CHAPTER 5

IMPACT OF APPLICATION OF EKM IN HRD

5.1 Introduction

In the earlier Chapter the mechanism of application of EKM was discussed and the related concerns and justifications were mentioned. In almost all the companies in IT sector, a systematized EKM Implementation mechanism is observed which is very much in favor of the appropriate strategy. After touching this aspect, it would be worth examining the influence of application of EKM with specific reference of HRD. Knowledge based assets are the essence of contemporary business as it is difficult to get right knowledge in right time in any enterprise for its day-to-day as well as overall performance. The importance of intangible assets has increased rapidly in knowledge society. In order to survive, organizations are in need of the competitive advantage of more efficient utilization of human resources and intellectual capital.

The basic components of HRD can be observed as Training, learning and development and these are changing significantly with new digital age requirement. The HR department plays a vital role in ensuring the smooth running of an enterprise – most importantly by tracking and analyzing the promptness and work patterns of the workforce which help the knowledge workers to perform and also to acquire knowledge. Yet it is comparatively ignored or overlooked in enterprise management. There are lots of newer and better methodologies and technologies coming into market that are being adapted by enterprise to aid the departmental tasks and functions. However, the proper knowledge management techniques has not been followed and implemented in the organization. Slowly, this scenario is changing especially in the IT sector.

Although by surveying only the HR personnel the actual state-of-the-practice in KM may not be completely revealed, as there are also other perspectives such as IT resources and the documents. But as intellectual capital management is a rising function in companies, it certainly gives a very important perspective as an extended study of its intangible assets with HR context.
5.2 The Stakeholders Of Application OF EKM

The stakeholders are all those people who are the affected party in a project or a task. There are several members comprising stakeholders of application of EKM starting with the Top Management, Middle Management, the HR personnel, Quality personnel, Marketing and Sales personnel, employees, Industry experts, customers, customer’s customer, Vendors, Support staff, media partners, etc. All these are directly or indirectly involved in formulating and executing the EKM Initiatives in the enterprise.

Knowledge enabling activities of a firm could be housed in mostly the HRD department. However, this is not always necessary to ensure HRD’s central role in enterprise’s KM efforts. More important is to ensure full support and leadership of company’s executive team, to ensure that executives actively embrace a knowledge management approach and realize the importance of the same. Therefore, an additional task for HRD professionals is to play an active role in providing a link between corporate strategy and knowledge management strategy through a combination of strategic planning, scenario planning, and advocacy approaches. (Ardichvili, A.; 2002)

We need to consider Knowledge Management System as a discipline to improve the overall organizational performance. Thus it requires studying the HRD as a separate entity in an organization where EKM is practiced and the role played by every individual considering them as KM implementers.

5.3 HRM / HRD Perspective

Human Resource Management (HRM) is a wide area having several functions under its umbrella of which Human Resource Development (HRD) being one of the major one. The HRD Function was differentiated from the Personnel Function based on the finding in L&T that, creation of a learning environment through HRD tools suffers, if the same groups of people are to look after personnel (essentially monitoring, control, and maintenance roles) and development functions. It was integrated also into the HR function along with differentiation as a lot of development issues
depended on personnel policies and both functions were required to work hand in hand.

De Cenzo and Robbins (1996: 8) defined HRM as the part of the organization that is concerned with the people dimension, and it is normally a staff or support function in the organization. HRM role is the provision of assistance in HRM issues to line employees, or those directly involved in producing the organization’s goods and services. Invariably, human resource management (HRM) issues have been major concern for managers at all levels, because they all meet their goals through the efforts of others, which require the effective and efficient management of people (Dessler et al., 1999). The spacious array of HRM activities for example, planning, recruiting, selection, and training just to mention few, place enormous responsibilities on supervisors and managers alike. These embrace analyzing jobs, planning labour needs, selecting employees, orienting and training employees, managing compensation, communicating (which includes counseling and disciplining), and maintaining employee commitment. In addition to the already mentioned activities, ensuring fair treatment, appraising performance, ensuring employee health and safety, building and maintaining good employee/labour relations; handling complaints and grievances, and ensuring compliance with human rights, occupational health and safety, labour relations, and other legislation affecting the workplace are equally important activities. Education, learning, training and development happen to be the building blocks of HRD of any organization. All these components focus on Knowledge awareness, knowledge adaptation and knowledge sharing. Hence, it is worth studying, exploring and implementing new methodologies with EKM demeanor to impart, enrich and share knowledge for organizational growth.

The field of HRM has as well seen certain recent developments and every department of human activity is realizing its importance in the smooth functioning of the enterprise. Innovative techniques are being developed to improve the culture at the workplace so that the employees are motivated to give their best to the organization and as well attain job satisfaction. With so much of competition and the changes taking place at a rapid speed it becomes imperative to implement the latest HR practices in the organization. While these practices are becoming inevitable, they as well are posing new trials in front of the HR personnel. Some of the new arrivals in this area are (Noronha, 2009): employees for lease, moon lightning by employees

123
(another bigger challenges posing these days where employees are engaged in more than one jobs), Dual career groups, Flexi-time and flexi-work, different types of training and development activities, management participation in employees’ organization, consumer participation in collective bargaining, collaborative management (comprising employee, customer, government and stockholders participation), employee proxy in certain cases, HR accounting, refined organization policies, exit policies and practice, etc. If one delves into these areas further, there is every possibility of applying a logical support of a relevant customized EKM framework to support all such activities to make optimistic impact and reduce the pessimism in it.

A HR initiatives powered by EKM probably could be the best practicing strategy emerging as a positive outcome. Globalization changes the old tools and strategies of
HRD and now EKM supported HRD enriched in web based environment and tools like e-learning, virtual classroom, distance education etc. Figure 5.1 represents the framework of KM enriched HRD that would be quiet acceptable in the enterprise looking ahead to apply EKM at enterprise level. In the dynamic business environment where there are several influencing factors on a HR Initiatives and systems, a strong support from the HRD would be effective with the enterprise’s KM Initiatives in continuous action.

