Valuation and Reporting Practices of Human Resource Assets at INFOSYS

Abstract

Although Human Resource Accounting (HRA) is a relatively new field, its development has already passed through several discernible stages. The first stage of development, from 1960-1966, was marked by interest in HRA and the derivation of basic HRA came from a variety of sources, including the economic theory of human capital, organizational psychologists' concern for leadership effectiveness, the new Human Resource (HR) perspective, and a concern for human assets as components of corporate goodwill. This article attempts to evaluate and report the present scenario of HR concerns. This article covers four different aspects on which proper attention is to be paid by the people interested in HR reporting. Success of corporate undertakings purely depends upon the quality of human resources. it examine Human Resource accounting practices in corporate sector in India.The article discusses HRA practices in Infosys Technologies Limited *.*

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Introduction

Human resource accounting is of recent origin and is struggling for acceptance. It is clearly said that, Human resources accounting is an accounting measurement system and a large body of literature has been published in the last decade setting for the various procedures for measurement. At the same time the theory and underlying concepts of accounting measurement have received sizeable attention from academics and a substantial body of literature has developed. The conventional accountings of human resources are not recognized as physical or financial assets.

Though Human Resources Accounting was introduced way back in the 1980s, it started gaining popularity in India after it was adopted and popularized by NLC. Human Resources accounting, also known as Human Asset Accounting, involved identifying, measuring, capturing, tracking and analyzing the potential of the human resources of a company and communicating the resultant information to the stakeholders of the company. It was a method by which a cost was

Srusti Management Review
Vol.- IV, Issue-IV, April-2011
pp.37-46
ISSN 0974 - 4274

assigned to every employee when recruited, and the value that the employee would generate in the future. Human Resource accounting reflected the potential of the human resources of an organization in monetary terms, in its financial statements.

HRA Practices in India: An Overview

The requirements of Schedule VI as per Section 211 of the Companies Act, 1956, relating to the balance sheet and profit & loss account, provide for disclosure of all physical assets and creation of depreciation provision thereon but they have not mentioned any single word regarding the disclosure of HR value in the balance sheet. Section 217(2A) of the Companies Act, 1956, read with Particulars of Employees (Amendment Rules), 1998, requires the companies to give a statement showing the particulars of employees who are employed throughout the financial year and are in receipt of remuneration aggregating Rs. 24,00,000 or more per annum and also the particulars of employees who are employed for a part of the financial year and are in receipt of remuneration aggregating Rs. 2,00,000 or more per month. As a part of the Report of the Directors, this statement includes name of the employee, designation, gross and net remuneration received, age, qualifications, experience of the employee, date of joining and particulars of last employment held by the employee. As far as HRA is concerned, the disclosure of particulars of employees by companies, in fulfillment of statutory requirement of Section 217(2A), is not sufficient to draw any conclusion because only the details of gross emoluments drawn by the employees are furnished. Thus, the Companies Act, 1956, has not framed any rule regarding valuation of HR and presentation of significant information about human resources in the financial statements of companies.

The Accounting Standards Board of the Institute of Chartered Accountants of India (ICAI) have so far issued 32 accounting standards on most of the important areas in accounting but have not formulated any specific accounting standard on measurement and reporting of cost and value of HR. In spite of there being an absolutely unfavorable environment in India regarding the method of introducing the reporting on HRA, Bharat Heavy Electrical Ltd., a Navratna Public Enterprise (PE) started the valuation of its HR by following the ‘present value of future earnings’ model of Lev and Schwartz in the financial year 1974-75. As revealed by the existing literature and on the basis of the information obtained from the annual reports of various companies, it is found that 15 organizations belonging to the public sector and eight belonging to the private sector, i.e., 23 companies, had adopted such a practice. The list of Indian companies having HRA practice is provided in Table 1.

