“Our core corporate assets walk out every evening. It is our duty to make sure that these assets return the next morning, mentally and physically enthusiastic and energetic.”

- N. R. Narayana Murthy, Chairman and Chief Mentor, Infosys Technologies

Opening statement of the Infosys Annual Report, 2007-08

1.1 INTRODUCTION TO HUMAN RESOURCE ACCOUNTING

1.1.1 HUMAN RESOURCE ACCOUNTING: THE SCENARIO

In the knowledge driven economies of 21st century, where knowledge and attitude of employees assume greater significance than the physical assets and the accomplishment of these organizations is contingent on the quality of their Human Resource- its knowledge, skills, competence, motivation and accepting the organizational culture; it is imperative that the humans be recognized as an integral part of total worth of an organization.

A British accountant has said that human resources are the "pivotal variables without which the inanimate assets are worthless" (Rogers R., 1974, p-40). Thus, to grow or even to survive, an organization must manage its people properly. Human elements are becoming more important input for the success of any corporate enterprise (Sirisetti & Mallesu, 2014, p-48). Human resources, along with the financial and material resources, contribute to the production of goods and services in an organization. Physical and monetary resources by themselves cannot improve efficiency or contribute to an increased rate of return on investment. It is through the combined and concerted efforts of people that monetary and material resources are harnessed to achieve organizational goals. Human resources, therefore, are the most important assets of the organization. Unlike physical assets, human resources do not depreciate over a period of time. In fact, with additional training and experience gained over a period of time, they tend to do well in the job. This fact is ignored when a firm’s balance sheet is prepared. According to W. Pyle (1970, p-70) a difficulty with conventional accounting arises in the budgeting process. Expenditures for physical resources are included in the firm’s capital budget and
need not be formally justified against revenue in the current year. However, expenditures for building long term employee capabilities and favorable relationships with external parties are not included in the conventional capital budget. This practice makes it more difficult for the manager to secure funds for such purposes. The expenses incurred in Recruitment, Training and Development, Performance Management and other HR activities are charged against the revenues of particular accounting period. In fact, as pointed out by Rensis Likert, the expenses on human resource are fixed in nature and do not offer any immediate return. The returns accrue to the form over the long period, i.e. as long as employee remains with the firm. Hence such costs should be capitalised and amortised over the entire period so that the balance sheet gives a ‘true and fair’ view of the state of affairs of a business. Since human resources are capable of enlargement over a period of time, there should be innovative ways of showing how the organization make investment in its people and how the value of people changes over a period of time. Human Resource Accounting is one such method which endeavours to measure both the cost and the value of people to an organization.

### 1.1.2 HUMAN RESOURCE ACCOUNTING: THE CONCEPT

*"What gets measured gets managed"*

- Nishchae Suri, managing director, Mercer
  (Sabharwal, S. and Sengupta, D. 2011)

Human Resource Accounting is the upcoming term in the field of Management. It is a process of measuring the monetary value of each employee of the organisation. This is the only method which can give actual value specifically in terms of money without any human intervention or unfairness. It is just like assessing the value of physical assets. Besides, the value of human resources estimated through HRA becomes an important element of managerial decision making.

HRA is similar in principle to the financial accounting. Just as financial accounting reflects the costs of assets such as building and machinery, HRA shows human resources as capital not as expenses. HRA will force HR managers to take decisions on hard numerical data rather than experience or expert opinions. This is a branch wherein Human Resource Management, Financial Management, Accounting, Statistics and Strategic
Management collaborate for betterment of the organization. Thus, HRA shows the investments, the organizations make in its people and how their values change over a period of time.

Human Resource Accounting (HRA) is basically an information system that tells management what changes are occurring over time to the human resources of the business. If such information is not taken into consideration, then the management runs the risk of taking decisions that may improve profits in the short run but may also have severe repercussions in future.

The basic premises underlying the theory of Human Resource Accounting are:

- a) People are valuable resource of every organization;
- b) The usefulness of employees as an organizational resource is determined by the way in which it is managed;
- c) Information about the investments and value of human resources is useful for decision making in the organization.

1.1.3 DEFINING THE CONCEPT OF HUMAN RESOURCE ACCOUNTING

The early accounting literature defined *human resource valuation* as the process of identifying, measuring, and communicating information about human resources to assist management decision-making within an organization. (Edmonds and Rogow, 1986, p.42) Since the output of human resource valuation could be seen of more use then initially thought of. The utility was not restricted to intrinsic decisions. Many external stakeholders of the organization could find the use of HRA. Hence, the definition was modified to include them.

The American Accounting Society Committee on Human Resource Accounting (1973) defines it as follows: “Human Resource Accounting is the process of identifying and measuring data about human resources and communicating this information to interested parties.” In simple terms, it is an extension of the accounting principles of matching costs and revenues and of organizing data to communicate relevant information in financial terms.
Mr. Woodruff Jr. Vice President of R. G. Batty Corporation defines it as follows: “Human Resource Accounting is an attempt to identify and report investments made in human resources of an organization that are presently not accounted for in conventional accounting practice. Basically it is an information system that tells the management what changes over time are occurring to the human resources of the business.”

Moreover, Stephen Knauf (1983) has defined HRA as "the measurement and quantification of human organizational inputs such as recruiting, training, experience and commitment."

Davidson et. al. defines human resource accounting as “a term used to describe a variety of proposals that seek to report and emphasize the importance of human resources – knowledgeable, trained and loyal employees- in a company earning process and total assets”.

Flamholtz has defined HRA as “accounting for people as an organizational resource. It involves measuring the costs incurred by organisation to recruit, select, hire, train and develop human assets. It also involves measuring the economic value of people to the organization”.

Brummet explains HRA as, “the process of developing financial assessments for people within organization and society and the monitoring of these assessments through time. It deals with investments in people and with economic results of those investments” (Saha, 1997, p.10)

P.K. Gupta (cited in Narayan, 2010, p.240) says “Human Resource Accounting (HRA) is basically an information system that tells management what changes are occurring over time to the human resources of the business. HRA also involves accounting for investment in people and their replacement costs, and also the economic value of people in an organization”
Thus according to the above mentioned definitions, we can say that, human resource accounting is concerned with:

I. Identification of data about human resources of an organization.
II. Measurement of the data in terms of cost and value.
III. Communicating the results to the all internal and external decision makers.

Human resource accounting will definitely prove a best tool for decision makers as they will be exposed to a new kind of human resources related information which was never made available to them. The exact role of HRA information is yet to be understood as far as HR managers are concerned. This study strives for achieving the said objective.

1.1.4 OBJECTIVES OF HUMAN RESOURCE ACCOUNTING

1. To increase managerial awareness of the values of human resources,
2. To facilitate the effective and efficient management of human resources (Porwal, 1993),
3. To develop management principles by classifying the financial consequences of various practices (Likert 1971) and assist in the development of effective human resource management practices (Sirisetti & Mallesu, 2014, p-49)
4. To by classifying the financial sequences of these practices. It provides the sound and effective basis of human asset control, that is, whether the assets appreciated, depleted or conserved. (Sharma and Shukla, 2014, p-131)
5. It furnishes cost/value information for making management decisions about acquiring, allocating, developing and maintaining human resources in order to attain cost - effectiveness. (Sharma and Shukla, 2014, p-131)

1.1.5 IMPORTANCE OF HUMAN RESOURCE ACCOUNTING

Human Resource Accounting provides useful information to the management, financial analysts and employees as stated below:

1. Human Resource Accounting helps the management in the Employment and better utilization of human resources and helps the organisation to place the right man in the right post depending on his skills and abilities. (Akrani G.,2014)
2. It assists in deciding the transfers, promotion, training and retrenchment of employees.
3. It provides a foundation for planning of physical assets vis-à-vis human resources.
4. It helps to ascertaining the causes of high labour turnover and taking preventive measures.

