CHAPTER 3

INDIAN IT INDUSTRY

The purpose of this chapter is to bring out the status of IT industry in India. This chapter begins with the introduction to the Indian IT industry and then moves on to describe the role of IT - ITeS sector in India. Further the chapter provides an overview of Indian IT Industry. The chapter also reviews in detail the major trends in the IT Industry. Subsequently the chapter presents the HR challenges and major concern areas in the Indian IT Industry. The chapter ends with the discussion of need of competency mapping in the Indian IT industry and conclusions.

3.1 Introduction

The Indian information technology (IT) industry has played a key role in putting India on the global map as a major knowledge-based economy and outsourcing hub. The information technology industry in India has gained a brand identity as a knowledge economy due to its IT sector. This sector has helped India transform from a rural and agriculture-based economy to a knowledge-based economy. Besides this, the lives of people have been positively influenced by direct or indirect contribution of IT sector to various parameters such as employment, standard of living, per-capita income etc.

The IT industry in India has two major components: IT and ITeS. This includes hardware peripherals, networking, training, and domestic and export market for IT services and software; and ITeS-BPO (IT enabled Services-Business Process Outsourcing). The growth in the service sector in India has been led by the IT–ITeS sector, contributing substantially to increase in gross domestic product (GDP), employment, and exports. The sector has increased its contribution to India’s GDP from 1.2% in FY1998 to 7.5% in FY2012 [NASSCOM (2012)]. According to the National Association of Software and Service Companies (NASSCOM), the apex body for software services in India, the IT–BPO sector in India aggregated revenues of US $100 billion in FY2012, where export and domestic revenue stood at US $69.1 billion and US $31.7 billion respectively, growing by over 9% [NASSCOM (2012)]. The major cities that account for about nearly 90% of this sector's exports are Bangalore, Hyderabad, Chennai, Delhi, and Mumbai. The market size of the industry is expected to rise to US $ 225 billion by 2020 considering India’s competitive position,
growing demand for exports, Government policy support, and increasing global footprint. Today IT sector leads the economic growth in terms of GDP, employment, export promotion, revenue generation and standards of living. IT-ITeS industry’s contribution to the Indian GDP had increased from approximately 1.4 percent in 1998-99 to 5.2 percent in 2006-07. The share of IT (mainly software) in total exports increased from 1 percent in 2001 to 18 percent in 2011.

Exports dominate the IT–ITeS industry, and constitute about 77% of the total industry revenue. Though the IT–ITeS sector is export driven, the domestic market is also significant with a robust revenue growth [NASSCOM (2012)]. The industry’s share of total Indian exports (merchandise plus services) increased from less than 4% in FY1998 to about 25% in FY2012. Top five Indian IT services providers are Tata Consultancy Services, Infosys, Cognizant, Wipro and HCL Technologies [Gartner (2012)]. The IT sector in India is generating 2.5 million direct employments. India is now one of the biggest IT capitals of the modern world and all the major players in the world IT sector are present in the country [Kamdar (2006)].

Generally dominant player in the global outsourcing sector, however, the Indian IT sector continues to face challenges of competitiveness in the globalized world, particularly from countries like China and Philippines. The cost of the skilled Indian workforce is reasonably low compared to the developed nations. This makes the Indian IT services highly cost efficient and this is also the reason as to why the IT enabled services like business process outsourcing and knowledge process outsourcing have expanded significantly in the Indian job market. India’s reputation both as a source and a destination for skilled workforce helped it improve its relations with a number of world economies. So in conclusion it can be said that the growth of India’s IT industry has been instrumental in facilitating the economic progress of India.

3.2 Role of IT – ITeS Sector in India

The Indian IT Industry is one of the most high profile and widely tracked industries of the economy. The industry has grown at a scorching pace over the past few years, showcasing Indian technical and managerial talent to the world. It has been instrumental in giving India some serious economic leverage in today’s highly globalized world. With its low cost and high skills base, India has been the destination of choice for global corporations looking to cut
costs and become more competitive through creating a sustainable competitive advantage by the strategic deployment of technology in their respective organizations, which is in sync with their overall business objectives. In this regard, the top-rung companies are making sincere efforts to start providing better services to their clients, and delivering more ‘returns per IT rupee/dollar of investment’ to them. Taking Infosys just as an example, a close look at its annual report reveals that an increasing proportion of its revenues are being earned from providing ‘high-end’ services like package implementation, systems integration and IT consulting.