Table 1: Indian Companies Having HRA System			
Sl. No.	Name of the Company	Year of Introducing HRA	Model Adopted
1	Bharat Heavy Electricals Ltd. (BHEL)	1974-75	Lev and Schwartz
2	Steel Authority of India Ltd. (SAIL)	1983-84	Lev and Schwartz with refinements as suggested by Flamholtz and Jaggi and Lau
3	Hindustan Machine Tools Ltd. (HMTL)	1986-87	Not reported
4	Oil and Natural Gas Corporation Ltd. (ONGC)	1981-82	Not reported
5	National Thermal Power Corporation Ltd. (NTPC)	1986-87	Lev and Schwartz
6	Hindustan Shipyard Ltd. (HSL)	1986-87	Not reported
7	Oil India Ltd. (OIL)	1984-85	Lev and Schwartz
8	Minerals and Metals Trading Corporation of India Ltd. (MMTC)	1983-84	Lev and Schwartz
9	Cement Corporation of India Ltd. (CCI)	1980-81	Lev and Schwartz with refinements as suggested by Flamholtz and Jaggi and Lau
10	Engineers India Ltd. (EIL)	1980-81	Not reported
11	Electrical India Ltd. (ELIL)	1983-84	Lev and Schwartz
12	Project and Equipment Corporation of India (PEC)	1980-81	Lev and Schwartz
13	Metallurgical and Engineering Consultants of India (MECON)	1984-86	Lev and Schwartz
14	Canbank Financial Services Ltd. (CFSL)	1989-90	Lev and Schwartz with refinements as suggested by Flamholtz and Jaggi and Lau
15	Southern Petrochemical Industries Corporation Ltd. (SPIC)	1983-84	Lev and Schwartz
16	Cochin Refineries Ltd. (CRL)	1987-88	Lev and Schwartz
17	Madras Refineries Ltd. (MRL)	1985-86	Lev and Schwartz
18	Associated Cement Companies Ltd. (ACC)	1983-84	Lev and Schwartz
19	Tata Engineering and Locomotive Co. Ltd. (TELCO)	-	-
20	Infosys Technologies Ltd. (ITL)	1998-99	Lev and Schwartz
21	Satyam Computer Services Ltd. (SCS)	1995-96	Lev and Schwartz
22	KPIT Cummins Infosystems Ltd. (KPIT)	2000-01	Lev and Schwartz
23	Neyveli Lignite Corporation Ltd. (NLC)	-	Lev and Schwartz
Source: Mallik AK and Sur D (2003), Human Resource Accounting Practices in India, *The Indian Journal of Commerce, IGNOU, Vol. 56, No. 4, October-December, pp. 17-26 (adapted)*			

Most of these enterprises have adopted Lev and Schwartz model for valuing their human resources. However, SAIL, CFSL and CCI have valued their human resources by applying this model after incorporating certain modifications as proposed by Eric G Flamholtz and Jaggi and Lau, whereas EIL, HMTL and ONGC have not disclosed the models employed by them. The discount rates used by the enterprises have fluctuated between 10 and 15%. Such different rates of discount considered are treated as debatable issues. Even the logic behind the rates adopted by these has not been mentioned. Valuation of human resources cannot be compared due to such different rates for which inter-firm comparison of HR value cannot be done. Almost all the enterprises, except HMTL, have reported category-wise distribution of human resources and their value but only five companies, namely, BHEL, SAIL, MMTC, HMTL, and NTPC, have shown age-wise distribution of human resources. Productivity and performance statistics of human resources have been presented by nine companies, such as BHEL, MMTC, NTPC, PEC, MECON, CRL, MRL, OTL, and ITL, in their annual reports. However, all the enterprises under consideration have reported the information relating to salary with sub-breaks in their annual reports as a part of schedule of accounts, whereas segment-wise distribution of salaries has not been mentioned by any one. Almost all the companies, except SAIL, CCI, MMTC and NTPC, have been silent about their objectives of reporting HRA information in the annual reports (Mallik & Sur, 2003, p.22). Thus, it can be said that the practice relating to the disclosure of HRA information is not uniform among different Indian enterprises. In the absence of any legal requirement, almost all the enterprises, except a very few, have now discontinued their HRA practices. At present, only MMTC, MRL, ONGC, ITL, SCS and KPIT have HRA system. However, these companies have been reporting the HRA information as supplementary information in their annual reports. These accounts are, therefore, unaudited

For valuing human resources, different models have been developed. Some of them are opportunity cost Approach, standard cost approach, current purchasing power Approach, Lev and Schwartz present value of future earnings Model Flam holtz's stochastic rewards valuation Models etc. Of these, the model suggested by Lev and Schwartz has become popular. Under this method, the future earnings of the human resources of the organization until their retirement is aggregated and discounted at the cost of capital to arrive at the present value.

Human resources accounting system consists of two aspects namely:

a) The investment made in human resources

b) The value human resource

Measurement of the investments in human resources will help to evaluate the charges in human resource investment over a period of time. The information generated by the analysis of investment in human resources has many applications for managerial purposes. The organizational human performance can be evaluated with the help of such an analysis. It also helps in guiding the management to frame policies for human resource management. The present performance result will act as input for future planning and the present planning will have its impact on future result. The same relationship is also applicable to the areas of managerial applications in relation to the human resource planning and control .Investment in human resources can be highlighted under two heads, namely,

Investment Pattern:

The human resource investment usually consists of the following items:-

1 Expenditure on advertisement for recruitment

2 Cost of selection

3 Training cost

4 On the job training cost

5 Subsistence allowance

6 Contribution to provident Fund

7 Educational tour expenses

8 Medical expenses

9 Ex-gratia payments

10 Employee's Welfare Fund

All these items influence directly or indirectly the human resources and the productivity of the organization.