5. It helps in tracing the real cause for low ROI.

6. It helps in understanding and assessing the inner strength of an organization and helps the management to steer the company well through most adverse and unfavourable circumstances.

7. It helps employees in improving their performance and bargaining power. It makes each of them to understand his contribution towards the betterment an organisation vis-à-vis the expenditure incurred by the firm on him.

8. HRA shows that the organisation cares about the employees and their welfare. This increases their morale and it motivates them to work hard and achieve the objectives of the organisation. (Akrani, 2014)

9. Only reputed organisations conduct HRA. So, competent and capable people want to join these organisations. Therefore, it attracts the best employees and managers to the organisation. (Akrani, 2014)

10. HRA helps the organisation to design (make) a suitable training and development program for its employees and managers. (Akrani, 2014)

Research during the early stages of development of HRA, was conducted at the University of Michigan by a research team including the late organizational psychologist Rensis Likert, founder of the University Of Michigan Institute Of Social Research and well known for his work on management styles and management theory (Likert, 1961), faculty member R. Lee Brummet, and then Ph.D. candidates William C. Pyle and Eric Flamholtz. The group worked on a series of research projects designed to develop concepts and methods of accounting for human resources. One outcome of this research (Brummet, Flamholtz & Pyle, 1968a) was a paper representing one of the earliest studies dealing with human resource measurement-- and the one in which the term "Human Resource Accounting" was used for the first time.
1.2 HUMAN RESOURCE ACCOUNTING MODELS

Researchers like Flamholtz (1999 and 1985), Lev and Schwartz (1974), Brummet, Likert (1985) and others tried to device a system to measure HRA value of an employee. As an output of their contribution are the different methods replacement cost model, stochastic rewards valuation model, historical cost model, discounted future wage method, acquisition cost model

There are two approaches to HRA:
Cost approach (HRCA) and Monetary Value based approach (HRVA)

1.2.1 COST MODELS

Cost is a sacrifice incurred to obtain some anticipated benefit or service. The cost approach involves methods based on the costs incurred by the company on an employee.

i) Historical cost model
Historical cost is based on actual cost incurred on human resources. The cost is of two types – acquisition cost and learning cost. Acquisition cost is the expense incurred on recruitment, selection, and placement. Learning cost involves expenses incurred on training and development. This method is very simple in its application but it does not reflect the true value of human assets. For example, an experienced employee may not require much training and, therefore, his value may appear to be low though his real value is much more than as suggested by historical cost method (Sirisetti & Mallesu, 2014, p-50)

ii) Acquisition cost model
This model is developed by Brummet, Flamholtz and Pyle. It measures the organization’s investment in employees using the five parameters: Recruiting, Acquisition; Formal training and familiarization; Informal training and Informal familiarization; Experience; and development.
It suggests instead of charging the costs to profit & loss accounting it should be capitalized in balance sheet. In case the personnel leave the company before the anticipated period of service, then the unamortised portion of costs remaining in the
Chapter 1: HUMAN RESOURCE ACCOUNTING

The company’s books is written off against the profit and loss account in that year. If the period of service exceeds the anticipated time, then amortisation of costs is rescheduled. This method is the only method of human resource accounting which is based on sound accounting principles and policies.

iii) Replacement Cost approach

This approach measures the cost of replacing an employee. According to Likert (1985) replacement cost include recruitment, selection, compensation, and training cost. The human resources of a company are to be valued on the assumption as to what it will cost the concern if existing human resources are required to be replaced with other persons of equivalent experience and talent.

Such costs have two dimensions-

a) **Positional replacement costs** or the costs incurred to replace the services rendered by an employee only to a particular position; and

b) **Personal replacement cost** or the cost incurred to replace all the services expected to be rendered by the employee at the various positions that he might have occupied during his work life in the organisation.

iv) Opportunity Cost or Competitive Bidding Model:

It is the calculation of what would have been the returns if the money spent on HR was spent on something else, is also used. Hekimian and Jones (1967) proposed that where an organization had several divisions seeking the same employee, the employee should be allocated to the highest bidder and the bid price incorporated into that division’s investment base. There are no criteria on which the bids are based. Rather, the managers rely only on their judgments.
1.2.2 MONETARY VALUE BASED APPROACH
The economic value approach includes methods based on the monetary value of the human resources and their contribution to the company’s gains.

i) Lev and Schwartz Model:
Lev and Schwartz (1971) proposed an economic valuation of employees based on the present value of future earnings, adjusted for the probability of employees’ separation (death and retirement) from the organization. This method helps in determining what an employee’s future contribution is worth today.

According to this model, the value of human capital embodied in a person who is ‘y’ years old, is the present value of his/her future earnings from employment and can be calculated by using the following formula:

\[ E(V_y) = \sum_{T=y}^{T=Y} \sum_{t=1}^{T+1} P(y, t) \frac{I(I)/(I+R)}{T-y} \]

where \( E(V_y) \) = expected value of a ‘y’ year old person’s human capital

- \( T \) = the person’s retirement age
- \( P_y(t) \) = probability of the person leaving the organization
- \( I(t) \) = expected earnings of the person in period I
- \( R \) = discount rate

In India, this model is widely followed. The companies like BHEL, MMTC, Infosys, ONGC, NTPC follow the same method for calculating HRA value of the employees of their organisation.

Merits:
- It considers the value of employee rather than cost incurred.
- Value of each employee can be calculated individually.

Limitations:
- The training expenses incurred are not considered.
- Factors responsible for higher earning potentiality of each individual employees like seniority, bargaining capacity, skill, experience etc. which may cause differential salary structure are ignore.
The measure is an objective one because it uses widely based statistics such as census income return and mortality tables.

The measure assigns more weight to averages than to the value of any specific group or individual.

This method has no indication about the accounting treatment of human resource.

The Model ignores the possibility and probability that individual may leave an organization for reason other than death or retirement. The model's expected value of human capital is actually a measure of expected ‘conditional value’ of a person’s human capital - The implicit condition is that the person will remain in organization until death or retirement. This assumption is not practical.

ii) Flamholtz’s model of determinants of Individual Value to Formal Organizations:
This model has been suggested by Flamholtz (1971). This is an improvement on ‘present value of future earnings model’ since it takes into consideration the possibility or probability or an employee’s movement from one role to another in his career and also of his leaving the firm earlier, that his death or retirement.

According to Flamholtz, the value of an individual is the present worth of the services that he is likely to render to the organization in future. As an individual moves from one position to another, at the same level or at different levels, the profile of the services provided by him is likely to change. The present cumulative value of all the possible services that may be rendered by him during his/her association with the organization is the value of the individual.

iii) Flamholtz’s Stochastic Rewards Valuation Model:
Stochastic process means the progress of an individual through organizational roles during his service life. This model directly measures an individual's conditional value and expected realizable value. This model assumes that an individual generates value as he takes different roles in the organisation. An individual’s expected conditional value and expected realizable value will be equal, if he is certain to remain in the organisation in the predetermined roles throughout his expected service life. (Badiyani B., 2012, p-157)
Flamholtz has given the variables affecting an individual’s expected value (IERV): individual conditional values and his likelihood of remaining in the organization. The former is function of the individual’s abilities and activation level, while the later is a function of such variables as job satisfaction, commitment, motivation and other factors.