Services like IT consulting are where the industry needs to aim at, not only to grow in scale and size, but also because of the fact that competition at the higher end of the value chain is lower, since the entry barriers are high, owing to the fact that these services require a high level of skills to provide. It is due to this reason that many organizations testify that their employees are their most valuable resource. This is especially relevant in the service industry. The Indian IT Industry has made a marked shift by offering services in IT consulting, system integration, remote infrastructure management, network consulting, KPO (Knowledge Process Outsourcing) and integration processing services. The IT R & D services currently account for more than 15 percent of the total IT exports. India’s strengths have been its large growth potential, increasing outsourcing trend, large talent pool availability, high quality educational infrastructure, low operating costs, R & D strengths, and the government initiatives. Around 175 of the Fortune 500 companies have R & D operations in India. A vast network of state-owned national research laboratories provides a world-class support.

India’s IT service industry was born in Mumbai in 1967 with the establishment of the Tata Group in partnership with Burroughs. The first software export zone Santacruz Electronics Export Processing Zone (SEEPZ) was set up here way back in 1973, the old avatar of the modern day IT Park. More than 80 percent of the country’s software exports happened out of SEEPZ, Mumbai in 80s.

Today Bangalore is known as the Silicon Valley of India and contributes 33% of Indian IT exports and it is the leading IT exporter [Canton (2012); Rai (2006)]. India’s second and third largest software companies are headquartered in Bangalore, as are many of the global SEI-CMM (Software Engineering Institute-Capability Maturity Model) level-5 companies. Mumbai too has its share of IT companies that are India’s first and largest like TCS, and well established like Patni, LnT Infotech, i-Flex, WNS, Shine, Naukri, Jobspert etc. are
headquartered in Mumbai. And these IT and dot com companies are ruling the roost of Mumbai’s relatively high octane industry of information technology.

Table 3.1: Big Four IT Companies in India

<table>
<thead>
<tr>
<th>Firm</th>
<th>Revenues</th>
<th>Employees</th>
<th>Fiscal Year</th>
<th>Headquarters</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCS</td>
<td>$10.17 billion</td>
<td>2,54,076</td>
<td>2012</td>
<td>Mumbai</td>
</tr>
<tr>
<td>Wipro</td>
<td>$7.30 billion</td>
<td>1,40,569</td>
<td>2012</td>
<td>Bangalore</td>
</tr>
<tr>
<td>Infosys</td>
<td>$7.00 billion</td>
<td>1,53,761</td>
<td>2012</td>
<td>Bangalore</td>
</tr>
<tr>
<td>HCL Technologies</td>
<td>$4.3 billion</td>
<td>85,335</td>
<td>2012</td>
<td>Noida</td>
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</tbody>
</table>

Table 3.1 shows top four IT companies in India. Major IT hubs in India are: Bangalore, Chennai, Mumbai, Delhi, the national capital region (comprising Delhi, Gurgaon and Noida), Pune, Kolkata, Thiruvanathapuram.