Investment in Current Costs

After analyzing the investment pattern in the human resources of an organization the current cost of human resources can be ascertained. For this purpose, current cost is defined as the cost incurred with which derives benefit of current nature. These are the costs, which have little bearing on future cost. Thus, the expenses incurred for the maintenance of human resources are termed as current costs. Current cost consists of salary and wages, Dearness allowance, overtime wages, bonus, house rent allowance, special pay and personal pay.

Amidst this background, it is significant to mention that the importance and value of human assets were recognized in the early 1990s when there was a major increase in employment in firms in service, technology and other knowledge-based sectors. In the firms in these sectors, the intangible assets, especially human resources, contributed significantly to the building of shareholder value. The critical success factor for any knowledge-based company was its highly skilled and intellectual workforce.Soon after, the manufacturing industry also seemed to realize the importance of people and started perceiving its employees as strategic assets. For instance, if two manufacturing companies had similar capital and used similar technology, then it was only their employees who were the major differentiating factor. Due to the above development, the need for valuing human assets besides traditional accounting of tangible assets was increasingly experienced.

From the above discussions, it is felt that, Human resource accounting provides quantitative information about the value of human asset, which helps the top management to take decisions regarding the adequacy of human resources. Hence, It is Concluded that, the Human Resources are an indispensable but often neglected element is thus to be fore grounded into the industrial area for the betterment of the economy.

Valuation adopts the guidelines advocated by the Lev and Schwartz Model and also by Eric Flamholtz and Jaggi. Accordingly, the Present Value (PV) of future wages payable to employees, as adjusted for efficiency factor, is considered as HR value. In this process, factors such as the number of employees are likely to move upwards and provision for likely future wage revision, retirement and promotion and performance rating are considered. In short, the value of HR is said to comprise the following:

HRV = Ó PV OF WC × EF

The model requires more reliable estimates of future wages payable. Moreover, assumption of efficiency factor creates computational problems in practice.

Basically, HRA can be tracked through two methods: Cost-based analysis and value-based analysis. The cost-based approach focuses on the cost parameters, which may relate to historical, replacement or opportunity costs. The value-based approach suggests that the value of human resources depends on their capacity to generate revenue. This approach can be further subdivided into two broad categories: non-monetary and monetary.

HRA also helps in examining expenditure on personnel and reappraisal of expenditure on services and training. In case of mergers and takeover decisions, where human asset value becomes a relevant factor, it can also serve as a key factor.

HRA helps create goodwill for a company. The company can project a positive image by having the best practices, with superior policies in place. Experts believe that adopting this may help the organization attract more investments.

As the implementation of HRA requires extensive research, many companies do not want to go into the intricacies of finding the value of their human resources. While most of the big companies (with a large manpower) can afford to venture into such best practices, it may not be economically-viable option for small and medium companies.

Naresh Taneja, head of human resources of HCL Technologies (Mumbai formerly Gulf Computers), believes that one cannot totally rely on this concept. He says, "Considering the dynamism of this industry, it is very difficult to predict as to what is going to be your future requirements and how technology is going to shape in the near future. As HRA is not directly related to Return on Investment (ROI), many companies do not take it very seriously. However, in the past few years, organizations have been investing a lot on improving their systems and infrastructure. And the next obvious step would be measurement of human assets." However, it's ultimately the people who deliver results. Realizing the benefits, which can be provided, the responsibility lies on the companies, as to how much importance they can or do they give to their HR.

Requirements under the Companies Act

At present, companies in India are expected to furnish information relating to their employees such as name, age, qualification, designation and nature of duties, remuneration, data of commencement of employment, experience, etc., as per Section 217 (2A) of the Indian Companies Act, 1956, read with the Companies (particulars of Employees) Amendment Rules, 1988 forming part of the Director's Report.