Limitations
The model suffers from nearly all the drawbacks from which the present value of future earnings models suffers. Moreover, it is difficult to obtain reliable data for determining the value derived by an organization during the period a person occupies a particular position. The model also ignores the fact that individuals operating in a group may have a higher value for the organization as compared to individuals working independently.

1.3 HUMAN RESOURCE ACCOUNTING IN INDIA

1.3.1 HRA THE SAD STORY
Human Resources Accounting was introduced way back in the 1960s, but not many companies in India have adopted it in their organization. There is little agreement concerning the procedure of accounting for human assets. There are proponents and critics of the various approaches like cost and value approaches. This factor has become responsible for the slow development of the concept of human resource accounting. Even today when a good deal of research has been done in this field, it is very unfortunate that there is not any generally accepted method either for valuation of human resource or for their recording in the books of accounts.

Considering the statutory requirements, the Companies Act, 1956 does not demand furnishing of HRA related information in the financial statements of the companies. The Institute of Chartered Accountants of India too, has not been able to bring any definitive standard or measurement in the reporting of human resources costs.

Moreover, like other accounting exercise, the HRA too depends heavily on the availability of relevant and accurate information. This information is more in indirect form; hence implementation of HRA is a big problem.
The challenges are more than thought of. A detailed view of it is discussed in Literature review Chapter.

Limitations of Human Resource Accounting:

1. There are no clear-cut and specific guidelines for calculating cost and value of human resources of an organization.
2. The period of existence of human resource is uncertain and hence valuing them under uncertainty in future appears unrealistic.
3. There is an apprehension that HRA may dehumanize and manipulate employees.
4. The empirical evidence is yet to be found to support the hypothesis that HRA as a tool of the management facilitates better and effective management of human resources.
5. The pattern of executing employee value in the financial statement is the question yet to be classified on which there is no consensus in the accounting profession.
6. As human resources are not capable of being owned, retained and utilized, there is problem for the management to treat them as assets in the strict sense.
7. There is constant fear of resistance from the trade unions as placing a value on employees would make them claim rewards and compensations based on such valuation.
8. Amortization rate of human resources is still a question. Is the rate of amortization to be decreasing, constant or increasing?
9. Tax laws do not recognize human beings as assets.
10. There is no universally accepted method of human asset valuation.
11. In India, human resource accounting is still at the developmental stage. Much additional research is necessary for its effective application.
12. The life of a human being is uncertain. So its value is also uncertain. (Akrani G., 2011)

Not many evidences are available that portrays the application of Human Resource Accounting. Hence, the growth and acceptance of HRA is quite less. The implementation of HRA is voluntary and no official body has made it mandatory that HRA should be put into practice.
Researchers have conducted several study and surveys on HRA and came out with meaningful conclusions but many of those are under criticism.

1.3.2 REVIVAL OF HUMAN RESOURCE ACCOUNTING

Even though the situation prevails, yet, a growing trend towards the measurement and reporting of human resources particularly in public sector is noticeable during the past few years. BHEL, Cement Corporation of India, ONGC, Engineers India Ltd, National Thermal Corporation, Minerals and Metals Trading Corporation, Madras Refineries, Oil India Ltd, Associated Cement Companies, SPIC, Metallurgical and Engineering Consultants India Limited, Cochin Refineries Ltd etc are some of the organizations, which have started disclosing some valuable information regarding human resources in their financial statements (Srinivasan, 2009). Many of these enterprises spare a separate section in their annual reports for a detailed account of their human resources. Although HRA faced tremendous criticism from researchers and finance experts, the term is now in its revival phase. The reasons and indicators for the same are

1.3.2.1 Modification in Accounting Standards implementation

Bullan M.L. and Eyler K.A. (2010, p-4) stated that in recent years, the financial reporting standards used in the United States referred to as Generally Accepted Accounting Principles (GAAP), have been moving toward adoption of more complex measurement methods compared with the traditional historical cost approach to asset measurement. The strong growth of International Financial Reporting Standards (IFRS) is another indication that the environment for financial accounting reporting is one that potentially encourages the consideration of alternative measurement and reporting standards. Accountants and others in the financial reporting environment have become accustomed to using more complex measurement approaches to the financial statement reported amounts. This would lend support to the possibility that future financial reports may include nontraditional measurements such as the value of human resources using HRA methods. A traditional framework of Accounting is in the process to include a much broader set of measurement than was possible in the past. Current amendments in IFRS standards have declared the requirement of implementation of HRA in all the Indian companies by the end of 2015.
1.3.2.2 Increased Importance of HRM in organization:

What distinguishes a successful company from unsuccessful one is the quality of manpower. Organizations have increasingly recognized the potential for their employees as source of competitive advantage. It has always been argued by the managers that the employees of an organization constitute a valuable resource. The success of an organization depends upon the effective and meaningful utilization of its 3 Ms viz. men, materials and money. The importance of human resource has been well recognized now by the organisations.

The credit for recognizing human resources as an ‘asset’ goes to William Paton (1920) when he stated that “in a business well organized and loyal personnel may be more important asset than a stock of merchandise.”

In order to ensure growth and development of any organisation, the efficiency of people must be augmented in the right perspective. Without human resources, the other resources cannot be operationally effective. The efficient and effective utilization of inanimate resources depends largely on the excellence, caliber, skills, perception, and character of the human resources working on it.

Although employees are always both an asset and a cost for their organisation, most organizations in India and abroad, have proven to be capable at measuring the cost side of the human capital equation than the asset side. This imbalances result in inefficiencies in human capital management. There is genuine need for reliable and complete management of human resources.

Sengupta (2013) questioned, what if organizations in India could quantify the workforce with objective, verifiable and value-based conservative valuation principles using certain set of tools as mentioned above to better manage the workforce using data instead of gut instinct?

Human resources have been enthroned as the canopy of all the “assets” that a nation possesses and owns at a given point of time. In order to ensure that these assets are preserved, there is a need of valuing them in correct manner.
1.3.2.3 Growth of Service Industry:

Another argument for Human Resource Accounting stems from the transition of our economy from a manufacturing orientation to a service orientation. As human beings become the key element in service organizations, failure to measure their value and account for their cost will lessen organizational effectiveness.

The past few decades have witnessed a global transition from manufacturing to service based economies, India not being an exception to it. The fundamental difference between the two industries lies in the very nature of their assets. Unlike any other industry, human resource is the greatest asset of the service sector. Rise in service sector and increase in the requirement of intellectual employees, there has been a need for quantifying and valuation of these resources. Emergence of Knowledge Era, states a new beginning for the intelligence based valuation of an individual. Increase in service sector lead to the appreciation of human resources as one of the several forms of wealth such as money, securities and physical capital.

In software companies and other service industries, the financial capital comes from the ability of the firm to transition the human capital into a structural capital that will be shipped out and consequently transition into financial capital. One of the major reason that IT companies initiated public disclosure of HRA information as to project the quality of its skilled workforce to various stakeholders like investors, clients etc. In an industry where attrition rates are still very high, HR valuation helps the companies know the value they would forego when they are about to lose a person. Most importantly, the management of these companies believed that their employees would provide them the greatest source of competitive advantage in the new generation ‘knowledge economy’.

Hence, in the year 1995-96, Infosys took cognizance of this fact and became the first IT Company in India to disclose the value of its human resources by using HRA. "A company's annual report shows the financial parameters. It only looks at the tangible assets, but we also wanted to inform the shareholders about intangible assets. Our employees are our value," S Gopalakrishnan, the CEO and managing director of Infosys. (Sabharwal and Sengupta, 2011). Narayan (2010, p.242) said the company used the Lev & Schwartz model and valued its human resource assets at Rs 1.86 billion. Infosys had
always given utmost importance to the role of employees in contributing to the company’s success. Analysts felt that human resource accounting was a step further in Infosys’ focus on its employees. Narayana Murthy (CMD) said: “Comparing this figure over the years will tell us whether the value of our human resources is appreciating or not. For a knowledge intensive company like ours, that is vital information”. Infosys Technologies valued its human resources which were Rs. 184 crores, much more than the value of its physical assets of Rs. 84 crores. (Sirisetti and Mallesu, 2014, p-48). Few years later, Satyam Computers followed suit by publishing its HRA information in its Annual report as “additional information to investors”.