3.3 Indian IT Industry - An Overview

The Indian software industry is fast becoming tradition of the modern day information technology (IT) revolution, and it is considered as an example of excellence of a technology-intensive industry, establishing itself in a developing country. The Indian software industry, though successful, still faces major hurdles, as it is still small in terms of its global market share and producing low value-added products, while its own domestic market is only one-third of the size of its export market. Software and services exports (includes exports of IT services, BPO, engineering services and R & D and software products) reached US $47 billion in FY2009. The cross-border mergers and acquisitions involving Indian IT and IT-enabled companies increased by nearly 12 per cent between January 1 and December 15, 2008 to US $3.22 billion (in 98 deals) compared with US $2.88 billion (in 159 deals) in 2007. The average deal size in 2008 increased to US $32.86 million (as compared to US $18.15 million), according to Grant Thornton India. Moreover, as top outsourcing customers in the US and Europe seek to renew their computer infrastructure management contracts worth nearly US $30 billion, Indian tech firms, including HCL, Tata Consultancy Services (TCS), Wipro and Infosys are bidding against incumbent multinational rivals IBM and HP, for their share of the lucrative opportunity.
According to NASSCOM, if India maintains its current share of the global offshore IT-ITeS market, the IT-ITeS exports from India will exceed US $ 330 billion by 2019-20 (nearly 14 per cent of the projected worldwide spend). The ITeS sector is working towards reducing its dependence on the US market and is exploring new and emerging markets such as those in Australia and the Middle East. Realizing its potential, after IT parks and IT special economic zone (SEZs), the government of India has cleared a proposal for creating much larger Information Technology Investment Regions (ITIRs) to give a fillip to the country’s growing IT and ITeS sector. The profile of the Indian IT services went through a sea change in the last few years, partly as it moved up the value chain and partly because the industry responded to the market dynamics most positively than never before. Twenty years ago, most US companies would not even consider outsourcing their IT projects to vendors outside the US. Now, twenty years later, a vast majority of US companies highly use the professional services of Indian software engineers through large, medium or small companies or through individuals recruited directly. Today, the Indian software industry, which is considered as one of the leading engines of economic growth truly symbolizes India’s strength in the knowledge-based economy. Highly skilled human resources coupled with low wage structure and world class quality services, have transformed India into a global powerhouse in the IT and have gained a critical position in the Indian economy. In addition to this, the software industry has also created high value jobs, enhancing business efficiency and earning export revenues further pushing up the economy in the global scenario.

Key features distinguishing the IT industry are as follows:

1. **Human capital is the key asset**: Unlike manufacturing and some service industries, software does not require very large investment in equipment and/or real estate. The capacity of a software company to generate revenues is primarily determined by the quantity and quality of its technical staff.

2. **Complex setup and gestation period**: Unlike other businesses, in case of software companies the evolution path is more tedious and usually takes years before a company attains significant revenue levels.

3. **Rapid technological changes and market dynamics**: The target markets and their needs for various software based solutions may not change very rapidly, but the technology options keep changing at a fast pace.
4. **Significance of quality deliveries and customer trust:** Most businesses rely on computer based systems for managing their operations and any software related problems could have serious adverse effects. Hence, the degree of trust between the software company and its clients is a significant determinant of the success of software projects. With these given set of features, and the existing structure of India, the industry faces a host of challenges.

The research was carried out on IT companies in India and keeping in view the requirements of the present study IT Industry’s strengths, weaknesses, opportunities, and challenges were analyzed. *Table 3.2* presents a SWOT analysis of Indian IT Industry.

**Table 3.2:** Indian IT Industry - A SWOT Analysis

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
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<tr>
<td>• Highly skilled human resource</td>
<td>• Absence of practical knowledge</td>
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<tr>
<td>• Low wage structure</td>
<td>• Dearth of suitable candidates</td>
</tr>
<tr>
<td>• Quality of work</td>
<td>• Less research and development</td>
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<tr>
<td>• Following quality standards such as ISO 9000, SEI CMM etc.</td>
<td>• Employee salaries in IT sector are increasing tremendously.</td>
</tr>
<tr>
<td>• Cost competitiveness</td>
<td>• The low wages benefit will soon come to an end</td>
</tr>
<tr>
<td>• Initiatives taken by the Government (setting up Hi-Tech Parks and implementation of e-governance projects)</td>
<td>• Contribution of IT sector to India’s GDP is still rather small</td>
</tr>
<tr>
<td>• English-speaking professionals</td>
<td></td>
</tr>
<tr>
<td>• Quality telecommunications infrastructure</td>
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<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
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<tbody>
<tr>
<td>• High quality IT education market</td>
<td>• Lack of data security systems</td>
</tr>
<tr>
<td>• Increasing number of working age people</td>
<td>• IT development concentrated in a few cities only</td>
</tr>
<tr>
<td>• Upcoming international players in the market</td>
<td>• Countries like China and Philippines with qualified workforce making efforts to overcome the English language barrier</td>
</tr>
<tr>
<td>• India’s well developed software infrastructure</td>
<td></td>
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</tbody>
</table>
Though India boasts of highly skilled HR in IT and has high quality IT education market, there is enormous dearth of suitable IT candidates to competently perform developmental or operational tasks in IT industry.