5.3.1 The Role Of HRD In Creating And Supporting KM Practice
As a matter of fact, HR is part of the knowledge management in an organization, and because of this it has to play a role in concurrence with the IT department, and others responsible for generating and manipulating knowledge. In this course of action, there are multiple challenges faced which demands a multi-faceted role to be played by the HRD
The challenge in enabling communities of practice is not so much one of creating them (most of communities emerge spontaneously), but one of preserving, supporting, and enriching the development of each individual’s uniqueness within the context of the community, and then linking the uniqueness with the community purpose. Therefore, under the community of practice model of KM, the role of HRD professionals is not so much to capture or distribute knowledge, but to create conditions for its generation and dissemination. This is achieved by enabling community interactions; by promoting conditions for an open exchange of ideas and information; by creating time and space for storytelling; and by supporting innovative thinking.
1. Need to develop and maintain a technology platform for synchronous and asynchronous interaction between members of the community. It is advisable to make this system easily accessible through the company’s intranet, and link it to knowledge repositories, learning modules, and “ask the experts” kind of systems. In this area, HRD professionals need to cooperate closely with the IT function of the organization, to select and implement the most appropriate technological solution, and to ensure compatibility with the organization’s existing databases (e.g., the background information on the community members should be easily downloadable into the community system from the existing HR databases).
2. Need for providing encouragement and support, and for energizing the community discussions. This need is likely to be higher at the initial stages of the community existence and, in most cases, will diminish as communities grow and become more self-sufficient. Most often, the role of a facilitator is assumed by one of the community members. The role of HRD professionals, thus, is to provide this individual with training in teamwork facilitation skills, conflict resolution, online communication etiquette, etc.

3. Need to facilitate the transformation of new knowledge generated by the community interactions into organizational capital, by capturing the most important information and making it available in a form of knowledge objects residing in online databases. The key to this activity is to make sure that only accurate, verified by multiple community members, information gets stored, and that it becomes easily accessible by the community members. A crucial role for HRD practitioners here is to ensure user friendliness of these objects. To achieve this goal, HRD professionals would need to utilize their understanding of knowledge acquisition strategies of adult learners, theories of cognition, and constructivist models of education.

4. Need to actively participate in community-building efforts: developing teamwork skills for the community members, and building the culture of sharing. Techniques and approaches utilized in various Organization Development interventions, which are well familiar to most HRD practitioners, should be utilized here.

5. Need to give utmost Importance towards equipping community members with skills for efficient use of technologies underlying the community interactions. Achieving this goal involves developing and making available online self-paced learning modules and providing just-in-time synchronous or asynchronous tutoring in technology use.

6. Need to monitor the evolution of learning needs of the community members. Thus, discussions of certain technical problems encountered by community
members in their work may suggest that training in new technological processes is needed. Or, detection of inter-cultural problems in community interactions across national boundaries may indicate the lack of cultural awareness (and suggest a need for cultural awareness and cross-cultural sensitivity training).

7. Need to develop and maintain an “ask the experts” system above the routine practice of a Help-Desk. This system should be an integral part of the technological platform supporting communities of practice. The “ask the experts” system connects community members with a pool of volunteer experts on specific subjects, in situations when members need assistance or tutoring, but cannot get help either from the other community members, or through the stored knowledge or learning object database. A further smart repository of such interaction could be plugging-in as another module of such systems that need proper monitoring and control as well.

5.3.2 Role Of HR Professionals

HR should help the organization articulate the purpose of the knowledge management system. As a knowledge facilitator, HRM must ensure alignment among an organization's mission, statement of ethics, and policies. HRM must nourish a culture that embraces getting the right information to the right people at the right time. HRM should also create the "ultimate employee experience by transforming tacit knowledge into explicit knowledge through education, organizations must build employee skills, competencies, and careers, creating "bench strength." This combines the traditional training and development responsibilities of HRM with the new responsibilities of human capital steward: using all of the organization's resources to create strategic capability. HRM must integrate effective knowledge sharing and usage into daily life i.e. knowledge sharing must be expected, recognized, and rewarded.

HRD roles are supposed to derive their power from their expert knowledge, networking and facilitation skills, and from the employee they serve. The HR Manager (new name for the traditional Personnel Manager popularized in mid-
eighties to keep up with times) derives his power from his association with policy making, implementation, and closeness to CEO.

In spite of the need for competency building in a globally competitive environment real Human Resources Development has not got the attention it deserved. The HRD roles are being reduced gradually to recruitment and retention roles essentially involving salary revisions, ESOPs, performance appraisal and reward systems. There is very little effort made or time left for competency building, creation of learning environment and to aligning HRD with business strategies. Dave Ulrich's books indicating the changes needed in HRD roles are widely read and quoted but very little of it is followed.(T.V.Rao,2007). It is in this context worth examining if creating a new Role called Chief Learning Manager or Chief Knowledge Manager will help Indian corporate sector. As a matter of fact, the researcher identified such structure in Hewlett-Packard wherein Chief learning Officers and Chief Knowledge Officers are deliberately given as titles. This change is slowly observed in many other organizations as well; which did not mark a change in mere title but its multi-varied responsibility in managing the workforce and to leverage an organization's learning into tangible business results to gain competitive market advantage.

HRM must take a strategic approach to helping firms manage email, instant messenger, internet surfing, and similar uses of technology HRM must champion the low-tech solutions to knowledge management although it should not ignore the high-tech knowledge management tools, HRM contains the expertise to develop low-tech knowledge management strategies.

It is observed that most organizations used the HRD Managers for people maintenance and control roles rather than development roles. Things are now changing steadily although not with significant pace with few exceptional enterprises. HRD Managers and HRD Departments were created in this country essentially to promote a learning culture. In the consulting report that created the first HRD department in India at Larsen & Toubro in the year 1975 the IIMA Consultants have outlined the following roles to the HRD function and to the HRD Managers; (T.V. Rao-IIMA, 2007):

- Developing enabling capabilities in individuals and the system.
- Integrating the development of the people with Organizational development.
Maximizing the learning opportunities of Individuals in organizations through various mechanisms, autonomy and responsibility.

- Decentralization, delegation and shared responsibility
  Balancing change and adaptation.
- Building feedback and reinforcement mechanisms etc.

5.3.3 Competencies of HRD professionals:

In order to achieve the desired KM Program executed effectively, HRD practitioners need a whole set of competencies, most of which are already in the armory of the HRD profession, but some may need to be acquired or developed more.