Thousands of IT companies have been set up in India, they hardly have any fixed assets but they have good team of human resources which are not shown in the balance sheet. If one wishes to compare the performance of an IT and a manufacturing company on the basis of ‘Capital Employed ratio’, the ratio would be higher for IT company as compared to manufacturing firm which is contradictory to our assumptions. The basic problem of IT sector is not high cost but absence of performance measures. This calls for HRA information.

As compared to other sectors, majority of IT companies have implemented HRA in their annual statements. The Indian IT industry accounts for a 5.19% of the country’s GDP and export earnings as of 2009, while providing employment to a significant number of its tertiary sector workforce. More than 2.3 million people are employed in the sector directly or indirectly, making it one of the biggest job creators in India and a mainstay of the national economy. Looking at these aspects of IT industry, this sector has been selected for study.
1.4 HUMAN RESOURCE MANAGEMENT

Strategic human resource management can be defined as the linking of human resources with strategic goals and objectives in order to improve business performance and develop organizational culture that foster innovation, flexibility and competitive advantage. In an organization, SHRM means accepting and involving the HR function as a strategic partner in the formulation and implementation of the company’s strategies through HR activities. Human Resource Management was regarded as a support function because of its inability to show direct contribution in company’s profits. Now, as the focuses of companies have shifted to human resources and their importance has been acclaimed, HRM has greatly been accepted as a Strategic function. HR Managers have grabbed the positions in Board of Directors of the organization. Generally, strategy refers to the overarching, long-term directions of an organization that are critical to its survival and success. (George T., 1987, p-6)

Earlier Human Resource Department was considered as a cost center for the organization i.e. a department within the organization that brings in no revenue or profit—it only costs money for the organization to run this function. Due to the increased importance of employees in service based economy and a role in Strategic Management HRD has now been considered as revenue center.

The HRA practices have interplay with the strategic human resource practices. So, HRA has high impact on strategic HR decisions. Thus, this relation between HRA and other HR functions need to be analyzed.

For SHRM to happen, the cooperation of the line managers is critical (Ulrich, 1998). HRM is more of a line managers’ responsibility with the increasing strategic importance of HR (Brewster and Smith, 1990; Mello, 2001; Truss and Gratton, 1994) and this requires a closer relationship between HR and line managers (Becker and Gerhart, 1996). Martell and Caroll (1995) look at the inclusion of line managers in the HR policymaking process as a critical element of SHRM. Line managers could be in a better position to respond to issues concerning the employees enabling HR managers to find more time to perform strategic functions related to HRM (Budhwar and Sparrow, 2002). However, effective participation may be constrained by factors like the lack of HR competence of the line managers, lack of training for taking up devolved HR responsibilities, inadequate time
for people management issues, and emphasis on short term performance measures that causes lack of focus on achieving results through managing people (McGovern, Gratton, Hope-Hailey, Stiles and Truss, 1997 cited in Krishnan and Singh, 2004). Thus, in order to see successful HRA in organization having a great impact on Strategic HRM, there need to be effective implementation of the same at base or lower level. Let us have a glimpse of some crucial functions of HR both at Tactical and Strategic Level.

1.4.1 HUMAN RESOURCE PLANNING
The success of a business is directly linked to the performance of the employees. Hiring the wrong people can lead to business failures. Hence, it is imperative to manage inflow of the employees and put effort into human resource planning. Inflow means recruiting the suitable candidate for job. Recruiting the right candidate and retaining them is important part of HRP.

IT organization requires professionals with right skills and right attitude to be deployed for positions based on global business opportunities. The human resource planning subsystem in an IT organization is faced with the challenge of matching supply and demand. (Narahari and Murthy, 2009). Also, many HR manager’s output of work or productivity is the number of suitable candidates selected and retained.

The need of the hour is to develop a system that would help HR in preparing appropriate budget for HRP, selecting right candidate for job and retaining employees to control attrition. An information based mechanism that would assist HR manager in taking these decisions is required.

Strategic Human Resource Planning
In 1996, strategic planning, mission statements and benchmarking were the top three management techniques. Of the 409 North American companies surveyed, 89 per cent reported using strategic planning in 1996. (Pitt G., 1998)

Miles and Snow (1984) discussed “make” or “buy” HR strategies where HRM systems focus on building or acquiring human resources. Strategic Planning for Human Resources includes making a yearly budget for employees’ inflow and maintenance. While making
recruitment budget all the direct costs involved in the process are taken into consideration and a rough figure is quoted as indirect costs. In the HR valuation process, indirect cost is counted and measured, the same should be used in making recruitment budget. Inclusion of appropriate costs enables HR managers to understand the exact money involved in the process and which costs can be saved.

One of the major decisions in HRP is implementing retention strategies. Which strategy should be implemented is the HR Managers choice. He/she need to choose the strategy that would best suit their company is cost effective and bring down the attrition rate. In order to take this decision, HR manager would need data about each strategy, cost involved in implementing the same, percentage of turnover expected to be reduced on implementation of that strategy etc. to take correct decision.

1.4.2 PERFORMANCE MANAGEMENT SYSTEM
Performance Management System is the area where utmost concern of the employee lies. But these employees are only those who wish to work with the organization for a long period of time and see their growth or career progression in the same company.

Measuring the performance of the employee is very crucial at the same time “difficult”. Specifically in IT companies where employs are expected to work in teams and individual performance cannot be as curtain.

An employee works hard entire year to ensure that he fits into “performer” category. What if, the PM are faulty or biased? It decreases the employee’s motivation to work. Performance may not be necessarily link to compensation or incentives or promotions but a simple recognition or the work done gives a good amount of satisfaction to employees.

Moreover, if PM is facility, neither manager (nor company) nor employee knows that how much has he/she has contributed to the organization.

In IT organization, most of the companies follow “bell performance measurement model”. Due to this, many of the employees are forced into the best performer and non performer category.

**Strategic Performance Management System:**
Strategic performance management is defined as: the process where steering of the organization takes place through the systematic definition of mission, strategy and
objectives of the organization, making these measurable through critical success factors and key performance indicators, in order to be able to take corrective actions to keep the organization on track (Grigore A., Bagu C. and Radu C., 2009). The majority of employers fail to achieve strategic goals as they are missing a trick to align performance management with strategy. As a result, many employees are unaware of how they can contribute to their company’s strategic goals. Rather than pushing people to work longer and harder, the answer may lie in equipping them to work smarter by telling them what to perform, how to perform, how is that contributing to corporate goals and how much are they contributing towards profits. Today’s performance management system should provide a complete suite of competency measurement tools – i.e. more than just performance reviews and appraisals, it should give the holistic view.

"If you can develop a performance management system where people come out of it feeling more energized and positive, that's a good thing because often people walk in feeling ready for battle," says Paul Brewerton, director at the Strengths Partnership, an HR assessment and coaching consultancy (Gray, 2011). Thus, a Performance management system should be strategically designed to motivate employee to perform to his/her highest capabilities. This can be done by undertaking multiple initiatives such as implementing performance based pay, linking promotions to performance as the only criterion, comparing employee performance on corporate level and across different departments instead of in small groups, keeping performance criterion fair and transparent, etc. For doing this HR managers need the right tool. A tool in the form of performance management method that would appraise right candidate with apt reason and provide a guideline for future performance. Human Resource Accounting is the perfect method to do this.