IT companies operating in India have for long lamented the fact that there is a lack of employable candidates despite there being a large number of graduate and post-graduate colleges in the country. According to a McKinsey study, only 25% of our engineering graduates, in India, are suitable for working in multinational companies.

According to India Skills Report (2014), businesses around the world are reporting a skills shortage epidemic that is weighing on growth prospects. Almost four in ten (39 percent) businesses around the world are struggling to recruit the right people, with a lack of technical skills cited as the primary problem (64 percent). In fact for about 3/4th Indian businesses, one of the primary challenges faced is the shortage of technical skills. The other challenges are shortage of general employability skills such as teamwork, communications and others faced by 2.3rd businesses followed by lack of applicants and required work experience faced by over 61 percent businesses respectively [India Skills Report (2014)].

Brain-drain from premier engineering institutes like the IITs, primarily to the US, is a source of concern to the IT industry. Besides the brain drain these institutes are also being put in the dock for not producing enough engineers to satisfy the needs of the software industry. Brain-drain from these institutes and stagnant output of engineering colleges definitely contribute to the manpower shortage of the Indian IT industry.

3.3.1 Major Trends Impacting Skill Requirements for the IT Industry

IT industry is a wealth and job creating industry, which has in just a few years, grown to US $1 trillion, employing millions of professionals worldwide. The Indian software industry has burgeoned, showing a nearly 50% compounded annual growth rate over the recent years.

Being one of the top contributors in the economic growth of the country, the Indian IT industry requires a skilled and competent workforce as per industry needs. Various factors could be taken into consideration that would impact the skill requirements for the Indian IT industry. Some of them are mentioned below:
1. The continuous demand of skilled workforce: Since the Indian IT industry would continue to take potential growth over the next years, therefore the demand for skilled IT, Engineering and Science graduates is expected to mount in rapid manner.

2. IT solutions targeting to multiple industries: In last few years the BFSI (Banking, Financial, Services and Insurance) sector has maintained the dominant position and other industries such as retail, healthcare, education, telecom, supply chain etc. are going to be prominent industries for which, customized IT solutions are available across the industry. This will result in more requirement of the skilled workforce.

3. Global market opportunities: In recent years, the Indian IT industry has seen prominent growth across the globe and the share of business is increased from other part of the world such as Europe, Latin America, Africa, UAE, Japan, etc. This growth would open the door for new opportunities and to fulfill the distinct business requirements, industry would require skilled workforce.

4. Projected industry size: According to the estimation, the Indian IT industry is expected to record US $ 220 billion from exports and US $ 60 billion from domestic front by FY 2022 growing at a CAGR (Compound Annual Growth Rate) of 12.8%. There are various reasons such as increasing public sector spends, sustainable GDP growth, implementation of IT solutions in different industries, and expansion of IT industry to tier-2 and tier-3 cities would be considered the driving force of the domestic market.

5. Projected human resource requirements: The emergence of the Indian IT sector has brought about sea changes in the Indian job market. The industry continues to be a net employment generator - expected to add 230,000 jobs in FY2012, thus providing direct employment to about 2.8 million, and indirectly employing 8.9 million people [NASSCOM (2012)]. This growth is expected to increase to more than 14 million (direct and indirect) by 2015 and to around 30 million by 2030. The majority of employment is expected in the ITeS export sector, IT and software export followed by the domestic market. As per the studies conducted, and keeping the growth of Indian IT industry into consideration, it is estimated that the industry would employ around 7.5 million of manpower by FY 2022 and around 2.3 million employees in the IT and ITeS industry by FY 2015.
6. Expected changes in the educational profile of the workforce: In the Indian IT industry, the large pool of employed workforce is currently software engineers and MCA and their share is about 80%. It is estimated that the proportion of science and IT graduates who are engaged in software development would see a significant increase from about 10% currently to 15%.

3.3.2 HR Challenges in the Indian IT Industry

Being a knowledge-based industry, a high intellectual capital lends a competitive advantage to a firm. Intellectual capital comprises of human capital and intellectual assets, the latter being any created bit of knowledge or expertise.

