CHAPTER 1

DESIGN OF THE STUDY

1.1 INTRODUCTION

The current turbulent corporate scenario demands every organization to review their existing strategies for employee management. It is a proven fact that the distinctive competency of the human resource is the key for every organization to attain a competitive edge. This unique characteristic of the workforce distinguishes it from other resources of the organization. The present day human resource is expected to conceptualize, innovate and implement strategies that can offer the organization a winning edge. The organizations are struggling to stay afloat in the rough waters and the human resource function is a key player in helping the companies around the world to achieve their strategic goals. As the composition of the workforce exhibits a continuous change, the employers are compelled to consider retention of knowledge equally to retention of their human resource.

The erratic attrition rate and the disequilibrium in the demand for and the supply of quality workforce have made it imperative for the organizations to design robust mechanisms to extract and exploit the core asset of the organizations – the employees’ knowledge.

The ongoing knowledge era provides a radically different outlook and is dominated by the mind power. Internationalizing the business operations has forced the Indian companies to adopt strategies that would enable them to withstand the challenges of the global industrial arena. Globalization, workforce diversity and the volatile industrial environment propel the organizations towards manifesting the available human potential into an everlasting knowledge repository. The supposition of unprecedented
challenges and opportunities ahead in the knowledge economy has prompted the organizations to acknowledge the need and importance of agglomeration of the unparalleled intellectual assets.

The competitive corporate arena triggers the organizations to strategically manage the human resources not only for reaping success but also to survive in the industry. Management of human resources encompasses managing the knowledge of the employee (Alan Price, 2007). The current Human Resources Management (HRM) scenario is knowledge centric rather than product centric. The information driven knowledge era compels the organizations to be capable of creatively enriching their core competencies by way of new knowledge creation and retention from the internal environment and external environment as well.

Hence, it would be appropriate to study and analyse the concept of Knowledge Management (KM) and its relevance in Indian context. Assessing the role and significance of this vitalizing concept and throwing light on the enablers of Knowledge Management Practices (KMP) is the need of the hour. The concept of knowledge management entails a new business compass for the organization to operate within.

Every day, the arena of Human Resource Management is giving place to new concepts and the present buzz word is “Knowledge Management”. The rapid and constant change in the knowledge economy has warranted the traditional organizations to adapt new strategies to exploit the knowledge of the workforce which is an irreplaceable asset. Globalization has paved the path for the abundant supply of work force and employment opportunities as well. The existence of strong competitors and increased mobility of labour pose a predominant threat to the organizations. The walk over of an employee not only means a reduction in the workforce but also means the loss of the crucial asset “knowledge” because the valuable asset walks away with the
employee. Knowledge can be defined as being aware of and understanding thoughts which are obtained through experience. Knowledge can be in the form of ideas, competencies and skills of a person. Data converted into information and further transformed into knowledge and to wisdom there from (Rowley, 2007).

The transformation from industrialized economy into information based economy has necessitated the adoption of knowledge management practices in the organizations. Zuboff (1988) views that human knowledge and capabilities have always been the source of value creation and this phenomenon is becoming more latent in the information age where the intellective component of work is increasingly important.

Concept and definition of knowledge management

The business dictionary defines knowledge management as strategies and processes designed to identify, capture, structure, value, leverage and share organization’s intellectual assets to enhance its performance and competitiveness. It is based on two critical activities:

- Capture and documentation of individual’s tacit and Explicit knowledge and,
- Its dissemination within the organization.

Ouintas et al. (1997) defines “KM is to discover, develop, utilize, deliver, and absorb knowledge inside and outside the organization through an appropriate management process to meet current and future needs”.

Knowledge management is a key issue in managing the human force of an organization. The adoption of this concept widens the scope and functions of HRM. In the era of economic survival, every organization is in need of three major assets; knowledge, cheap labour and natural resources among
which knowledge is the only long living asset and thus can be regarded as the source for competitive advantage (Neumann and Tome, 2011). In the prevailing intellectual economy, what organization know is becoming more important than the traditional sources of economic power - Capital, Land and Labour (KPMG report, 1998).