The particulars provided by companies relating to their employees are only specific in nature. In other words, details of remuneration drawn by the managerial employees alone are shown in the annual reports and the details of remuneration of non-managerial personnel are not shown. According to the above provisions, these are the particulars of managerial personnel who draw above Rs. 72,000/- p.a. w.e.f. 15-6-88, Rs. 1,44,000/- p.a. w.e.f. 18-9-90 and Rs. 3,00,000/- p.a. w.e.f. 17-10-94, if employed throughout the financial year, or Rs. 6,000/- p.m. w.e.f. 15-6-88, Rs. 12,000/- p.m. w.e.f. 18-9-90 and Rs. 25,000/- p.m. w.e.f. 17-10-94, if employed for a part of the financial year.

The above provision, therefore, includes only those employees whose remuneration falls within certain specified limits. Moreover, only those companies which have their employees drawing remuneration in excess of the above specified limits had to give an account of such details, as required under Section 217 (2A) of the Companies Act, 1956.

William Pyle, together with the management of R G Barry Corporation, initiated a pioneering effort to develop a system of accounting for the firm's investment in its human assets on a current cost basis. Under Pyle's direction, the firm formulated a set of concepts and procedures for measuring recruitment, acquisition, training, development and other costs incurred as investments in human assets. This Section describes the R G Barry system in order to exemplify the concepts and methods of accounting for investments in people.

Human Resource Accounting *vis- a- vis* Social Accounting

As a result of a changing social ethos, business organizations are increasingly expected to meet culturally and governmentally defined standards of corporate responsibility, with respect to the environment, consumerism, minority employment, women's rights and employee satisfaction. If current trends persist, it is likely that business corporations increasingly will be held accountable for social contribution. They may also come under the scrutiny of a social audit to assess the costs as well as the benefits of corporate activities.

The measurement methods of HRA can facilitate corporate social accountability for employees. The techniques for measuring investments in HR might be used to assess a corporation's contribution to socially valuable human capital. Many firms engage in hiring and developing the hard-core unemployed, for example, and one measure of a firm's social contribution might be its investment in building human resources among this group.

HRA measurement techniques may also be used to help control the liquidation and depletion of the economy's human capital. For example, there is a high risk of technological obsolescence in the aerospace industry. Engineers may become specialists on a single wing for a number of years, but once that wing is phased out, the engineers may be obsolete. The firm may find it less costly to recruit and hire recent college graduates than to invest in retraining its current engineers. As a result, highly trained and experienced people may find themselves unemployed. To meet its social responsibilities towards its current employees, an aerospace company might invest in developing the general skills of the engineers in addition to investing in training for specific skills that are likely to become obsolete.

HRA measurements can also be used to assess the quality of the working life of employees. Its present trends continue, the "Lordstown Syndrome" of rebellion against hard, monotonous, dehumanized work. As a result of our changing social ethos, the ethic that hard work is a virtue and a duty is being abandoned. There is increasing concern for work to provide on-the-job satisfaction as well as a means to off-the-job satisfaction. Management, therefore, needs a way of measuring employees' satisfaction with aspects of work. The issue seems to be appearing increasingly in labor/management relations.

Human Resource Reporting - Practices

We have discussed how the emerging economy relies largely on the effective management and deployment of intellectual capital, specifically human capital. The growing importance of human assets in terms of their direct financial impact to an organization has consequently translated into an increasing emphasis of human assets in corporate annual reports, public disclosure of internal HR information and related effects on an organization's internal culture. Numerous companies have succeeded in integrating the values and practices associated with HRA into their existing standards. We will now highlight several of these pioneering companies individually. For each company, we will discuss four main issues:

- The nature of their services,
- The degree to which the company has integrated human and intellectual capital positions into its managerial system,
- The extent to which the company has publicized human assets in its annual report or other such information sources, and
- The role of these efforts in the broader picture of the company's culture and values.

The reporting of HR, it appears, is being done on a selective basis at the option of companies in India. This has resulted in only a few companies coming forward to give importance to the valuation and reporting of human resources. Even among the reporting companies, no uniform model is followed for valuation of human assets of their companies. Hence, considering the great value attached to HR, necessary and adequate provisions shall be made in the Companies Act, 1956, in order to make it obligatory for companies to evaluate and report the HR. The task of finding out an appropriate method of valuation of HR, to be uniformly followed by all companies in India, may be entrusted to an expert committee solely formed for this purpose. This will enable more and more companies to come forward to account and report the value of HR in their financial statements.