1. Understanding how adults learn individually and in groups; people’s motivation to learn and share information and expertise (Sternberg & Horvath, 1999).


3. Understanding how people use competence, knowledge, and skills in various work situations.

4. Facilitating storytelling and building a culture of sharing in Best practice. Those HRD professionals, who have background in OD, are especially well positioned to fulfill this role.

5. Facilitating knowledge generation using constructivist learning theory. Most corporate KM and e-learning systems are based on delivery of pre-packaged modules, with an underlying assumption that knowledge is something static, once-and-for all given. The communities of practice metaphor, on the other hand is based on the assumption that knowledge emerges out of the community interactions.

To sustain the culture of a dynamic global network, human resource managers are required to possess multiple competencies that are both relational and contingent in nature (Henderson & Clockburn 1995). Moreover, because of the need for a quick diffusion of information across different sources and domains of knowledge within a global network, the global human resource manager is encouraged to promote a spirit of multicultural interpersonal and inter-organisational trust, within which members of the networked organizations can learn to cooperate (Barney & Hansen 1994).
There is an indisputable need for knowledge management enabled HR practices as given in the figure 5.2; in the workplace to enable HR managers to promote the sharing of knowledge at department as well as organization level and thereby allow the organisation to acquire and retain intellectual capital.

It has been observed that in organizations which have adopted the communities of practice metaphor for KM, the HRD function takes a lead role in the implementation of these ideas, as found at Infosys Software Technologies.

Knowledge enabling activities of an enterprise could be housed in its corporate university or HRD department. However, this is not always necessary to ensure HRD’s central role in KM efforts. More important is to ensure full support and leadership of company’s executive team, to ensure that executives actively embrace a knowledge management approach and realize the importance of the communities of practice in implementing knowledge management.

Without this support, KM could become isolated in HRD departments and become less effective. Therefore, an additional task for HRD professionals is to play an active role in providing a link between corporate strategy and knowledge
management strategy through a combination of strategic planning, scenario planning, and advocacy approaches. (Alexander Ardichvili). Performance Technology (PT) Knowledge management and HR professionals seem to be synergistic roles. (T.V.Rao) Nevertheless, organizations necessitate modifying the traditional human resource manager’s role. Specifically, new dimensions of the human resource leadership role are required, some of which relate to managing conflict, power, influence and control, as well as commitment and trust building both within and beyond the firm boundary.

New revived HRM roles are those devised for human capital, knowledge facilitator, relationship builder, and rapid deployment professional. EKM has the capacity to significantly, expand the role of the HRM professional.

Additional skills that HRD professionals may possess, or may need to develop, include the use of technologies for synchronous or asynchronous online collaboration, the use of software for development and delivery of online learning and knowledge objects, and understanding principles of online databases and expert systems.

5.4 Challenges Faced By HRD

The on-going changes happening in the Industry give a thrust to adapt newer practices like what are mentioned under bullet point 5.3 by the HRD. These new practices pose new challenges which need to be addressed aptly by the HR personnel to retain employees as well as maintain organizational interests.

The IT industry poses even more challenges to HR professionals-from recruitment to retention, compensation to career planning and from technological obsolescence to employee turnover. The role of the Human Resource Manager is evolving with the change in competitive market environment and the realization that Human Resource Management must play a more strategic role in the success of an organization.

It is the human nature to feel insecure in sharing knowledge at the work place as knowledge is regarded to be a valuable resource in the profession. There is a natural tendency in every individual to hoard knowledge and consequently there is no motivation to share it with others unless she/he is convinced, rewarded or recognised properly (Chua 2003). There have been instances of motivating the employees towards knowledge sharing. Some researchers advocated for rewards and incentives to motivate employees towards learning, thereby leading to organisational learning.
Price Waterhouse devised reward mechanisms for knowledge sharing activities among its employees and linked it with their performance evaluation (O’ Dell and Grayson 1998).

There are several challenges faced by the HRD with so many factors responsible such as growing competition among companies as well individuals, market and business environment and status, technological changes and upgradations, as well as people management issues. It is certainly a major concern to understand the psychology of workforce, retain the best talents of the industry, motivate them to perform better and handle diversity while maintaining unity simultaneously, especially in countries like India, where it is still evolving. Globalization has resulted in many positive developments but it has left many concerns for HR managers.

For that matter, just ponder over the concern of knowledge sharing, motivation and recognition. It is observed that it is very obvious human nature to feel insecure in sharing knowledge at the work place as knowledge is regarded to be a valuable resource in the profession. There is a natural tendency in every individual to hoard knowledge and consequently there is no motivation to share it with others unless she/he is convinced, rewarded or recognized properly (Chua 2003). There have been instances of motivating the employees towards knowledge sharing. Some researchers advocated for rewards and incentives to motivate employees towards learning, thereby leading to organizational learning (Gardiner and Whiting 1997). Price Waterhouse devised reward mechanisms for knowledge sharing activities among its employees and linked it with their performance evaluation (O’ Dell and Grayson 1998).

As a part of the study, the researcher has filtered out few common challenges that were found among the HR personnel during the pilot study. These challenges identified include; Change Management, Talent Management and Employee engagement, Organizational Development and corporate Re-organization, Leadership Development, Employee retention, Compensation Management, Industrial Relations, employee welfare and corporate social responsibility. In order to overcome these challenges the popular measures were as well identified as Innovative drives with ownerships taken at department level, Continuously updated training plan, Creativity and innovation management, Best practices, HR Benchmarking, conducting meetings and follow-ups, performance measurement and
competency mapping and technological support. Also there could be certain environment specific trends evolving several HR challenges as listed in table No.5.1