Thus knowledge management is the process involving information, people and other tools to extract reusable knowledge which can support the organization to perform in a new and better way, and as a conveyance of which the employees can update themselves, improve their skill set and can be a part of the learning environment. Knowledge is an economical and strategic resource that offers the base for knowledge based organizations (Shafia Md. Ali et al., 2011). According to Alavi and Leidner (2001) knowledge is a justified belief that can increase the capacity to learn and to perform. Albert (1998) views knowledge management as the process of collecting, organizing, classifying and disseminating information throughout an organization, so as to make it purposeful to those who need it. It is a tool that helps to utilize the resources in a smarter way to achieve the business goals.

Globalization and emergence of digitalized form had necessitated the use of knowledge and the present business scenario is transforming from product oriented phase to knowledge oriented phase. The ability of the companies to exploit their intellectual capital has become more decisive than exploiting physical assets (Davenport and Prusak, 1998).

Knowledge management is the Explicit and systematic management of vital knowledge and involves the processes of creating, gathering, organizing, diffusing and exploiting the intellectual asset. Conversion and integration of personal knowledge into corporate knowledge is accelerated by the process of knowledge management.
Knowledge management is a deliberate approach to capture, convert, store and disseminate the valuable knowledge of the workforce to create an organisational knowledge repository. It can be viewed as a conscious strategy involving three major components namely People, Processes and Technology. People are the inevitable component because the efficient utilization of other two components depends upon people’s willingness to share and reuse the knowledge (Plunkett, P.T, 2001). Knowledge management processes are capable of driving an organization towards leveraging the expertise and creating a synergy.

**Importance of knowledge management practices**

The organizations are increasingly confronted by tremendous challenges, including competition, globalization, the economic regulation, outsourcing, advances in technology, and the rapid creation of fresh knowledge. Knowledge management is a strategy that helps to address these challenges because it supports organizations in increasing their competitive advantage by leveraging the intellectual capital already present in the organizations.

The increased mobility of labour and the ageing workforce lead to the loss of knowledge which is a very critical and strategic element either for success or for survival of the organization. An organization that effectively leverages its knowledge capital can optimize the performance. Thoughtful planning and proper implementation of the knowledge management practices are essential for building on the successes and learning from mistakes. The adoption of such practice would fuel the individual learning and organizational learning as well. The knowledge management activities promote innovativeness, adaptability and flexibility which are the essential needs in the present knowledge economy.
Knowledge management in India – An overview

The initial years of knowledge management excessively depended on the usage of IT tools but later the focus has shifted towards the human capital. India is the fourth largest economy in the world and is abundant with the human resource. The technological boom, knowledge explosion and active globalization propel the Indian organizations to lean upon knowledge management as a survival strategy. In spite of the fact that many Indian organizations have taken efforts to implement KM programmes, still India has a long way to go.

The leading cement manufacturing company L&T uses Know–Net, a knowledge portal to capture the tacit knowledge of the employees and uses it to solve the project related issues. In 1999 Infosys has adopted the KM strategy “KEEP (Knowledge Enhancement, Extraction and Practice), CARE (Competency Augmentation with Research Excellence), LEARNING” with a view to empower the employees and to transform them as knowledge leaders (Srivatsava et al., 2011).

According to Chandana Goswami (2008) ICICI bank’s knowledge portal “wise guy” aims to enhance interaction among the employees and to create a knowledge sharing culture. Employees who write up more articles or answers more queries are suitably rewarded to encourage and motivate the knowledge sharing culture among the employees.

The knowledge management initiative in Patni Computers was reviewed by Ajayraj M. Vyas, Ankur Amin and Rina Dave (2011). The knowledge management initiative consisted of discussion forum, help desk and usage of IT infrastructure. The knowledge centre created by the company provided opportunities to its employees to learn new technologies, have discussions and to receive answer for their technical queries. It resulted in
training time reduction and increased productivity due to better sharing of knowledge among its employees.