1.4.3 TRAINING AND DEVELOPMENT

“There is nothing training cannot do; nothing is above its reach; It can turn bad morals to good, It can destroy bad principles and create good ones, It can lift men to angel ship.”

-Mark Twain

Human capital is increasingly regarded as one of the major drivers of productivity, economic growth and competitive advantage. Recognizing the importance of human capital, enhancing this capital through training and development has become crucial. An
average Japanese company spends about 6% of budget on training. Motorola’s CEO required all divisions to spend at least 2% of budget on training. Over next 7 years, profits increased 47% and it was estimated that each $1.00 in training yielded $30.00 in return.

As rightly said, “An organization is only as good as it’s employees,” In order for an organization to produce professional career minded employees an investment has to be made.

Training and development refers to the process to obtain or transfer knowledge, skills and abilities needed to carry out a specific activity or task. Rapid changes in technology, the exportation of jobs (e.g., manufacturing), downsizing, shortcomings in formal education (e.g., high school level), global competition and the aging workforce are some of the major reasons making organizations to focus on continuous learning and job training. (Study Mode, 2014).

HR training and development responsibilities begin with newly joiner’s orientation. Behavioural training programs HR to establish the relationship between the employer and employee, as well as help form collegial relationships among co-workers. During an employee's tenure, HR's provides skills training and professional development opportunities that prepare employees for additional responsibilities with the company as well as future promotions. But the sorry situation is when it comes to cost cutting, this is the first function to be sliced. Companies often fail to realize that the return on investment in training and development activities help support employers' goals for profitability, according to Paul Sarvadi, author of Entrepreneur magazine's May 2005 article titled, "The Importance of Employee Development."

Since, training and development programs are very costly; HR managers need to select a right candidate for attending the training program. It should be based on his contribution to organization, his tenure, and future expected services. HRA model can prove managers with these details.
Strategic Training and Development
Training has the distinct role in the achievement of an organizational goal by incorporating the interests of organization and the workforce (Stone R J. Human Resource Management, 2002). Now a day’s training is the most important factor in the business world because training increases the efficiency and the effectiveness of both employees and the organization (StudyMode, 2014). Each training needed by organization to be given to the group of employees calls for a huge investment on company’s side. While selecting a training program, HR mangers should know the expected ROI of the training. Does by attending the training program, is there any increase in the value of employee.

Impact of a training program need to be accessed, in the light of performance records and promotion charts of employees who have undergone that training programs. Calculating the effects of the training and comparing it with the investment made is very difficult as the effects are slow and difficult to measure. However, in long run, company need to do so, in order to take decision regarding future investments in training programs.

1.4.4 COMPENSATION MANAGEMENT
Compensation refers to all forms of financial returns and tangible benefits that employee receives as part of employment relationship. Compensation is divided into two parts and these are cash compensation which is the direct pay provided by employer for services rendered by the employee and fringe compensation which refers to employee benefit programs.

Cash compensation has two elements which include base pay and contingency pay. Base pay is the fixed pay plus overtime pay, while contingent pay is concerned with performance allowances such as merit increases, incentive pay bonuses and gain sharing. Fringe compensation on the other hand refers to benefits provided to employees by organisation.

Various studies have established that salaries and benefits are closely related to job satisfaction (St. Lifer, 1994); and job satisfaction can bring about motivation which in turn affects employee job performance and organizational commitment.(Unllib.unl.edu, 2014, p-2).
**Strategic Compensation Management System**

Compensation is a critical piece of Human Resource Strategy. Compensation is both visible and important to employees, a compensation program designed to communicate and reward strategic goals increases the probability that employees will not only understand what those goals are but also will achieve them. According to Dyre (1985) the notion that compensation policies are strategic, thereby affecting the Missions of the organization, has considerable currency. This is part of the current popularity of all things strategic. While some may write it off as another fad, another cynical view is that a strategic perspective on compensation is part of a growing recognition that macro-organization consider as an important part of the study of human resource management. (Milkovich, 1987, Pg- 2)

The importance of a strategic perspective on compensation rests on three fundamental tenets. The first is that compensation policies and practices differ widely across organizations and across employee groups within organizations. The second tenet is that the decisions managers and employees make help shape these differences; that discretion exists to choose among options and the processes used to implement them. Perhaps most fundamental of all the tenets on which a strategic perspective on compensation is based is the belief that fitting compensation systems to environmental and organizational conditions makes a difference; that systematic variation in compensation systems is more than random noise; that making compensation policies and practices contingent on organizational and environmental conditions has some desired effects on employee behaviors and the performance of organizations. (Milkovich, 1987, pg- 4, 5)

Lists of Compensation Decisions deemed to be strategic in the literature. It includes the market position (level of pay relative to competitors), Internal versus external orientation, hierarchy (the steepness of the pay structure and the basis—job versus skills—for the pay structure reward mix, and the basis of rewards (performance versus seniority, groups versus individual, criteria used, etc.) (Milkovich, 1987, pg- 9)

A technique of Job Evaluation is used to establish an equitable wage rate. This method is a more systematic and rational approach to internal equity where the jobs in an
organization are evaluated according to compensable factors like education, skill, experience, and responsibility.

All these activities that fall under the purview of Strategic Compensation need to be considered as at the end of the day what matters is the money.

1.5 RATIONALE OF STUDY

In the knowledge driven economy, Human Resources are the most important assets. The accountants in the past have not given due consideration to these assets. Organisations heavily invest in recruitment, training and development, etc. But the amount is treated as revenue expenditure and hence is debited to profit and loss account. However, these costs are incurred to get services from the employees and hence should be capitalized. Failure of accounting principle to give justice to human assets leads to emergence of human resource accounting concept.

Information Technology being the most human intensive sector needs to give more importance to their intellectual capital. Growth of IT sector in India lead to ample opportunities for software professionals. It became easier for employees to find more lucrative opportunities. Hence, attrition is high in this industry. Implementation of HRA practices and its proper usage may help to control employee turnover.

For the management, to prove their concern to their employees, organizations have to undertake multiple initiatives. There are companies like Infosys, Mahindra Satyam and Rolta India who has been undertaking Human Resource Accounting and consistently disclosing this information in their Annual Records. As a result of this, these companies know the monetary valuation and contribution of each employee and hence can utilize workforce properly.

Despite the importance attached to human capital in the IT Industry HRA is still at an infancy stage in India. The reasons for the non-implementation by the other IT Companies are relatively unknown. The main problem arises where the actual utility of the Human Resource Accounting information is questioned. The use of HRA value in decision making of various Human Resource function is to be proved. Every management would like to know how HRA initiative can help their organisation’s profitability.
Management has long being searching for a decision making tool. There is a need to understand how the monetary information of employees can be used for human resource planning decisions, performance management, training and development and other decisions.

This research would not only contribute in answering the problems mentioned above but also help to understand as to how can Organizations in India translate their rhetoric that “people are our most valuable assets” into reality.

1.6 EMPLOYEE MOTIVATION
Motivation refers to reasons that underlie behavior that is characterized by willingness and volition (Guay et al., 2010, p. 712). Intrinsic motivation is animated by personal enjoyment, interest, or pleasure, whereas extrinsic motivation is governed by reinforcement contingencies.