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<tr>
<th>Sr. No.</th>
<th>Environmental Trends</th>
<th>Human Resource Challenges</th>
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<tbody>
<tr>
<td>1.</td>
<td><strong>Business Environment</strong></td>
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<td></td>
<td>Globalization and increased competition</td>
<td>Managing a global workforce. Ensuring availability of employees who have the skills for global assignments. Focusing increasingly on employee productivity to ensure competitiveness. Ensuring legal compliance when conducting business abroad.</td>
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<td>Mergers and Acquisitions</td>
<td>Managing employee insecurity. Ensuring continued employee productivity. Developing HR initiatives to manage employee morale.</td>
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<td></td>
<td>Downsizing</td>
<td>Managing organizational relationship with survivors Managing morale and commitment of survivors Providing outplacement services or relocation for employees who loses jobs. Providing personal and family counseling to employees who lose their jobs.</td>
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<td>2.</td>
<td><strong>Changing Nature of Work</strong></td>
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<td></td>
<td>Technological Advancements</td>
<td>Managing a virtual workforce. Managing employee alienation. Developing training modules and conducting programmes to provide employees with required skills. Retraining current employees to manage obsolescence. Providing work-life balance initiatives.</td>
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<td></td>
<td>Outsourcing</td>
<td>Manage employee concerns about losing jobs due to outsourcing. Managing employee morale and productivity.</td>
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<td></td>
<td>Flexible Work Arrangements</td>
<td>Managing the loss of organizational control over work. Developing programmes for motivating the flexible workforce. Developing ways of ensuring commitment of the flexible workforce to the firm.</td>
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<td>3.</td>
<td><strong>Demographic, Societal, and Workforce Trends</strong></td>
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<td>Workforce Diversity</td>
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<tr>
<td>Workforce Composition</td>
<td>Devising customized HR strategies for hiring, retaining, and motivating employees belonging to different generations. Developing life-style driven perks for the new generation employees. Developing work-life balance programmes.</td>
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<tr>
<td>Workforce Availability</td>
<td>Ensuring the availability of skilled talent to fulfill organizational needs.</td>
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<tr>
<td>Ageing population and workforce</td>
<td>Finding replacement for retirees. Managing the demand-supply gap for qualified managerial talent due to a large retiring workforce. Developing mentoring programmes to ensure the skills of experienced managers are passed on to new managers. Obsolescence training and retaining of older employees. Managing retirement policies. Conducting programmes to retain experienced employees.</td>
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<tr>
<td>Educated and knowledge workforce</td>
<td>Ensuring the continued supply of trained manpower. Training new hires. Partnering with universities and developing academic initiatives to meet projected shortage of skilled manpower. Training employees in computer skills, communication skills, and customer handling skills. Emphasizing re-training and development activities.</td>
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<td>Women in workforce</td>
<td>Strategizing to attract and retain educated and skilled women workers. Conducting programmes for women who opt for career breaks. Providing facilities such as crèches, flexible working hours, etc.</td>
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<tr>
<td>Changing family structures</td>
<td>Developing work-life balance programmes.</td>
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<tr>
<td>Global Workforce</td>
<td>Developing diversity training programmes. Developing HR initiatives directed to workforce diversity. Identifying and training expatriate managers for overseas assignments. Developing equitable pay plans for individuals working in different countries.</td>
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<td>Contingent Workforce/workforce flexibility</td>
<td>Developing systems to motivate the temporary workforce and elicit commitment from themHelping the temporary employees to quickly adapt to the organization to reach their full potential</td>
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4. **Changing Nature of Employment Relationship**
Offering challenging jobs to employees.
Managing rewards for enhancing employee performance.
Providing opportunities for enhancing skills through training, development, and educational programmes.
Developing programmes for employee commitment.
Understanding value differences across different employee groups and customizing HR programmes.

Table 5.1 Globalization Trends and Human Resource Challenges

Apart from above, number of challenges faced by HRD in every organization, to quote a few in IT sector in particular, as observed by the researcher were as follows:

- **Workforce Retention and Motivation:**
  Retention and motivation of personnel are major HR concerns today. Gartner Group Company specializing in management of human capital in IT organizations has observed that the average tenure for an IT professional is less than three years. Further, the use of new technologies, the support of learning and training, and a challenging environment ranked higher than competitive pay structures as effective retention practices. As per the survey carried out by Meenakshi Gupta in the year 2004; with 1028 software professionals from 14 Indian software companies, her findings showed that; while the professional gave importance to personal and cultural job-fit, HR managers believed that the key to retention was salary and career satisfaction. Money was a prime motivator for 'starters', but for those into their third or fourth jobs, their value-addition to the organization was more important. Monetarily, offering 'the best salaries in industry' is the minimum every company is doing, apart from performance-based bonuses, long-service awards, and stock options. Many organizations frequently conduct employee satisfaction and organization climate surveys, and are setting up Manpower Allocation Cells (MAC) to assign 'the right project to the right person'. In fact, some are even helping employees with their personal and domestic responsibilities to satisfy & motivate their workforce! Similar facts were found during quantitative study in organizations like Cognizant, TechMahindra Ltd and Infosys Software Technologies. Also few facts were referred from the employee satisfaction survey conducted in the year 2010 by the researcher. It was observed that an employee’s cognitive (i.e. employee’s perception and awareness) and affective (i.e. emotional indulgence) evaluation of his
or her job were the two important vital aspects. And it comprise several components like the pay, promotions, work tasks, coworkers, supervisors, work culture, job satisfaction, etc. Employee satisfaction is a measure of how happy workers are with their job and working environment. Keeping morale high among workers can be of tremendous benefit to any company, as happy workers will be more likely to produce more, take fewer days off, and stay loyal to the company. The factors contributing towards the same could be treating employees with respect, providing regular recognition and empowering employees.

- **Acquisition of the Best Talent**
  Many organizations often experience precipitous and simultaneous demands for the same kinds of professionals in today's job market. In such a seller's market, companies in the IT sector are striving to understand which organizational, job, and reward factors contribute to; attracting the best talent one - with the right blend of technical and person-bound skills. This would mean a knowledge of 'the tools of the trade' combined with conceptualization and communication skills, capacity for analytical and logical thinking, leadership and team building, creativity and innovation. The Indian software industry suffers from a shortage of experienced people such as systems analysts and project managers, and attracting them is a key HR challenge. This is one such area where more attention is required to be given with the help of innovative Knowledge Management initiatives.