Under the Ministry of Home Affairs, GOI-UNDP (United Nations Development Programme) National Disaster Risk Management Programme, Knowledge Networking is undertaken as an initiative to establish networks among prime government agencies, policy makers, disaster managers and specialists from allied fields of engineering, architecture, planning, seismology, hydrology, agriculture and social science. This is to promote exchange of information to reduce the risk of disaster. The initiative aims to connect all government departments, statutory agencies, research organizations and institutions to share collectively and individually their expertise. The exchange of knowledge is facilitated through physical interaction, workshops, documentation of experiences, and sharing on World Wide Web portal to enhance sharing of expert knowledge.

Role of HRM in knowledge management

According to Alitha Thavares (2011) knowledge management is all about people and the culture of sharing and not just the tools employed. Hence the Human Resource department has a very crucial and vital role to play in not just its formation but also in giving KM its shape. The basic criterions mentioned by Alitha are listed below.

- HRM can and must help with **articulating the main purpose of knowledge management**. Since HR deals with people, knows the workings of the organization, it is in a strategic position to understand how KM can be employed for the benefit of its employees and the organization as a whole.
Along with the vision, HRM should and must **align KM along the organization’s mission and policies**. The main purpose being is to create an atmosphere of sharing and using knowledge to its optimum to begin with, at least.

The most crucial purpose is to **transfer tacit knowledge into Explicit knowledge**. This can be done through its traditional training methods via building employee personality and career skills and competencies, through workshops, through fun and entertainment, through internal social Networking sites and mailing lists via the Intranet. It has to employ not just tools, but, the human capital to energize the company towards the change that it must bring.

**Initiate culture change and Learning initiatives**: HRM can facilitate this through a series of event related initiatives and talent fairs and interactive e-learning modules with mentorship, within the organization thus involving all levels of employees from across projects and the organization. HRM has to be the enabler for behavioral change for KM to succeed.

HRM itself has to undergo some change in its use of technology. It needs to be at the forefront in understanding what technological tools are appropriate for the sharing of knowledge, moving it from internal Email niches to wider discussion forums on the Intranet.

### 1.2 STATEMENT OF THE PROBLEM

The major challenge for the HRM today is the retention of the employees. In spite of numerous retention strategies, the attrition rate could not be zeroed down completely, especially in the IT sector. Hence, the attention of the organizations has begun to get diverted towards retention of knowledge in addition to retention of workforce. According to the national
knowledge commission the Indian industries are much interested in incremental innovation rather than breakthrough innovation. Adoption of knowledge management is one of the breakthrough innovations and the Indian industry is considered to be in the infancy stage. Hence, it becomes necessary to assess the mindset and perception of employees with regard to knowledge management.

1.3 SIGNIFICANCE OF THE STUDY

Creation, storing and sharing of knowledge have assumed greater importance and are considered to be the crucial activities for the success of any organization by attaining a competitive edge over others and this concept particularly has gained more relevance to knowledge intensive organizations (Donaldson, 2001). Knowledge management enables the organizations to generate value from the knowledge and the intellectual assets. It is imperative for any organization to clearly disseminate the reasons and expectations behind the implementation of knowledge management practices.

Knowledge management considers the employees from the resource based view and ponders the workforce as the assets of the organization (Rahe, M. and Morles, C., 2005). The noticeable aspect is, this unique asset (human resource) behaves or responds according to its motives. Hence it becomes imperative for the researchers to extend knowledge management to individual perspective and analyse the perception of the employees with reference to KM.

1.4 NEED FOR THE STUDY

The IT industry is predominantly knowledge driven and occupies a special role in the Indian industrial arena. With acute competition from countries like China and Japan, the Indian IT industry need to redefine its face, revamp the functions and formulae for the success. The study about employee
perception on knowledge management practices becomes inevitable as there is a growing need for revitalizing the organizational Strategic Human Resource Management (SHRM) practices to offset the lacunae of attrition management practices adopted by the IT companies.

Knowledge management not only helps the organizations to cope with the trend of increasing labour turnover in the IT industry but also acts as a handy instrument for the companies to retain the knowledge base of employees even if they quit.