The unique characteristics of IT industry pose many HR challenges for this industry. With a global explosion in market-opportunities in the IT sector, the shortage of manpower both in numbers and skills is a prime challenge for HR professionals. The related issues are varied indeed: recruitment of world-class workforce and their retention, compensation and career planning, technological obsolescence and employee turnover. This section presents some of the major HR challenges posed by the IT sector.

1. Recruitment: The Indian software industry suffers from a shortage of experienced personnel for key positions such as systems analysts, project managers and many more, and attracting them is a key challenge. Software companies are striving to understand which organizational, job, and reward factors contribute to attracting the best talent. The HR professionals handling the recruitment function of the organization are constantly facing new challenges like putting in place systems that assembles a talent pool with the right blend of technical and person-bound skills that fit the specified job. Therefore, in a pressure to recruit a large number of people that the organization requires, the HR department may land up making ‘false promises’ that lead later into employee dissatisfaction. Problems often result from mismatched expectations created at this early point in an individual’s relationship with the company. They can induct ‘right’ people in the company whose career aspirations are in tune with the company’s work and reward systems.

2. Workforce retention and motivation: Retention and motivation of personnel are major HR concerns today. It has been 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. Attrition has always been a sensitive topic for IT firms. Despite offering high salaries across all business segments, the industry has been plagued with attrition across the board, particularly in the past few years. In fact, this has brought about a reality check among a number of Indian companies with the discovery that it is increasingly harder for them to hire and retain the employees they need, to meet the booming demand in business.

Organizations, the world over have now acknowledged the fact that HR is their most strategic and critical resource. And no other industry has felt the heat on this count more than IT and ITeS industry, which are almost fully comprised of knowledge workers. Apart from causing the company a monetary loss and breaks in their day-to-day operations, attrition contributes to knowledge transfer, which is a loss that is horrific and adversely affects business. In the war for talent, the company suffers and requires focused strategy to keep workers on the job.

High attrition will push the operation cost to high levels, productivity will take a beating and the company will lose its competitiveness in the market. The major causes of attrition identified by some IT companies were again the desire for higher education, marriage/transfer of spouse, salary, or when expectation of going on-site abroad is not met [Harvard Management Update (1999)]. IT Industry is facing challenges relating to attrition, employee loyalty, confidentiality, etc. The present day’s HR managers are performing multiple functions than before [Dasari (2008)].

In IT industry, the attrition is primarily in a lateral direction as employees seek better prospects in other companies. In the case of call centers, however, employees frequently leave in order to return to earlier plans for higher education or professional training.

A young Indian IT professional in India is earning more than double the average salary than any other profession. They are also likely to see their salaries jump more than any other professional in the country right now – with salaries rising about 20% a year on average. In last few years, people have left their jobs in other engineering streams and joined the software bandwagon.

The approach of investing in one’s career by growth in a stimulating environment is not generally encouraged by HR professionals in India. Funding talent programs in today’s economy has been challenging for many organizations in India, but as a professional firm,
they offer their clients one product: the talent and expertise of the employees. Therefore talent development should be viewed as a key element of the value proposition for clients, hence, unwavering commitment to invest in this area regardless of economic climate.

HR arm of any technology company plays an important role in retaining talent. In a constantly changing world— and a business environment marked by “volatility, uncertainty, complexity and ambiguity”— technology will continue to play a growing role in HR’s success.

There are many benefits of HR-related technology such as Human Resource Management Systems (HRMS) and Talent Management solutions. Traditionally, these systems were thought of as cost reduction tools, saving time and automating routine administration to raise productivity within the HR department itself. An HRMS certainly does deliver that result, but when viewed as part of an investment in a competitive workforce, it can do much more.

3. **Coping with the demand-supply gap**: Shortage of IT professionals are global in nature and not peculiar to the Indian software industry alone. Consequently, recruitment managers are exploring new sources of IT manpower from non-IT professional sectors, as well fresh, trainable science graduates. In the last few years, it has been seen that, the significant gap between demand (driven by IT industry) and supply (driven by academic institutions) is getting increased and further to this, not all graduates are employable as per industry requirement. This huge employability gap has become one of the biggest challenges in Indian IT industry. According to a recent study, only 25% of IT graduates are considered employable as per industry standards, and only 17.85% are eligible for the job in IT service sector with 6 months training.