Human Resource Accounting in Infosys Technologies Limited

Infosys Technologies Limited is one of the largest Indian IT companies, with nine development centers and over 30 offices worldwide. Infosys employs over 1,04,850 employees (2009). It was formed on July 2, 1981 by NR Narayana Murthy and six other software professionals. It is the first Indian IT company to be listed in NASDAQ. At Infosys, employees are considered as the most important assets. The company strongly believes that the quality and level of service that its professionals deliver are among the highest in the global technology services industry. It takes genuine efforts to minimize the information asymmetry between management and shareholders. The company has always been at the forefront in practicing progressive and transparent disclosure. The US Generally Accepted Accounting Principles (GAAP) was first adopted in India by Infosys. Additional disclosures are provided in the annual reports of Infosys so that the stakeholders can have deeper insights to the way the company is running its business. In addition to the mandated Indian and US GAAP financial statements and supplementary data as required by the relevant statutes, the disclosures which are provided in the Annual Reports of Infosys include: Brand Valuation, Balance Sheet (including Intangible Assets), Economic Value-added Statement, Current-cost Adjusted Financial Statements, Intangible Scorecard, Risk Management Report, Human Resource Accounting and Value-added Statement (Annual Report, Infosys, 2006-07).

Table 2: Employee Strength of Infosys (FY 2002-2003 to 2006-2007)

Distribution of the Employees	2003	2004	2005	2006	2007
Functional Classification					
Software/technical professionals (+ trainees)	14,001	23,860	34,417	49,495	68,156
Support	1,335	1,774	2,333	3,220	4,085
Gender Classification of the Employees					
Male	12,460	19,833	27,600	38,179	49,922
Female	2,896	5,801	27,600	22,319	14,536
Age Profile of the Employees					
20-25 years	7,460	14,631	20,865	30,971	43,099
26-30 years	5,754	7,894	11,164	14,932	19,642
31-40 years	1,879	2,737	4,202	6,107	8,600
41-50 years	232	334	444	585	744
51-60 years	29	37	72	116	148
60+ years	2	1	3	4	8
Total	15,356	25,634	36,750	52,715	72,241

Source: Annual Reports of Infosys, 2002-2003 to 2006-2007

Table 3: Value of Human Resources in Infosys (March 2003 to March 2007)

Period	Human Resources Valuation		
	Category	Number	Rs. in cr
March 2003	Software professionals	14,521	10,078.91
	Support	1,355	699.05
	Total	15,876	10,777.96
March 2004	Software professionals	23,855	19,607.78
	Support	1,779	1,532.18
	Total	25,634	21,139.97
March 2005	Software professionals	34,747	26,550.12
	Support	2,003	1,784.13
	Total	36,750	28,334.25
March 2006	Software professionals	49,495	43,336
	Support	3,220	3,301
	Total	52,715	46,637
March 2007	Software professionals	68,156	53,592
	Support	4,085	3,860
	Total	72,241	57,452

Source: Annual Reports of Infosys, 2002-2003 to 2006-2007

Table 4: Value-added Statement of Infosys (for the Period March 2003 to March 2007)

	2003	2004	2005	2006	2007
Value-added					
Income	3,740	4,976	7,253	9,521	13,893
Less: Operating Expenses excluding personnel costs					
Software development expenses	351	393	604	812	1187
Selling and marketing expenses	124	131	182	231	371
General and Administration Expenses	213	265	414	587	834
Subtotal	688	789	1200	1630	2392
Value-added from operations	3,050	4,184	6,052	7,891	11,501
Other income (including exceptional items)	-	-	-	139	378
Total value-added	3,050	4,184	6,052	8,030	11,879
Distribution of value-added					
Human Resources					
Salaries and bonus	1,686	2,450	3,539	4,801	7,112
Providers of capital					
Dividend	191	972	356	1,238	654
Minority interest	23	16	23	21	11
Interest	-	-	-	-	-
	-	-	1,259	665	-
Taxes					
Income Taxes	201	227	325	313	386
Tax on dividend	-	-	-	174	102
	-	-	-	487	488
Retained in business					
Depreciation	-	-	-	437	514
Income retained in business	954	507	1,776	1,046	3,100
Total	3,050	4,184	6,052	8,030	11,879

Source: Annual Reports of Infosys, 2002-2003 to 2006-2007

Conclusion

As we begin the new millennium, it becomes evident that the core strategic asset of enterprises as well as the new foundation of the wealth of nations is human capital. Without the ability to measure these assets, their management is unlikely to be either rational or optimal. Although the development of HRA is not complete, some progress has been made.

One can hope for a day when human capital will receive the same degree of recognition as other assets in accounting practices as well as in the overall management paradigm.

A proper reporting of HR in the financial statements of a company will go a long way in giving a fair and complete view of the accounting information, infuse confidence in the people working in the organization, boost their morale and help the management in fulfilling their social responsibilities.

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