1.5 OBJECTIVES OF THE STUDY

- To study the awareness of employees on knowledge management practices in IT industry.
- To ascertain the factors influencing the organization to practice knowledge management among their employees.
- To examine the methodology of implementation of knowledge management practices in IT companies.
- To identify the barriers of implementing knowledge management practices among employees.
- To study the benefits of knowledge management practices in the study domain.
- To establish the relationship of the personal and organizational profile of the employees on knowledge management influencing factors, barriers and benefits.
- To construct an empirical model of knowledge management practices in IT industry.
1.6 **HYPOTHESES OF THE STUDY**

- **Ho1:** The factors influencing knowledge management do not differ significantly.

- **Ho2:** There is no significant difference among employees on knowledge management practices in their organizations.

- **Ho3:** There is no significant difference among the different methodologies in the implementation of knowledge management practices.

- **Ho4:** There is no significant influence of the demographic factors on the perception of employees.

- **Ho5:** There is no relationship between the barriers of knowledge management practices and their benefits.

1.7 **LIMITATIONS**

- The sample size of the study is restricted to 500. The analyses are strictly based on the perception of the employees in IT sector.

- The data is collected only from the employees of IT companies in and around Chennai city only.

- The study assumes information given by the employees is valid and reliable.

- The study is not a comparative study of KMP adopted by different IT companies.

- The findings are drawn from the perception of the respondents, which are subject to change. Hence the findings cannot be generalized.

- The results of the study may not be applied to other industries.
1.8 OPERATIONAL DEFINITIONS

Based on detailed review of literature and theoretical background on the concept “Knowledge management”, the following definitions were found to be appropriate for the study.

✓ Filemon A. Uriarte Jr. (2008) - Knowledge management is the process through which organizations generate value from their intellectual and knowledge based assets. Knowledge management is concerned with the process of identifying, acquiring, distributing and maintaining knowledge that is essential to the organization.

✓ Ian Watson (2003) - Knowledge management involves the acquisition, storage, retrieval, application, generation and review of the knowledge assets of an organization in a controlled way.

✓ Davenport (1994) - Knowledge management is the process of capturing, distributing, and effectively using knowledge.

✓ According to Madan Mohan Rao (2005) - “KM can be defined as a systematic discipline and set of approaches to enable information and knowledge to grow, flow, and create value in an organization. This involves people, information, workflows, enabling tools, best practices, alliances, and communities of practice”.

✓ Dalkir, K. (2005) - Knowledge management is the deliberate and systematic coordination of an organization’s people, technology, processes, and organizational structure in order to add value through reuse and innovation. This coordination is achieved through creating, sharing, and applying knowledge as well as through feeding the valuable lessons learned and best practices into corporate memory in order to foster continued organizational learning.
Nonaka, I. (1991) has defined types of knowledge as

a. Explicit knowledge is formal and systematic. For this reason, it can be easily communicated and shared, in product specifications or a scientific formula or a computer.

b. Tacit knowledge consists partly of technical skills – the kind of informal, hard-to-pin-down skills captured in the term “know-how”. It consists of mental models, beliefs, and perspectives so ingrained that we take them for granted and therefore cannot easily articulate them.

1.9 METHODOLOGY

The research method

The present study is both descriptive and analytical with multiple objectives to examine the perception of employees of IT industry in Chennai city towards the practices of knowledge management.

The sample

The multi stage random sampling technique is adopted to select the sample employees. The survey is conducted among the employees of IT companies in and around Chennai city. The method of sampling is incorporated as follows;

The whole IT industry is downsized to software industry in the first stage. The second stage is preceded with all levels of employees in software industry. After the two stages, random sampling method is adopted to collect the responses. Hence the adoption of multi stage random sampling method is justified.
Sources of data

The primary data is collected through survey method by issuing a well formulated questionnaire. Multi stage random sampling is applied for generating the required data. Totally 550 questionnaires were distributed out of which 525 were collected. 25 were rejected due to flaws and only 500 were found suitable for the study.