- **Fair Evaluation System for Employees:**
  It is necessary to develop an evaluation system that clearly links individual performance to corporate business goals and priorities. Each employee should have well defined reporting relationships. Self-rating as a part of evaluation process empowers employees. Evaluation becomes fairer if it is based on the records of periodic counseling & achievements of the employee, tracked over the year. For higher objectivity, besides the immediate boss, each employee should be screened by the next higher level (often called a Reviewer). Cross-functional feedback, if obtained by the immediate boss from another manager (for whom this employee's work is also important), will add to the fairness of the system. A relative rating of all subordinates reporting to the same manager is another tool for fairness of evaluation. Normalization of evaluation is yet another dimension of improving fairness.
* **360 Degree Appraisal:** This system, which solicits feedback from seniors (including the boss), peers and subordinates, has been increasingly embraced as the best of all available methods for collecting performance feedback. It is considered to be a multi-rater feedback mechanism, wherein the opinions of all team members matter, especially if you are in a leadership role (at any level). Every person in the team is responsible for giving relevant, positive and constructive feedback. Such systems also help in identifying leaders for higher level positions in the organization. Senior managers could use this feedback for self-development.

* **720 degree Appraisal:** It is performing a feedback after the main 360 degree appraisal. Many management experts feel that doing a comprehensive 360 degree appraisal is not complete in itself. They feel that an effective procedure to measure improvements and receive feedback is essential for the success of any appraisal. This gives a pre and post intervention result. The pre-intervention result sets the base line, the development intervention is then done to improve the participant's behaviors (e.g. training, coaching). The post intervention survey then shows the amount of improvement in the results. 720 degree as the name suggests is 360 degree twice-doing the appraisal once, where the performance of the employee is analyzed and having a good feedback mechanism where the boss sits down with the employee another time and gives him feedback and tips on achieving the targets set. Too often, employees complain that they never receive feedback until the next performance appraisal. They say that, by then it is too late. 720 degree appraisal seeks to address these concerns by giving the employees feedback on their performance and helps to attain goals set for them. Practically there are few more types although not observed as a single practice in the companies selected for study, are:

  - **90 degree Appraisal:** The employee evaluates himself and shows his strengths and achievements or his boss evaluates him. (Self or Boss).
  - **180 degree Appraisal:** The employee and the boss evaluates his performance on a monthly basis. (Self or Boss).
  - **270 degree Appraisal:** The method wherein the employee is evaluated by 3 persons, himself, Boss and co – workers.
* **Provision To Highlight performers:** Create profiles of top performers and make these visible through company intranet, display boards etc. It will encourage others to put in their best, thereby creating a competitive environment within the company. If a systems approach is followed to shortlist high performers, you can surely avoid disgruntlements.

* **Skip Level Meetings, Open house discussions and feedback mechanism:** Ideas rule the world. Great organizations recognize, nurture and execute great ideas. Employees are the biggest source of ideas. The only thing that can stop great ideas flooding your organization is the lack of an appropriate mechanism to capture ideas. Open house discussions, employee-management meets, suggestion boxes and ideas, capture tools such as Critical Incidents diaries; are the building blocks, which can help the Managers to identify & develop talent. Skip Level meeting, work out in free sharing of ideas, and/or grievances from team; in absence of their direct reporting manager for fair discussions. It is usually held once in a quarter by the Group Head or some of the Senior Managerial personnel. (as observed in leading companies like TechMahindra Ltd., Cognizant, TCS, etc).

- **Compensation And Reward To The Deserving Candidate**

Increasing demands of technology coupled with a short supply of professionals (with the requisite expertise) has increased the costs of delivering the technology. This makes incentive compensation a significant feature, with the result that IT companies have moved from conventional pay-for-time methods to a combination of pay-for-knowledge and pay-for-performance plans. With the determinants of pay being profit, performance and value-addition, emphasis is now on profit sharing (employee stock option plans) or performance-based pay, keeping in view the long-term organizational objectives rather than short-term production-based bonuses.

The compensation could be in terms of

- Financial compensation
- Opportunities for growth (enhancement of Technical and Functional skills) with desired task allocation
- Recognition and appreciation for the work done, by supervisors as well as colleagues at right time in a suitable way.
Of course, few workers will not experience a boost in morale after receiving more money. Raises and bonuses can seriously affect employee satisfaction, and should be given when possible. Yet money cannot solve all morale issues, and if a company with widespread problems for workers cannot improve their overall environment, a bonus may be quickly forgotten as the daily stress of an unpleasant job continues to mount. Skills, competencies, and commitment supersede loyalty, hard work and length of service. This pressurizes HR teams to devise optimized compensation packages as compensation is not the only motivator in this industry. Always a creative and innovative HR practice can only sustain and retain the existing talent in the organization. Organizations understand the relevance of being creative in their ways of implementing different practices for retaining their employee in order to gain the competitive advantage.

- **Maintaining preferred work environment:**

(Being the best place to work with): As with any other professional, what really matters to software professionals is selecting 'the best place to work with' which is what every company is striving to be. The global nature of this industry and the 'project-environment' (as opposed to product environment) has added new cultural dimensions to these firms. In a value-driven culture, values are determined and shared throughout the organization. Typically, areas in which values are expressed are: performance, competence, competitiveness, innovation, teamwork, quality, customer service, and care and consideration for people. Flat structure, open and informal culture, authority based on expertise and ability rather than position, and flexi-timings are some of the norms software firms follow. The idea is to make the work place a 'fun place' with the hope of increasing loyalty and commitment.

Getting Employees on Board, which is the major problem that occur in KM usually result because companies ignore the people and cultural issues. In an environment where an individual's knowledge is valued and rewarded, establishing a culture that recognizes tacit knowledge and encourages employees to share it is critical.

**Coping with the Demand-Supply Gap:** A deficiency of skilled IT professionals is global scenario, and not restricted to the Indian IT industry. Although major employee turnover is seen in the IT Sector across the globe, W. Strigel, founder of
Software Productivity Centre Inc. (1999) has projected the shortage of software professionals speaks out close to the reality. One of his survey reports that 75 per cent of US companies planned to reengineer their applications using newer technologies, but found that 72 per cent of their existing staff lacked the skills needed in these technologies, and 14 percent were not even re-trainable.

For India, it was predicted in the year 2004 itself as depicted in the graph No.5.1, that the IT sector will need 1,95,000 professionals. This trend in reality still continues, and in the year 2010 almost 3,70,000 IT professionals will be required (Strategic Review Reports, NASSCOM 1996-2001). These figures were quiet true and today the picture is very close to the given predictions. Consequently, recruitment managers are exploring new sources of IT manpower from non-IT professional sectors, as well fresh, trainable science graduates.