The study by Shilpajainusms (2010) reveals: The various factors of organizational structure and culture have positive and negative impact on job satisfaction, job stress and employee motivation, through the extensive review of the existing literature. The structure, leadership, managerial practices and the decision processes mediated by organizational climate and good supervisory style positively impact the employee motivation. Centralization, lack of participation in decision making, little opportunity for advancement, great amount of formalization and high degree of specialization affect employee motivation negatively.

A motivated employee is a happy employee and therefore a “productive employee. Recently, all the HR manager’s efforts are concentrated towards motivating their employees. A highly motivated employee imparts lot of direct and indirect benefits to the organization. They are more loyal, creative, innovative, create good work environment, perform better, etc. All these benefits help organization to a great extent. Now-a-days, salary has become secondary option for employees, as it always was. But a trend has been seen that a good experienced employee shifts from the job of higher pay to the job of lower pay. When asked for reasons, we got varied viz. “I get to work on my domain”, “Better Work-Life Balance”, “Self- authority”, “Flexibility in work such as work
from home option” are the few responses received from the employees of IT companies selected for study.

Every HR manager strives to prove employees with best of the amenities so as to retain them. But sometimes they tend to forget that association with an organisation is more of intrinsic decision which is driven by self-motivation.

The study attempts to find the impact of HRA on motivation level of employees. To check the same, three basic theories of motivation have been taken into consideration. Let us discuss the three theories in brief:

1.6.1 MASLOW’S THEORY OF HUMAN MOTIVATION

The different levels of needs on Maslow’s hierarchy are discussed as follows:

(i) **Physiological needs** These are biological needs which consist of the need for oxygen, food, water, and a relatively constant body temperature. They are the strongest needs because if a person were deprived of all needs, it is these physiological ones that would come first in the person’s search for satisfaction.

(ii) **Safety needs** When all physiological needs are met and are no longer controlling thoughts and behaviors, the needs for security can become active. While adults have little awareness of their security needs except in times of emergency or periods of disorganization in the social structure (such as widespread rioting), children often display the signs of insecurity and the need to be safe.

(iii) **Needs for love, affection and belongingness** When the needs for safety and for physiological well-being are satisfied, the next class of needs for love, affection and belongingness can emerge. Maslow states that people seek to overcome feelings of loneliness and alienation. This involves both giving and receiving love, affection and the sense of belonging.

(iv) **Needs for esteem** When the first three classes of needs are satisfied, the needs for esteem can become dominant. These involve needs for both self-esteem and for the esteem a person gets from others. Humans have a need for a stable, firmly based, high level of self-respect, and respect from others. When these needs are satisfied, the person feels self-confident and valuable as a person in the world. When these needs are frustrated, the person feels inferior, weak, helpless and worthless.
(v) **Needs for self-actualization** When all of the foregoing needs are satisfied, then and only then are the needs for self-actualization activated. Maslow describes self-actualization as a person's need to be and do that which the person was "born to do." "A musician must make music, an artist must paint, and a poet must write." These needs make themselves felt in signs of restlessness. The person feels on edge, tense, lacking something, in short, restless. If a person is hungry, unsafe, not loved or accepted, or lacking self-esteem, it is very easy to know what the person is restless about. However, it is not always clear what a person wants when there is a need for self-actualization. (Jerome, 2013)

### 1.6.2 HERZBERG THEORY OF MOTIVATION

Herzberg’s Two-Factor Theory divides motivation and job satisfaction into two groups of factors known as the motivation factors and hygiene factors. Basically the theory differentiates the factors between intrinsic motivators and extrinsic motivators. The intrinsic motivators, known as the job content factors, define things that the people actually do in their work; their responsibility and achievements. These factors are the ones that can contribute a great deal to the level of job satisfaction an employee feels at work. The job context factors, on the other hand, are the extrinsic factors that someone as an employee does not have much control over; they relate more to the environment in which people work than to the nature of the work itself (Schermersorn 3003 cited in Ruthankoon, 2003).

1. **Achievement:** An example of positive achievement might be if an employee completes a task or project before the deadline and receives high reviews on the result, the satisfaction the employee feels would increase. However, if that same individual is unable to finish the project in time, or feels rushed and is unable to do the job well, the satisfaction level may decrease.

2. **Recognition:** When the employee receives the acknowledgement they deserve for a job well done, the satisfaction will increase. If the employees work is overlooked or criticized it will have the opposite effect.

3. **Work itself:** This involves the employees’ perception of whether the work is too difficult or challenging, too easy, boring or interesting.
4. **Responsibility**: This involves the degree of freedom an employee has to make their own decisions and implement their own ideas. The more liberty to take on that responsibility the more inclined the employee may be to work harder on the project, and be more satisfied with the result.

5. **Advancement**: This refers to the expected or unexpected possibility of promotion. An example of negative advancement would be if an employee did not receive an expected promotion or demotion.

6. **Possibility of Growth**: This motivation factor includes the chance one might have for advancement within the company. This could also include the opportunity to learn a new skill or trade. When the possibility/opportunity for growth is lacking or if the employee has reached the peak or glass ceiling, as it is sometimes referred to, this could have a negative effect on the satisfaction the employee feels with their job and position.

The following are the hygiene factors, which work in the same way with positive or negative attributes, however these factors can only have an effect on the dissatisfaction one feels.

   1. **Company Policy or Administration**: An employee’s perception of whether the policies in place are good or bad or fair or not, change the level of dissatisfaction that employee will feel.
   
   2. **Personal or Working Relationships**: This is those relationships one engages in with their supervisors, peers, and subordinates. How someone feels about the interaction and discussions that take place within the work environment can also effect dissatisfaction.
   
   3. **Working conditions**: This includes the physical surroundings that one works within, such as the facilities or location.
   
   4. **Salary**: This factor is fairly simple, the increase or decrease of wage or salary effects the dissatisfaction within a company a great deal.
   
   5. **Personal Life**: Although people try to separate the two, work and personal life, it is inevitable that one will affect the other.
6. **Feeling a Job Security:** This is a pretty significant factor. The sense of job security within a position or organization as a whole relates to the dissatisfaction as well. (Ruthankoon, 2003, pg. 338)

### 1.6.3 THE ALDERFER ERG THEORY

According to Alderfer, man is motivated by three groups of core needs, namely Existence, Relatedness and Growth needs, hence the name ERG theory. The existence needs include the human basic needs necessary for existence, which are the physiological and safety needs. The relatedness needs refer to man's desire to maintain important interpersonal relationships. These are man's social, acceptance, belongingness and status desires. The last group of needs is the growth needs, which represent man's desire for personal development, self-fulfillment and self-actualization. (Arnolds and Boshoff, 2002)

![Comparison of Motivation Theories](image)

Source: Blogspot, 2011  
**Figure 1.1**
1.7 OVERVIEW OF IT SECTOR IN INDIA

The Information Technology (IT) sector in India is amongst the fastest growing sectors in the country and the world. The sector has increased its contribution to India's GDP from 1.2% in FY1998 to 7.5% in FY2012. According to NASSCOM, the sector aggregated revenues of US$118 billion in FY2014, where export and domestic revenue stood at US$86 billion and US$32 billion respectively.

The Indian Information Technology sector can be classified four categories - IT Services, Engineering Services, ITES-BPO Services and E-Business.

In today's knowledge-based organizations value is driven more by people than by any other factor. The valuation of companies has progressively changed over the last 20 years, putting a much higher weight on intangible assets like knowledge, competence, brands, and systems. These assets are also known as the intellectual capital of the organization. As compared to other sectors, majority of IT companies have implemented HRA in their annual statements.