4. **Compensation and reward**: 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 the incentive compensation a significant feature, with the result that software 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. Skills, competencies, and commitment supersede loyalty, hard work and length of service. This pressurizes HR teams to devise optimized compensation packages, although compensation is not the motivator in this
industry.

5. **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.

6. **Up-gradation of skills through retraining**: New behavioral approaches are required in creating better competencies and sustaining those competencies. There is constant need to upgrade the skills of candidates through training and re-training. Rapid and unpredictable technological changes and the increased emphasis on quality of services are compelling software businesses to recruit adaptable and competent employees. Software 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 to acquire 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.

### 3.3.3 Major Concern Areas

The study used an extensive review of literature to study the opportunities and HR challenges in IT sector in India. The primary research objective was to provide useful insights into the area of HR opportunities and challenges keeping in view the present trend and practices.

The current challenge for IT industry is to match its supply and demand position. Retaining the experienced persons in the organizations depends upon a number of factors in addition to -pay and perquisites. Changing demographic patterns mean that more people are approaching
retirement than entering the workforce. Younger generations have different needs and are re-negotiating the psychological contracts with their employer. They are quick to move if their organization is not meeting their expectations. Retaining and developing key people in the organization will be a critical success factor in the next five years [Blass (2007)]. Sitel India rewards their star performers and creates a talent pool that would help in upgrading employee skills and curbing attrition.

Considering the current scenario, how well the organization is able to manage this asset – human resource is the biggest challenge that the IT industry is facing. It is not capital or finance or marketing management that gives the competitive edge, but rather the human resources that get along with them, the intellectual capacities that determine the success of the organization. Now, the question is how to put in place the processes that are in tune with the IT revolution? How to strategize and compete with globalization? Perhaps this is the prime challenge for HR in the IT industry as the best practices today may not be the same after a particular period, so it is imperative that it constantly improves its own business aligned HR processes to be at a leading edge.

India cannot supply enough talent for further IT growth, if industry and academia fail to address training issues. Top-tier companies do not face much of a problem as they are after the top percentage of the talent pool. While there was no deterioration in the quality of education in leading universities and colleges, only the newly sprung self-financed engineering colleges contributed to non-employability or under-employability, there is no magic formula to manage talent. Firms must adopt their talent management strategies quickly, so that, they can continue to attract the best people, nurture them, rather than lose them to competitors. The departure of skilled staff is a loss of knowledge to any industry in general. However, its impact is more on industries like the IT and ITeS. The annual attrition rate in these industries is considered to be high and could range between 10 and 20 percent. This may be due to the relative stress of the consulting workplace, or other reasons [Philips (1990)].

Employee retention is another big challenge and involves how to create and maintain daily working environments in which the talented ones can productively pursue the joy of work and financial benefits from their individual or collective contributions. Organizations should focus on issues such as: identifying their star performance, compensating them for improving their individual as well as organizational productivity by way of rewards and recognition. This can better be done by conducting meaningful performance appraisal, designing jobs to nurture and
motivate talent across the organizational echelon. Treat talent as - internal customers, compensating talents as preferred suppliers, offering the right compensation, including proper reward and recognition, conducting meaningful performance appraisal, designing jobs to appeal to the talented people [Cappelli (2000)].

The talent management system can be an effective tool for creating a symbiotic relationship between talent and the organization to dramatically accelerate performance improvements. It is explained as to how to attract, retain, manage and identify talents in the organization [Chowdhury (2004)]. It is a proven fact that the productivity of employees depends on their work surroundings and the morale that they have. Success in the modern economy requires the talent mind-set. The organizations that are most successful in their goals are the ones where the system is also equivalent to talent.

3.4 Need of Competency Mapping in Indian IT Industry

The factors that impelled us to choose IT industry for our study are as follows:

1. The most significant challenge for HR professionals is high attrition rate which has always been a sensitive issue for Indian IT firms.

2. The contribution of the IT sector in terms of India’s GDP, generation of employment, and software exports is quite significant.