![Graph No.5.1 Annual Demand for IT Professional; (Source: N S Rathi, IIT Bombay, Meenakshi Gupta, 2004)](image)

India has retained its’ position as the leading global shoring destination with a 55 per cent share of global ITO and BPO market in 2010, and been able to increase its market share in spite of competitive challenges presented by emerging shoring destinations. These emerging opportunities both in the global and domestic markets can help India reach USD 130 billion in IT-BPO revenues by FY2015, a CAGR of 14 per cent. It is estimated that by FY2015, the Indian IT-BPO industry is expected
to contribute about 7 per cent to annual GDP and create about 14.3 million employment opportunities (direct and indirect). (Nasscom Strategic Review 2011)

- **Integrating HR strategy with Business Strategy**
  The strategic HR role focuses on aligning HR practices with business strategy. The HR professional is expected to be a strategic partner contributing to the success of business plans, which to a great extent depend on HR policies pertaining to recruitment, retention, motivation, and reward. The other major areas of concern for HR personnel in this context are, management of change, matching resources to future business requirements, organizational effectiveness, and employee development.

- **Encouraging Quality and Customer focus**
  With globalization and rapid technological change, quality is of utmost importance for the Indian IT companies, which earn most of their revenues through exports. Hence, the HR professional as a strategic partner needs to encourage a culture of superior quality to ensure customer satisfaction the only real measure of quality of a product or service.
  To be competitive today, an organization needs to be customer responsive. Responsiveness includes innovation, quick decision-making, leading an industry in price or value, and effectively linking with suppliers and vendors to build a value chain for customers. Employee attitudes correlate highly with customer attitude. The shift to a customer focus redirects attention from the firm to the value chain in which it is embedded. HR practices within a firm should consequently be extended to external entities like the suppliers and customers outside the firm.

- **Up-gradation of Skills – (Learning-Re-learning-Unlearning as and when required)**
  Business dynamics, Rapid and unpredictable technological changes, and the increased emphasis on quality of services are compelling companies in IT sector, to recruit adaptable and competent employees. IT professionals themselves expect their employers provide them with all the training they may need in order to perform not only in their current projects, but also in related ones that they may subsequently hold within the organization. As observed by Watts Humphrey, Fellow of the Carnegie Mellon University, "as software professionals gain competence, they do not necessarily gain motivation. This is because a creative engineer or scientist who has
learned how to accomplish something has little interest in doing it again. Once they have satisfied their curiosity, they may abruptly lose interest and seek an immediate change”. And when the rate of technological change is high may be higher than the time required acquiring competence in one area professionals could undergo psychological turbulence owing to the need to work in a new technology throughout their career. They want to gain new knowledge, which will be utilized by their organization. On the basis of the new learning they want to work in higher segments of software value chain. Therefore, constant up-gradation of employee skills poses yet another challenge for HR personnel.

In this context the researcher observed that TCS firmly believed that learning was a continuous process that did not stop with formal education. In order to make the company a learning organization, 6% of its turnover was invested in training and development. The company also had a world class training center in place. FC Kohli (Kohli), former CEO, commented (New letter quotes written by Anand Rao-GlobalvKM Practice Head in TCS), “To build people, we should equip them with knowledge and skills and attitudes before they can execute responsibilities.

- **Resistance to change**

In the competitive world, only uncertainty is certain and change is inevitable. In this context, there has been observation that there may be some resistance to such upcoming changes shown by the employees. This is a concern to the companies especially in IT sector, wherein supportive HR intervention can be of great support in the form of orientation, past pattern of growth and change management together with counseling, mentoring, etc.

- **High Employee Turnover and Knowledge drain**

Retention of existing skills and competences over the years and development of new skills and competences in the areas untapped so far in the organization pool of knowledge silos is a big challenge faced in an enterprise. This becomes more highlighted and crucial when it comes to an IT sector due to the high employee turnover and unpredictable economic changes that make an impact on this sector. Many experts retire or leave the organization or may not be available due to several reasons; such as health problems, legal problems, on-vacation, missing or even death. They might take away with them a great deal of knowledge and corporate memory.
These people are the ones who answer questions easily and have tacit knowledge that was not extracted from them previously. Loss of employees who hold such critical knowledge is very essential and thus primary challenge of preserving knowledge is to find ways in which tacit knowledge might be captured or at least be transferred to successors. Apart from flexible employment structure and human resource development is vital ingredient in locking the knowledgeable candidate. Consequently, employers are becoming increasingly dependent on the skills, flexibility and commitment of their employees. At the same time, the trend is against a lifelong employment in a single company; for example, in the United States of America the average worker is estimated to change his or her employer every five years. This situation is not conducive to promoting company loyalty in employees and has an adverse impact on transfer of knowledge from retiring staff members to successors.

Knowledge Management or in some organization it is termed as Talent Management becomes imperative to tackle such uncertain environment and is more efficiently managed if the controlling authority is the human resource department or a Talent Managing Group of an enterprise. Employee retention rather now called as Talent retention programs is popularly undertaken by most of the IT companies now-a-days and Exit interviews/discussion/interaction in formal along with informal ways can curtail this concern up-to some extent.

In the new paradigm of HRD, the focus is on Knowledge generation, knowledge acquisition, learning through various channels, training by Internet or distance learning and human development as issues of competitive advantage. The new directives must be involved in addressing workforce capability gaps, envisaging and engaging a creative workforce, performance improvement consulting, and taking action to ensure the right people are ready at the right time. There is demand for a whole new set of knowledge intensive HRD Competencies, many revolving around securing talent, strategic partnering, and ensuring the organization’s values remain explicit and aligned. These include driving change, managing increasingly scarce people resources, assessing environmental trends and their impacts on business (Collings, 2003). From KM perspective, HRD must take on the role of organization architect, develop the invisible assets of the organization and drive capability development and improvement with continuous knowledge gain.
The happening developments in Information Technology have dramatically affected traditional HR functions with nearly every HR function (such as compensation, staffing, and training) experiencing some sort of reengineering of its processes. However, this process of change has created significant new challenges for HR professionals.