1.7.1 IMPACT ON INDIA's GROWTH

IT-BPO sector has become one of the most significant growth catalysts for the Indian economy. In addition to fuelling India’s economy, this industry is also positively influencing the lives of its people through an active direct and indirect contribution to the various socio-economic parameters such as employment, standard of living and diversity among others. The industry has played a significant role in transforming India’s image from a slow moving bureaucratic economy to a land of innovative entrepreneurs and a global player in providing world class technology solutions and business services. The industry has helped India transform from a rural and agriculture-based economy to a knowledge based economy (Nasscom.in, 2010).

1.7.2 NATIONAL ASSOCIATION OF SOFTWARE AND SERVICES COMPANY (NASSCOM)

NASSCOM acts as an advisor, consultant and coordinating body for the IT-BPO industry in India. It helped to enable the government in India to develop industry friendly policies. NASSCOM is a not-for-profit organization which was set up in 1988 to facilitate business and trade in software and services and to encourage advancement of research in software technology.
NASSCOM has been proactive in ensuring that the Information Security environment benchmarks with the best across the globe.

As a part of its Trusted Sourcing initiative, NASSCOM is in the process of setting up the Data Security Council of India (DSCI) as a Self-Regulatory Organization (SRO) to establish, popularize, monitor and enforce privacy and data protection standards for India’s ITeS-BPO industry. DSCI shall function as an enabler to the IT and ITeS industry to grow at a rapid pace by facilitating the adoption and enforcement of the prescribed security standards and best practices. (India Law Offices, 2014)

Looking at these aspects of IT industry, this sector has been selected for study. Four IT companies from the top 20 list of NASSCOM have been selected for study.

Table 1.1: SWOT ANALYSIS OF INDIAN IT INDUSTRY

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. High Quality &amp; Price Performance</td>
<td>1. Lack of Package Orientation</td>
</tr>
<tr>
<td>2. Large Pool of Knowledge Workers</td>
<td>2. Lack of Domestic Computerisation</td>
</tr>
<tr>
<td>4. Flexibility, Adaptability &amp; Reliability</td>
<td>4. Original Technology</td>
</tr>
<tr>
<td>8. High Aspirations</td>
<td>8. Localisation</td>
</tr>
<tr>
<td>9. Indians in Silicon Valley</td>
<td></td>
</tr>
<tr>
<td>10. Government Encouragement</td>
<td></td>
</tr>
<tr>
<td>11. Infrastructure</td>
<td></td>
</tr>
<tr>
<td>12. Global Research &amp; Development</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Domestic Demand</td>
<td>2. Telecom Infrastructure</td>
</tr>
<tr>
<td>3. Outsourcing</td>
<td>3. Infrastructure</td>
</tr>
<tr>
<td>5. Overseas Listings</td>
<td>5. Protectionism by Export Destinations</td>
</tr>
<tr>
<td>6. Internet Service Provider (ISP) Policy</td>
<td></td>
</tr>
</tbody>
</table>

31
1.7.3 COMPANIES FOLLOWING HRA PRACTICES

Out of the mentioned 20 companies of India, following companies has implemented HRA.

1. INFOSYS TECHNOLOGIES LTD.

Infosys Technologies Ltd. was incorporated in 1981. It provides software development, maintenance and independent validation services to companies in banking, finance, insurance, manufacturing and other domains. Infosys became a public limited company in India in 1992. Infosys is the third-largest India-based IT services company by 2012 revenues. Gartner (2013)

From a capital of US$ 250, it has grown to become a US$ 8.25 billion (FY14 revenues) company with a market capitalization of approximately US$ 31 billion (Infosys, 2014). On
31 March 2014, its market capitalisation was $30.95 billion, making it India’s fifth largest publicly traded company (Ycharts.com, 2014).

Infosys has a global presence with 73 offices and 94 development centers in the United States, India, China, Australia, Japan, Middle East, and Europe. Infosys is a NYSE listed global consulting and IT services company with more than 160,000 employees. (Infosys Annual Reports, 2008). The only Indian tech firm to value its 'intangible assets', Infosys has valued each of its 1.3 lakh employees based on their earning potentials till retirement. (Sabharwal And Sengupta, 2011)

Management:

1) **N.R. Narayana Murthy**, Founder, Executive Chairman of the Board
2) **S. Gopalakrishnan**, Co-Founder, Executive Vice Chairman
3) **S.D. Shibulal**, Chief Executive Officer and Managing Director
Table 1.3: Disclosure of HRA practices in Annual Statements of Infosys

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>%</th>
<th>2007</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value-added</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>16,692</td>
<td>13,893</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less: Operating expenses excluding personnel costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software development and business process management expenses</td>
<td>1,306</td>
<td>1,187</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selling and marketing expenses</td>
<td>302</td>
<td>371</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General and administration expenses</td>
<td>968</td>
<td>834</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,576</td>
<td>2,392</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value-added from operations</td>
<td>14,116</td>
<td>11,501</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-operating income</td>
<td>704</td>
<td>378</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total value-added</td>
<td>14,820</td>
<td>11,879</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Distribution of value-added**

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>%</th>
<th>2007</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries and bonus</td>
<td>8,878</td>
<td>59.9</td>
<td>7,112</td>
<td>59.9</td>
</tr>
<tr>
<td>Providers of capital</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dividend</td>
<td>1,902</td>
<td>12.8</td>
<td>649</td>
<td>5.5</td>
</tr>
<tr>
<td>Minority interest</td>
<td>–</td>
<td>–</td>
<td>11</td>
<td>0.1</td>
</tr>
<tr>
<td>Interest on debt</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>1,902</td>
<td>12.8</td>
<td>650</td>
<td>5.6</td>
</tr>
<tr>
<td>Taxes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate income taxes</td>
<td>685</td>
<td>4.6</td>
<td>386</td>
<td>3.2</td>
</tr>
<tr>
<td>Dividend tax</td>
<td>323</td>
<td>2.2</td>
<td>102</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>1,008</td>
<td>6.8</td>
<td>488</td>
<td>4.1</td>
</tr>
<tr>
<td>Income retained in business</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>598</td>
<td>4.0</td>
<td>514</td>
<td>4.3</td>
</tr>
<tr>
<td>Retained in business</td>
<td>2,434</td>
<td>16.5</td>
<td>3,105</td>
<td>26.1</td>
</tr>
<tr>
<td></td>
<td>3,032</td>
<td>20.5</td>
<td>3,619</td>
<td>30.4</td>
</tr>
<tr>
<td>Total</td>
<td>14,820</td>
<td>100.0</td>
<td>11,879</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note: 1) The figures above are based on the consolidated Indian GAAP financial statements. 2) Dividends for fiscal 2008 include special dividend of Rs. 1,144 crore. 3) Income taxes for fiscal 2008 and 2007 include tax reversals of Rs. 121 crore and Rs. 125 crore respectively.

**Human resources valuation**

The dichotomy in accounting between human and non-human capital is fundamental. The latter is recognized as an asset and is, therefore, recorded in the books and reported in the financial statements, whereas the former is ignored by accountants. The definition of wealth as a source of income inevitably leads to the recognition of human capital as one of the several forms of wealth such as money, securities and physical capital.

We have used the Lev & Schwartz model to compute the value of human resources. The evaluation is based on the present value of future earnings of employees and on the following assumptions: a) employee compensation includes all direct and indirect benefits earned both in India and abroad, b) the incremental earnings based on group / age have been considered, and c) the future earnings have been discounted at the cost of capital of 13.32% (previous year – 14.97%).