3. Of the meager studies on IT companies, the area of competency-based human resource management remains largely untapped and specific areas of competency mapping and development do have scope for much improvement.

These assertions propelled the need to investigate IT companies operating in the country and what solutions can be proposed towards the challenges that HR professionals in IT industry are confronted with.

Due to various challenges faced by HR professionals in IT industry in India, it seems necessary to investigate if a difference exists in job competency expectations held for their HR professionals between the required competency levels and the existing level of working. Research indicates that the closer the employer job competency expectations, i.e., the required competence level to the existing competence level of the employees, brings the better chance
for productivity improvement, multi skill development and the higher employees will rate overall job satisfaction.

Several IT organizations in India are interested in knowing the present competence level of their employees so that adequate measures can be taken to improve their performance. Thus, research attention should more fruitfully focus on the development and validation of a competency mapping model for HR professionals.

In a world that is dominated by the service sector in general and knowledge based organizations in particular, the importance of human capital cannot be overlooked. To a large extent, human capital, defined as the skill, dexterity and knowledge of the population, has become the critical input in determining economic growth today. In a knowledge based organization, the driving force is on value creation of human capital. The human resources are educated group and the individual career progression is of paramount importance. Competent HR professionals are required to achieve results efficiently and effectively. Organizations depend on competency of HR to generate a return on investment (ROI) on the use of physical and technological resources. Hence, IT organizations, being knowledge based organizations, need to systematically pursue competency mapping and development.

From the aforementioned comments, it seems that there is a requirement for the competency mapping and competency development of HR professionals in order to meet the challenges facing them.

3.5 Conclusions

The Indian IT industry has been using PCMM as one of the strong tool and competency based pay is also accepted as a norm in this industry acting as pay differentiator in the best HR practices organizations. However, competency mapping and development still remains unexplored process in most IT organizations despite the growing level of awareness, as level-3 of PCMM is focused on the competency framework in an organization. Only a few IT organizations which are at the higher end of the HR value chain are known to be doing some work in this area. Unless managements and HR head have holistic expectations from their HR departments, the competency movement is unlikely to succeed as it requires a lot of time, dedication and money. The Indian IT industry has been facing these challenges, which has resulted in its inability to attract and retain the right caliber of employees to provide with a
competitive advantage. All these factors have over the years had an adverse effect on performance and commitment further affecting delivery quality, time and cost.

The progressive growth of information technology and globalization has played a vital role in restructuring the business world. It has reformed the approach towards business, altered employee expectations and employee attitude at work, and has further changed the employer-employee relationship. Considering today’s diverse workforce and a challenging environment, the onus of running a successful and profitable enterprise primarily lies in the hands of the management. Therefore, it is critical that management evaluate the competency base and the performance of its workforce. The main debate in HRM is nowadays concerned with the relationship between HR competencies and the individual performance. This study explores the above relationship in the context of IT industry in India. Recognizing the importance of individual competency framework for HR professionals, their competence levels, training needs and performance will help the companies improve its competitiveness. In addition, many researchers had emphasized the importance of an integrative perspective study. Therefore, this study integrates competencies, performance and training needs to investigate the competency framework in the context of IT industry in India.

The study also extensively covered the prevalent HRM practices in the areas of competency acquisition, compensation, training and development, and performance management in the IT sector and has incorporated a survey in an attempt to identify key shortfall areas which can be focused on to improve the competence levels of HR professionals. This research sought to accomplish these issues to assist IT companies develop an appropriate framework to enhance their HRM practices. The remarkable contribution of IT sector to India’s economy and its success over the past few years has been scripted by the superior, low cost expert services provided by its endowed workforce. In this industry lead by knowledge that vests in “people”, effectively managing them through favorable HR initiatives becomes a crucial ingredient for its success.

Being among the first few to venture into the rather scantily researched domain of competency-based human resource management in IT companies, the current study endeavors to provide a view of the HR territory in the context of Indian IT companies. The aforementioned issues prompt the need for this research which aims at providing a tool, a procedural framework, to enhance HRM in Indian IT companies via the development of an appropriate competency framework for HR professionals in Indian IT industry.