5.5 Impact Of Technological Advancements In HRM & worthiness Of EKM Implementation

Earlier thrust used to be on strategic approach, which tends to use traditional tools of training and development but now with the advent of latest technologies in education and the availability of web based tools provide adequate choice to learn in real time basis. It reflects positively the continuous transformation process through endeavor of challenges to achievement of desired goals with improvisation. The end focus is on HRD, which enable to globalization paradigm, implying radical organizational re-structuring; and technological transformation specifically, the implications of re-structuring along process should be explored from an operations perspective.

With the advent of a work situation where more and more companies have to confess that their valued employees are leaving them, a new concept of career and human resource management with additional facets has evolved. At the same time, thousands of consulting firms and technology vendors have flooded the market with KM-related products based on new software, databases, and other technological solutions. However, since late 1999, the initial euphoria has given place to a more realistic assessment of the impact of these technologies, and even to disillusionment with the results of KM efforts so far. For example, an annual survey by consulting firm Bain & Co., which measured executive satisfaction with 25 management techniques, showed that in both 1998 and 1999, knowledge management ranked at or near the bottom in every category (Garner, 1999). Among chief reasons for this failure is an overemphasis on technology-based solution tools [Davenport & Prusak (1998), Gourley (2001), and Von Krogh, Ichijo, & Nonaka (2000)]

HRM must revamp the selection, assessment, and reward practices. HRM have the abilities for creating, measuring, and reinforcing a knowledge-sharing belief with the help of EKM Practices and Tools. There are plethora of KM tools available now-a-days; from search-and-retrieval tools to decision-support systems, data mining, data
visualization, and intelligent search agents but the lack of attention to the human side
of the equation, especially the relationship between learning and knowledge creation,
dissemination, and use at individual, group, and organizational levels (De Long &
Seeman, 2000; Dixon, 2000; Gourley, 2001; Pfeffer & Sutton, 2000) slay the very
motive of using them.

One strategy for overcoming the above deficiency is to move away from the data
capturing and dissemination metaphor in KM to that of a socio-technical system that
helps people generate, share, and use knowledge in specific organizational contexts
(Von Krogh, Ichijo, & Nonaka, 2000).

Furthermore group, individual, and organizational learning and knowledge
management become interwoven and inseparable. How to implement a people-
centered knowledge management approach? And do organizations have mechanisms,
qualified personnel, and resources for implementing it? The central argument of this
section is that moving from technology-centered to people-centered approach in KM
requires using different metaphors, tools, and expertise. One such metaphor is that of
communities of practice supported by online interactive technologies. Human
Resource Development function of a business organization is uniquely positioned to
implement systems based on this metaphor, having expertise in all three domains that
need to be integrated to create efficient communities of practice: adult/ mature
learning, the use of learning and communication technologies, and organization
development (especially team work facilitation and organizational culture building
skills).

Therefore, HRD professionals can and should play a lead role in the
conceptualization, design and implementation of knowledge management strategy
and knowledge enabling systems of a firm.

Technology is here and will continue to progress. To understand the role technology
plays in today’s HRM we first have to understand business technology. According
to Luck (2010):

- Business technology refers to the integration of computer and communications
technologies in support of administrative applications and procedures within an
  organization.
- Business technology is constantly evolving.
- Business technology is required for a successful business”.
The HR field has evolved over time and nowadays HR is under more scrutiny and is more accountable than ever. HRs these days and in the near future have a greater importance in the strategic business partnership with the organization, and for this challenge to be won there is an increasing need for technology to be inserted on its daily operations and on its decision-making considerations.

The trends in technology which directly or indirectly have an impact in HRM are (as stated by Ivancevich, 2001, p. 52) given below:

- **Growth in knowledge needs:** There is tremendous growth taking place from several verticals in the business environment at a phenomenal speed. World trade is growing over three times faster in knowledge-intensive goods and services such as biomedicine, robotics, and engineering. This proliferates the need of business specific relevant and contextual information in a dynamic business scenario.

- **Shift in human competencies:** With the dynamics of business happening around the enhancement of human skills and competencies need to be elevated and broadened. More and more energetic, multi skilled and multi-talented human resource is the need of the hour. Some predict that in 2015 almost all net employment growth will be in knowledge workers.

- **Global market connection:** Technology is dissolving borders and creating an interconnected marketplace.

- **Business streamlining:** Easy to use communication, electronic mail, electronic conferencing, and databases are creating instantaneous dissemination of data to make better decisions to geographically dispersed workers.

- **Rapid response:** Technology permits quicker communications, which allows faster decision-making.

- **Quicker innovation:** Teams of marketing, engineering, and production personnel working in parallel with computer provided files, data, and information develop products faster.

- **Quality improvement:** The concept of building quality into the entire process of making, marketing, and servicing is enhanced by computer monitoring systems and through robotics.

With the advent of Knowledge Management Initiatives in HRD innovative practices such as Integrated talent management is breaking down the traditional silos in HR making it more Agile in real sense.

Walker (2001) stated that HR technology can help organizations meet their business goals and objectives today and in the future by:
• Helping managers deploy their workers more efficiently.
• Ensuring that workers receive proper training and development.
• Offering new insights on how to increase productivity.
• Enabling employees and managers to receive needed information faster.
• Reducing HR administrative costs.
• Assisting with better employee assessment and selection” (Walker, 2001, pp. 10-11).

Thus for overall elevation of business, relevant HR technology and innovative strategies are very essential which would enhance the holistic growth of the enterprise, at a better pace.

5.6 Apparent benefits of application of EKM

It is crucial but imperative to identify and disseminate knowledge gems from a sea of information so as to carry out a successful KM initiative in an enterprise. KM is now being acknowledged not just as a source of wealth but as a mechanism to maintain market position, avoid failure and beat the competition (Bahra, 2001).

Thomas Short, has defined KM as “The set of practices, tools and interventions, and infrastructures, aimed at improving a firm’s ability to leverage its knowledge resources to achieve business objectives. The purpose of KM as per Dalrymple is to deliver value to the business. Mazzie mentioned that corporate strategists view KM as an organisation’s long-term sustainable competitive advantage. Similar supporting view of KM is held by Barclay and Murray (1997). In practice, knowledge management often encompasses identifying and mapping intellectual assets within the organization, generating new knowledge for competitive advantage within the organization, making vast amounts of corporate information accessible, sharing of best practices, and technology that enables all of the above — including groupware and intranets.

