowledge sharing. These factors are interpersonal trust, communication between staff, information systems and rewards and organization structure, play an important role in defining the relationships between staff and in turn, providing possibilities to break obstacles to knowledge sharing. The conclusions of this study based on interpreting the results of a survey and a number of interviews with staff from various organizations in Bahrain from the public and private sectors. The research findings indicates that trust, communication, information systems, rewards and organization structure are positively related to knowledge sharing in organizations.

Xu and Quaddus (2005) investigated the factors influencing the adoption and diffusion of knowledge management systems (KMSs) in Australia. A qualitative field study was undertaken, in which six Australian organizations of various sizes, all in various stages of KMS adoption and diffusion, were studied via face-to-face interviews with key personnel in the organizations. A comprehensive combined model of adoption and diffusion of KMS was developed and is presented in detail. The findings of the research explain that the combined model can be used for practical applications in companies that are embarking on KMS adoption and diffusion.

Girard (2006) finds that there is a relationship exists between knowledge loss and the manager type. Specifically, the purpose of this research is to determine whether some types of middle managers report lower levels of information anxiety. A sample of Canadian Public Service middle managers completed an online survey instrument over a three-month period in the autumn of 2003. The research reveal that most of the sample reported relatively low levels of information anxiety and there was a significant negative relationship between frequency of task and information anxiety.

Shankar et al., (2003) discussed the strategic planning needs of the KM deployment process and developed a framework that could be used specifically by engineering firms to guide the KM implementation process. Findings of the research indicated that the process of KM require technology to capture, codify, store, disseminate and reuse the knowledge and major reasons for the failure of many KM projects was the absence of a well-defined strategic plan to guide implementation.

Dai et al., (2007) investigated online social information services to show promises for overcoming obstacles in current knowledge management practices. In this research a quality model of online social information systems was derived from prior literature.
on online information service quality and analyses of characteristics of emerging
technologies. An online questionnaire was developed and administrated to 168 users. The
findings of this research provide implications for developers of both enterprise
knowledge management systems and public social websites and can facilitate future
development of the instrument measuring the quality of online social service from
other perspectives.

Singh and Kant (2007) developed the relationships among the identified knowledge
management (KM) barriers. This research is also helpful to understand mutual
influences of barriers and to identify those barriers which support other barriers
(driving barrier) and also those barriers which are most influenced by other barriers
(dependent barriers). The interpretive structural modeling (ISM) methodology is used
in this research to evolve mutual relationships among these barriers. In this research
KM barriers have been classified, based on their driving power and dependence
power and analyzed the driving power and dependence power of these barriers.

Garcia (2007) finds results of a four-year qualitative research project on the dynamics
of skill development strategies in e-learning workplace environments. In this research
a potential knowledge city, Greater Manchester relies on its human (individual and
collective) capitals, put to work in knowledge engines such as its universities.
Research analysis has adopted Carrillo's generic system of capitals, an integrative
KM3 taxonomy. By exploring Greater Manchester (UK) universities' e-learning
strategies, this research finds KM theoretical understanding and shows the way
facilitators develop their knowledge-based skills in emergent higher education
learning spaces.

Skerritt (2005) present a 'soft methodology' model in knowledge management that
addresses the problem of accessing and managing personal (implicit/tacit) knowledge.
The model is based on the theories and methodologies of grounded theory, adult
learning and collaborative action learning and action research. The model consists of
seven commonly shared values and principles of an action learning and action
research (ALAR) culture, captured in the acronym ACTIONS. Outcome of the
research is that the resulting model, from which are generated seven kinds of personal
knowledge, can be used for knowledge management in management education and
the workplace. This model can be used for developing individual knowledge
management skills, which is a central concern for corporate universities and business
schools.
Scarso and Bolisani (2008) attempt to draw a comprehensive and coherent picture of elements that are generally treated disjointedly, both in academic studies and in practice. In this study an explanatory framework is proposed, which identifies and integrates the main dimensions shaping the creation and management of CoPs. The proposed speculation is based on a survey of more than 200 studies specifically focusing on CoPs in business environments. The propose framework, identifies the critical dimensions and issues, those can be of use for the design and management of CoPs intentionally created by firms.

Minbaeva (2005) empirically examine the effect of human resource management (HRM) practices on knowledge transfer within multinational corporations. The research study suggest that the employment of human resource practices, which affect absorptive capacity of knowledge receivers and support organizational learning environment, is positively related to the degree of knowledge transfer to the subsidiary. This research is based on the data from 92 subsidiaries of Danish multinational corporations (MNCs) located in 11 countries. Results of the analysis indicate the existence of two groups of HRM practices conducive to knowledge transfer and some HRM practices have a complementary effect on the degree of knowledge transfer when they are applied as a system.