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees (No.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software professionals</td>
<td>85,013</td>
<td>68,156</td>
</tr>
<tr>
<td>Support</td>
<td>6,174</td>
<td>4,885</td>
</tr>
<tr>
<td>Total</td>
<td>91,187</td>
<td>72,241</td>
</tr>
<tr>
<td>Value of human resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software professionals</td>
<td>92,331</td>
<td>53,592</td>
</tr>
<tr>
<td>Support</td>
<td>6,490</td>
<td>3,860</td>
</tr>
<tr>
<td>Total</td>
<td>98,821</td>
<td>57,452</td>
</tr>
<tr>
<td>Total income</td>
<td>16,892</td>
<td>13,893</td>
</tr>
<tr>
<td>Total employee cost</td>
<td>8,878</td>
<td>7,112</td>
</tr>
<tr>
<td>Value-added</td>
<td>14,820</td>
<td>11,879</td>
</tr>
<tr>
<td>Net profits excluding exceptional items</td>
<td>4,699</td>
<td>3,861</td>
</tr>
<tr>
<td><strong>Ratio</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Value of human resources per employee</td>
<td>1.08</td>
<td>0.80</td>
</tr>
<tr>
<td>Total income / human resources value (ratio)</td>
<td>0.17</td>
<td>0.24</td>
</tr>
<tr>
<td>Employee cost / human resources value (%)</td>
<td>9.0</td>
<td>12.4</td>
</tr>
<tr>
<td>Value-added / human resources value (ratio)</td>
<td>0.15</td>
<td>0.21</td>
</tr>
<tr>
<td>Return on human resources value (%)</td>
<td>4.7</td>
<td>6.7</td>
</tr>
</tbody>
</table>
Chapter 1: HUMAN RESOURCE ACCOUNTING

2. KPIT CUMMINS INDIA LTD.
KPIT is a global IT consulting and product engineering partner focused on co-innovating domain intensive technology solutions for corporations specializing in automotive & transportation, manufacturing and energy & utilities. It is an International Organization for Standardization (ISO) 27001 and ISO 9001:2000 Certified company. The company has been recognized as one of top ten investor friendly companies in India (Business Today, August 2007).

The most important reasons for adopting HRA practice in KPIT Cummins is that in the software / IT industry human resource is a significant asset utilized in generating revenues and the conventional accounting practice does not take any cognizance of this important asset in the organization. The widely accepted Lev and Schwartz Model has been used to compute the value of human capital. The subsidiary employees are not considered in the valuation and only the earnings in Indian Rupees are factored into the valuation. (Financemind, 2011)

Management:
1) Ravi Pandit, Chairman & Group CEO
2) Kishor Patil, Co-founder, CEO & MD
3) Sachin Tikekar, Board Member, President - Strategic Relationships & Business Transformation

According to Annual report (2004-05) of the company, in the Software / IT Industry Human Resource is a significant asset utilized in generating revenues. Conventional Accounting Practice does not take any cognizance of this important asset in the organisation.

There are various Models to evaluate the value of Human Resources. KPIT Cummins has used the widely accepted Lev & Schwartz Model to compute the value of Human Capital as at March 31, 2002.

KPIT disclosed HRA information in its annual reports in General Shareholder Information as 16th point.
Table 1.3: Disclosure of HRA information in KPIT

<table>
<thead>
<tr>
<th>Period</th>
<th>Development</th>
<th>Support</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>March-05</td>
<td>1279</td>
<td>106</td>
<td>1385</td>
</tr>
<tr>
<td>March-04</td>
<td>806</td>
<td>91</td>
<td>897</td>
</tr>
</tbody>
</table>

Source: KPIT annual report 2004-05

3. MAHINDRA SATYAM

Mahindra Satyam is one of the leading IT companies in India which is merger of Tech Mahindra and Satyam Computers. It is one of the few companies in India to implement and practice Human Resource Accounting.

Satyam had received the Golden Peacock Award in 2008 for Corporate Governance. Whereas the main stakeholder of the CG Practice, the employees, were misled and wrongly publicized in the books of accounts. Satyam underwent through illegal problems, is a known fact, and was acquired by Tech Mahindra. Satyam was conducting HRA practices, whereas Tech Mahindra was not. Now the new acquisition firm Mahindra Satyam continues to undertake the HRA practices.

Table 1.4: Disclosure of HRA information in Mahindra Satyam

<table>
<thead>
<tr>
<th>Period</th>
<th>Human Resources Valuation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Category</td>
</tr>
<tr>
<td>Mar-09</td>
<td>Development</td>
</tr>
<tr>
<td></td>
<td>Support</td>
</tr>
<tr>
<td></td>
<td>Total</td>
</tr>
</tbody>
</table>

Source: HRM review, April 2010
HRA disclosure in Annual Reports of Satyam

1. Number of Associates / Employees
2. HR valuation separately for the development and the support staff
3. Employee cost
4. Employee cost vs. HR value
5. Functional classification of employees
6. Qualification wise break-up of associates
7. Average age of associates
8. Value of human resources category wise
9. Personnel expenses to software revenues
10. Asset base per associate
11. Export revenues per associate
12. Geographical spread of employees
13. Balance sheet including intangible assets
14. Information as per Section 217 (2A) of the Companies Act, 1956

4. ZENSAR TECHNOLOGIES

Zensar Technologies is a technology partner of choice for global organizations looking to strategically transform, grow, and lead in today’s challenging business environment. Zensar operates in the US, Europe, Africa, Middle East, Singapore and Australia regions and has delivery centers in India (Pune, Hyderabad and Bangalore), China, UK, Amsterdam and US (Westborough). Zensar is the world's first enterprise-wide SEI CMM Level 3 Company.

5. ROLTA INDIA LIMITED (ROLTA)

Rolta India Limited considers all the direct and indirect benefits earned both in India and abroad by their employees. It reports human resource value per employee, net profit per employee, revenue per employee, total employee cost etc. (Financemind, 2011). Since, Rolta is not among the top 20 companies in India, it is not a part of our study.

1.7.4 SELECTION OF IT SECTOR FOR STUDY

As discussed IT sector is the fastest growing sector in India and has a huge contribution in Indian economy. Human Resources provide the single most source of competitive advantage for Organizations competing in the IT Sector. Majority projects are based on the past achievements and skill sets of the employees of the Organizations. Hence, Organizations needs to develop technical and functional
expertise within the workforce and effectively portray it to clients. Employee costs forms the majority of the costs and their value will form greatest assets of the organization. Thus, valuation of Human Capital and passing this information to the various stakeholders- Clients, Shareholders, senior management & HR Department- has become very important.

As India’s outsourcing sector continues to grow bigger and more complex, experts and software professionals want these companies to start valuing their staff on their balance sheets. (Sabharwal and Sengupta, 2011)

Owing to the mentioned reasons, increasing awareness of HRA and proving its utility is mainly required in IT sector. Majority of the HRA expert are available in the above mentioned cities. Hence, study was conducted mainly among these IT cities of India.

1.7.5 MAJOR IT LOCATIONS IN INDIA
Following are the cities in India where majority of IT companies are located. Hence, the research was majorly conducted here.

1. Bangalore: Popularly known as the Silicon Valley of India and leading software exporter from India. Bangalore is considered to be a global information technology hub of India.

2. Chennai: Chennai is the second largest exporter of IT and ITES of India, and is the BPO hub of India. Chennai has the largest operations centers of TCS, and Cognizant.

3. Hyderabad: Hyderabad is a major it hub in India which is also known as Cyberabad which consists of many Multinational corporation companies such as Google, Facebook, Microsoft, Amazon, Oracle and Electronic Arts, etc.

4. Mumbai: The Financial capital of India, many IT companies has established offices.

5. Delhi: The National Capital Region comprising Delhi, Gurgaon and Noida are clusters of software development.

6. Pune: Pune is C-DAC headquarters. Many National and International IT firms are established here.
1.8 REFERENCES