Table 1.1

Distribution and collection of questionnaire

<table>
<thead>
<tr>
<th>Size of the company</th>
<th>Issued</th>
<th>Received</th>
<th>Rejected</th>
<th>Usable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large scale companies</td>
<td>310</td>
<td>295</td>
<td>12</td>
<td>283</td>
</tr>
<tr>
<td>Medium and small scale companies</td>
<td>240</td>
<td>230</td>
<td>13</td>
<td>217</td>
</tr>
<tr>
<td>Total</td>
<td>550</td>
<td>525</td>
<td>25</td>
<td>500</td>
</tr>
</tbody>
</table>

Secondary Data

The Secondary data are collected from Journals, Magazines, Books, Publications, Reports, Dailies, Periodicals, Articles, Research Papers, Websites, Company Publications, Manuals and Booklets.

Framework of analysis

The study aimed at assessing and analyzing the employees’ perception on the knowledge management practices of the company. Responses relating to their awareness on various knowledge management tools, factors influencing to adopt knowledge management practices, their opinion on the implementation strategies adopted by the organizations, the presence of barriers and the positive outcomes of these knowledge management practices.
Collection of primary data is done through questionnaire survey. The questionnaire consists of six parts. The first part of the questionnaire comprises demographic factors with optional questions. The second part includes bipolar questions relating to knowledge management tools that are being adopted in the IT industry. The third part of the survey instrument consists of questions relating to factors influencing the adoption and implementation of knowledge management practices. The fourth part of the questionnaire comprises questions relating to implementation strategies and the fifth part offers statements relating to the barriers in effective implementation of knowledge management practices. The sixth part contains statements to draw the opinion of the employees relating to the benefits of knowledge management practices in the IT sector.

The questionnaire comprises both optional type and Statements in Likert's 5 point scale. The responses of these sections are obtained from the employees of IT companies in the 5 point scale, which ranges as follows:

5–Strongly agree, 4–Agree, 3–Neutral, 2–Disagree, 1–Strongly disagree

A pilot study was conducted to validate the questionnaire and to confirm the feasibility of the study. The responses were collected from 90 respondents and cron bach alpha criterion was adopted to test the reliability. The optional type and bipolar questions revealed the formation of a normal distribution. As far as the Likert five point scales is concerned the cron bach alpha value was found to be above the benchmark value of 0.75 whereas the alpha values were 0.732 and 0.733 for factors influencing knowledge management practices and implementation strategies respectively. Hence, the researcher revamped the two factors.
Tools for analysis

- Simple percentage analysis is applied to analyse the demographic profile of the respondents and their awareness level on various techniques adopted by the organizations for capturing and sharing their knowledge.
- Factor analysis by principal component method is adopted to identify the factors of factors influencing knowledge management practices, implementation strategies, barriers and benefits of knowledge management practices.
- K–means cluster analysis is applied to classify the employees based upon their perception.
- Non parametric chi-square analysis is adopted to examine the nature of association between the clusters of respondents and their awareness on various knowledge management tools.
- Karl Pearson’s coefficient of correlation is brought into the context to explore the parametric relationship among the various dimensions of knowledge management practices and benefits.
- One way analysis of variance (ANOVA) is applied to ascertain the significant relationship between various knowledge management practices aspects and its effect on employees in the form of perceived benefits with respect to organizational and personal details of the employees.
- The multiple regression analysis is found to be appropriate to find out the influence of knowledge management barriers on the benefits of knowledge management, hence it is also used in the study.
1.10 CHAPTER SCHEME

**Chapter I** - Introduces the concept knowledge management, its elements and includes the statement of the problem, objectives, methodology, scope and limitations of the study.

**Chapter II** - Elaborates the review of related literature pertaining to the present study.

**Chapter III** - Deals with the profile of the IT industry and the conceptual framework.

**Chapter IV** - Employees’ perception of knowledge management practices – An analysis.

**Chapter V** - Barriers and benefits of knowledge management practices – An analysis.

**Chapter VI** - Summary of findings, suggestions and conclusion.