Wong and Aspinwall (2005) investigated the critical success factors (CSFs) for adopting knowledge management (KM) in small and medium-sized enterprises (SMEs). A survey instrument comprising 11 factors and 66 elements was developed. Through a postal survey, data were sought from SMEs in the UK. A parallel one was also administered to a group of academics, consultants and practitioners in the KM field in order to provide a more holistic view of the CSFs. The study systematically determined the CSFs for KM implementation in the SME sector and would help SMEs to better understand the KM discipline, to facilitate its adoption and to priorities its practices as well as academics can use the results to build models that would further expand the KM domain.

Jain (2006) explore the role of information and communication technology (ICT) using a knowledge management (KM) approaches in African context. The research is based on a literature review. The discussion suggests that, in spite of various infrastructural limitations in Africa, KM applications can still play a vital role in indigenous knowledge management and consequently empowering Africa's development. Outcome of the research is that the major hindrance is the fact that Africa has thus far achieved little on its own, rather it has been emulating the progress.
made in the developed world. The other findings of the research concluded that tacit knowledge can be managed using ICT.

Chen and Choi (2004) highlighted the role of tacit knowledge in successful knowledge-based cities. It focused on a case study of Hsinchu Science Park in Taiwan. They suggested that the growth of successful knowledge-based cities is dependent on three interrelated processes that create and transfer tacit knowledge in cities they are local knowledge creation, transfer of knowledge from external sources and transfer of that knowledge into productive activities.

Dalmaris et al., (2007) presented a research into the improvement of knowledge-intensive business processes. Sir Karl Popper's theory of objective knowledge is used as a conceptual basis for the design of a business process improvement (BPI) framework. Case studies were conducted to evaluate and further evolve the improvement framework in two different organizations. They found new practical way to achieve performance improvement, that utilizes structured tools on intangible organizational assets and the framework can be applied by organizations that run knowledge-intensive business processes.

Ward (2007) point out a concepts related to the use of knowledge in business for the purpose of generating profit and show their application in relation to the author's own company, Ricardo. The research finds that knowledge is presented as a differentiated concept with various levels and functions and reveals how far theoretical concepts, such as tacit and explicit knowledge, knowledge bases and knowledge or learning communities are reflected in the real world situation of Ricardo.

Chua and Lam (2005) attempt to understand the reasons for knowledge management (KM) project failure. Five well-documented cases of KM project failure in the current literature are reviewed. For each case, the authors examine the circumstantial elements of the failure, including the rationale and intended objectives of the KM project. The outcomes of the project and the reasons that led to project failure factors fall into four distinct categories, namely, technology, culture, content and project management. Second, KM projects can be traced along a three-stage lifecycle, comprising initiation, implementation and integration. The findings are finally synthesized into a model of KM project failure. The model serves as a starting-point for future research in KM project implementation. Practitioners may use the model as a risk identification tool for KM project implementation. Furthermore the fact that
KM project failure is a reality with which both practitioners and researchers have to reckon.

Shaw et al., (2007) took a strategic approach to preparing the organization to avoid impending crisis and found they were fighting to mitigate its impact. The research examined a case-study of a financial services organization which faced the crisis of its impending dissolution. The research draws upon observations of change management workshops, as well as interviews with organizational members of a change management task force. The result of the research demonstrated the importance of building a knowledge management strategy during times of crisis and draw out important lessons for organizations facing organizational change.

Jabr (2007) explores the role of medical and health organizations within their communities. The study focuses on health organizations in the Sultanate of Oman to view their corporate knowledge and utilize it to improve practices and subsequently reinforce quality standards, while sustaining the image of learning organizations. The study based on gain a comprehensive picture of the process of KT to show the way physicians at two hospitals look at the knowledge of its participants and to discover the way participants are willing to share, transfer and receive knowledge. The results of the study indicate that junior physicians suffered from work overload and senior ones had negative attitudes and were unwilling to share knowledge.

Malhotra (2005) integrated knowledge management technologies in organizational business processes. In this study a comprehensive review of theory, research and practices on knowledge management developed a framework that contrasts existing technology-push models with proposed strategy-pull models. The framework explains the 'critical gaps' between technology inputs, related knowledge processes and business performance outcomes can be bridged for the two types of models. Findings of this research suggested superiority of strategy-pull models made feasible by new 'plug-and-play' information and communication technologies over the traditional technology-push models.

Chase (1997) explored some of the major concepts and approaches as discussed at an international congress on the subject. Beginning with an examination of some of the factors propelling the global knowledge economy, the research then explored knowledge-based organizational strategy, illustrated by a number of case studies from leading practitioners, including British Petroleum, Glaxo Wellcome, ICL, Nokia Telecommunications, the UK Post Office and Zeneca Pharmaceuticals. Findings of
the research indicated that the concept of intellectual capital lies at the heart of knowledge management and some companies define intellectual capital in terms of value creation, for others it is value extraction.