Peter Drucker stated that knowledge would become the only source of sustainable competitive advantage in the twenty-first century. Srikantaiah stated that “KM is the intuitive awareness in addressing problems in a more new and innovative fashion that takes advantage of opportunities provided by the capabilities of information technology”. Davenport (1998) mentioned that a KM function could inspire
resentment and concern within the organization if it seeks to assemble and control all knowledge. The goal of such an organization should be to facilitate the creation, distribution, and use of knowledge by others for competitive advantage. Sheller mentioned the purpose of KM is to add value to information already held be a firm, resulting in knowledge that will be of strategic use to the firm.

Koenig has extrapolated the relationship between organizational productivity with knowledge management through the provision of information services and information environment. Increasing complexity and turbulence of the external environment impose the organization with a greater demand for processing information and making quick decision as believed by Malhotra (1998) and Handy (1990). Such discontinuous environmental change would impede rational decision-making and demand greater need for innovative ideas. So there is an impetus to manage right information in a right form and use it appropriately for business purpose in the thrusting dynamic environment. A review of literature (Davenport, 1998; Duncan, 1997; Koenig and Srikantaiah, n.d.; Malhotra, Y 1998) also indicates steps such as, outsourcing, restructuring, empowerment of knowledge workers, teamwork leading to collective knowledge building are steps taken by organizations to face the challenges posed by volatile business environment.

A KM program should not be split from a business goal. While sharing best practices is a commendable idea, there must be an underlying business reason to do so. Without a solid business case, KM is a futile exercise.

Why companies adopt KM initiative?
- Enhance internal collaboration
- Capture and share best practices.
- provide e-learning.
- Customer relationship management
- provide a project workspace.
- competitive intelligence.
- enhance web publishing
- enhance transactional business processes.
- manage legal property(patents, bands)
- enhance supply chain management.
Some benefits of KM correlate directly to bottom-line savings, while others are more difficult to quantify. In today's information-driven economy, companies uncover the most opportunities — and ultimately derive the most value — from intellectual rather than physical assets. To get the most value from a company's intellectual assets, KM practitioners maintain that knowledge must be shared and serve as the foundation for collaboration. Yet better collaboration is not an end in itself; without an overarching business context, KM is meaningless at best and harmful at worst. Consequently, an effective KM program should help a company do one or more of the following:

- Foster innovation by encouraging the free flow of ideas
- Improve customer service by streamlining response time
- Boost revenues by getting products and services to market faster
- Enhance employee retention rates by recognizing the value of employees' knowledge and rewarding them for it
- Streamline operations and reduce costs by eliminating redundant or unnecessary processes

The drivers for KM today include workforce mobility, growing complexity in business environments, the need for lifelong learning, willingness by companies to invest in KM, the need to reduce loss of intellectual assets from employee turnover, the need to avoid reinventing the wheel, faster pace of innovation, the need to operate at a global level, increasing shift from tactical to strategic adoption of KM practices and the steady absorption of Internet and wireless technology.

A creative approach to KM can result in improved efficiency, higher productivity and increased revenues in practically any business function.

EKM as a methodology is strengthened by using appropriate technologies supporting the HR Practices. An effective HR technology must achieve several goals, as described by Walker (2001):

(a) Strategic alignment, which must support the goals of a business by helping users;
(b) Business intelligence, which should inspire new insights and learning, by providing users with relevant information and data, and by answering questions; and
(c) Efficiency and effectiveness, which must change the work performed by HR personnel, by dramatically improving their level of service, allowing more time for work of higher value, and reducing their costs (Walker, 2001, p. 4).
There are numerous benefits of application of EKM; here are few to list down as stated by Lengnick-Hall, M., & Lengnick-Hall, C.(2003);

i. Knowledge management can create competitive advantage for a company and its customers: By sharing information and best practices, organizations create expanded opportunities for market share and financial growth. Furthermore, knowledge management provides a means for organizations to differentiate themselves from competitors.

ii. Knowledge management can create a truly customer-focused culture: Appropriate organizational resources can be directed toward solving customer problems or meeting customer needs quickly and effectively.

iii. Knowledge management can act as a catalyst agent: Through tools, resources, and systems, it can help ignite creativity and innovation in the development of an organization’s products and services.

iv. Knowledge management can improve time to market: By leveraging best practices, learning and other time-savers to improve productivity, products can be introduced faster.

v. Knowledge management can expand a company’s strategic options: By leveraging intellectual property in research and development efforts as well as overall market and business strategy, organizations can discover new ways to create value.

The aim of such kind of innovative revolutionary exercises is to get the best value from all the different types of information generated or used within an organization. The information could be from internal or external sources, structured or unstructured, published or not, useful over the short or long term, on paper or in electronic form and of significance that is purely local and administrative or enterprise-wide and strategic. The practice of Knowledge management addresses all types and sources of information, allowing employees to more effectively exploit the information contained in the organization in order to meet the organization’s needs and objectives. An effective information management system should eliminate inefficiencies, including the following: collection of unnecessary information; collection of the same basic data by more than one group of employees; important information not identified or collected; storage of information long after the need is over; duplicated storage of the same data; inaccessibility of useful information to potential users; and dissemination of
information to those who do not need it. By correcting these inefficiencies, organizations will not only reduce information handling costs, significant in itself, but will also add considerable value to all business activities. Consequently, quality information would be made available to policy makers and planners, operational functions could be discharged more effectively, a higher quality of service could be provided to the customers, further resulting in improved customer relationships, and so on.

- **Concluding Remarks:**

As an IT based HRD system grows and its tentacles pull in more and more separate database we will find that the added value benefits begin the huge cost savings (Klutke, 1999). Improved access to up-to-date information and the ability to connect different system together are the fundamental reason why IT based and KM enriched HRD can prove to be an effective way for an organization to acquire competitive advantage.

In the preceding chapters, overview of the important aspects in context of the research study, which associates with multi-disciplinary areas such as Enterprise knowledge management, IT Industry and HR perspective, has been discussed. In the succeeding chapter the detailed data analysis and Interpretation of the facts collected during the study has been considered.