Campbell, Clare and Gitters (1999) define the newly emerging concept of knowledge management. The research is based on case studies which are included on these firms: Teltech, Ernst & Young, Microsoft, and Hewlett Packard. Findings of the research include a recommended strategy for implementation of knowledge management, best practices and strategic direction of this new discipline and its effect on competition, productivity and quality for the business of tomorrow.

Zhou and Fink (2003) elaborate a systematic linking of intellectual capital and knowledge management. The research establishes similarities between the two and proceeds to develop a systematic approach to linking them through the intellectual capital web (ICW). Findings show that the integration of IC and KM requires alignment of KM processes with IC assets to meet the organization's strategic needs.

Fowler and Pryke (2003) addressed issue of knowledge management in public service organizations where the concept of provider competitiveness limited significance but other priorities prevail. This issue explored through the medium of a study within the UK's Child Support Agency (CSA) based on the results of interviews and questionnaire responses from the senior management group. Outcomes of the research show a conditions framework and associated analysis assess broader implications and the possibility of wider application within other such public service organizations.

Hwang (2003) examines the concept of learning and explore training strategies to promote the ability to learn, which can guide the design of training interventions and the development of a knowledge management system. Findings of the research suggest that training strategies should be aligned with structural, cultural and managerial issues together to nurture the learning capability.

Mathiassen and Pourkomeylian (2003) explore the practical usage of insights on knowledge management (KM) to support innovation in a software organization. The research applies two complementary approaches to KM, the codified and the personalized, to evaluate current KM practices and to improve its SPI practices. This study is based on the insights from key principles within SPI and evaluation of the applied KM approaches. The results of the research conclude that it is advisable for SPI efforts to explicitly address KM issues. Each software organization has to find its
own balance between personalized and codified approaches, this balance needs to be dynamically adjusted as the organization matures.

Carpenter and Rudge (2003) discussed a knowledge management (KM) benchmarking exercises conducted at British Energy Power and Trading (BEPT). In this research the knowledge performance categories identified by the international knowledge management. The study was based on staff survey to determine KM activity within the division. The study’s findings discusses the concepts of benchmarking, organizational culture and knowledge audits and providing a context for their application in KM.

Loew, Bleimann and Walsh (2004) propose a new paradigm to overcome many problems in the area of information technology involving communication between humans. The paradigm will be exemplified using the example of knowledge transfer within a company. The solution is not interaction between a user and a highly intelligent system, but communication between people supported by intelligent systems. Findings of the result say that the basic idea of the knowledge broker is that of a hybrid man-machine system that enables knowledge transfer within companies not only theoretically, but also in practice.

Whitmore and Albers (2006) discuss of past, current and future knowledge management efforts in the accounting organization of a large American corporation. In the context of a nine-step framework, they highlights the challenges, benefits, approach and lessons learned in applying knowledge-management principles. The research findings concludes some of the typical challenges faced by today’s corporate accounting organizations include month-end deadlines, training gaps, employee turnover and satisfaction issues and the need to operate in a highly regulated and structured environment.

Woldesenbet, Storey and Salaman (2007) investigated assumptions that ‘taken-for-granted ness’ of the strategic manageability of change by senior managers may be exaggerated. This research is based on interpretive case research on semi-structured interviews with 44 senior managers in a number of business organizations in Ethiopia supplemented by secondary sourced. Finding of the research conclude that work in business knowledge just commenced and its continuity would further indicated that scholars’ and practitioners’ understanding of the knowledge work for managers in varied contexts and environments.
A review of existing literature shows that researchers developed various KM model related to single knowledge management tool or a combination of two to three. There are not many studies which emphasize complex relationship among several knowledge management tools such as knowledge creation, codification, mapping, sharing, acquisition and storing.

2.9 IDENTIFIED GAPS IN LITERATURE

Tradition of knowledge management practices that organizations typically address knowledge management from a social or technological point of view. The social perspective view that employees are their best assets, whereas those who favor the technological approach deal with that information technology is needed to support knowledge management. Abeck et al., (1999) advocate that effective knowledge management requires a hybrid solution, one that involves both people and technology. On the basis of literature review, some of the issues that have not been adequately address in the literature have been identified. These issues would be covered in this research. Literature review of KM practices identified gaps in literature are follows.

Organizations at large have placed importance in isolation by researchers.

- Some studies are more focusing on knowledge creation and knowledge sharing but not showing any relation with knowledge acquisition, mapping, storing and coding.
- Some researcher identified relation among knowledge mapping and knowledge sharing but they did not find any relation among knowledge storing, coding, acquisition and knowledge creation.
- It has also been observed that some studies are more inclined towards knowledge acquisition and knowledge sharing but not on knowledge creation, mapping, storing and coding.

Purpose of present research effort is carrying out an empirical study on select issue in knowledge management practices in Indian IT firms. The knowledge management practices will study with respect to: knowledge codification, knowledge storing, knowledge mapping, knowledge sharing, knowledge acquisition and knowledge creation. It further would develop a model for ideal KM practitioners.