



The Role of Human Resource Accounting in Corporate Sector: An Indian Perspective

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Abstract: In 21st century being globalisation of business and service, Human forces are becoming more important for the success of a concern. Every business concern requires physical assets as well as human resources for its successness. Without human resources and efforts physical assets like building, plants, machines, offices, computes are unproductive. All the activities plans, strategies of a concern are initiated. Performed, executed, implemented, managed and controlled by the man power who make the concern. Profitability, productivity, solvency and efficiency of any organization is largely depends upon the human resources. Knowledge or skills based companies are much richer than the physical or financial bearing companies. Since intellectual, experience, know-how, attitude, mood, education, behaviour and value system of employees with a different way can improve the efficiency of production or services and create more wealth of a organization. Human are the creative and innovative force which strives to secure maximum results. The concept of human resource accounting is in the early stage of development in developing countries like India.

Keywords: Human Resource Accounting, HR Information System, Talent Management.

Introduction

The concept of Human Resource accounting came into existence during the early and mid 1980's when behavioural scientists attacked the standard accounting system for its failure to value the human wealth of the organization along with its other material transactions. 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 Companies Act, 1956 does

not explicitly provide for disclosure on human assets in the financial statements of the companies hence the issue is to be addressed is how to measure the economic value of the people to the organization and various cost based measures to be taken for human resources. The two main components of Human Resources Accounting were investment related to employees and the value generated by them. 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.

Human Resource Accounting

The concept of human resource accounting can be better understood if one goes through some of the important definitions given by the competent authors in the accounting field. HRA seeks to measure the abilities of allemployees in a company at all levels to produce value by way of knowledge & capability. As recession forces consumers to stop investment, producers are forced to go for employee curtailment. Hence, it is a time for the companies to go for innovative methods to deal with economization of staff costs rather than downright downsizing. HRA also involves accounting for investment in people & their replacement costs. Information generated by HRA can be used for a host of managerial & Strategic decisions like recruitment, turnover, personnel advancement analysis, training and capital budgeting.

In hospitals, academic institutions, consulting firms etc., the total worth of the organization depends mainly on the skills of its employees and the services they render. Hence, the success of these organizations is contingent on the quality of their Human Resource- its Knowledge, skills, competence, motivation and understanding of the organizational Culture. In knowledge –driven economies therefore, it is imperative that the humans resource recognized as an integral part of the total worth of an organization.

Human resources accounting system consists of two aspects namely:

- a) The investment made in human resources
- b) The value human resource

Factors affecting Human Resource Accounting:

The following table focusing on variables of Human Resource Accounting

Table 1: Factors affecting Human Resource Accounting

Tangible factors (a).Physical Factors	Tangible factors (b)Financial Factors	Intangible factors (a).Positive Factors	Intangible factors (b).Negative Factors
-Extent of aim achieved -Average of people recruited -Guidance needs -Time and Performance comparison	-Cost involved -Price of service sold -Cost comparison among similar services	-Quality of services rated -Benefits rated -Forming of social indicators and their comparison -Effectiveness of training programmes -Market popularity of the institution -Judgement of real value of human resources	- Measuring damages -Creating social evils -Human resources as liability through destructive activities -Lack of individual and group relations

Table 2: items to be included in Human Resource Accounting

Significant items in Human Resource Accounting
<ul style="list-style-type: none"> ○ Cost per Employee ○ Human Capital Investment Ratio(HCI) ○ The amount of wealth created by each employee ○ The profit created by each employee ○ The ratio of salary paid to the total revenue generated ○ Average salary of each employee ○ Employee absenteeism rates ○ Employee turnover rate and retention rate

The main objectives of a HR Accounting system are as follows:

1. To furnish cost value information for making proper and effective management decisions about acquiring, allocating, developing and maintaining human resources in order to achieve cost effective organizational objectives.
2. To monitor effectively the use of human resources by the management.
3. To have an analysis of the human asset i.e. , whether such assets are conserved, depleted or appreciated.
4. To aid in the development of management principles, and proper decision making for the future by classifying financial consequences, of various practices.
5. In all, it facilitates valuation of human resources, recording the valuation in the

books of account and disclosure of the information in the financial statement.

6. Further, it is to help the organization in decision making in the following areas:
 - a. Direct Recruitment Vs promotion.
 - b. Transfer Vs. Retention.
 - c. Retrenchment Vs. Retention
 - d. Impact on budgetary controls of human relations and organizational behaviour.
 - e. Decision on reallocation of plants, closing down existing units and developing overseas subsidiaries etc.

Development of the concept of Human Resource Accounting:

“Human Resource Accounting” is the offshoot of various research studies conducted in the areas of accounting and finance. Human resource is an asset whose value gets appreciated over the period of time provided placed, applied and developed in the right direction. Till the recent past, organizations took few efforts to assign monetary value to human resource in its accounting practice. Behavioural scientists initiated efforts to develop appropriate methodology for finding out the value of human resource to the organization. They were against the conventional accounting practice for its failure to value the human resource of an organization along with physical resources.

The traditional concept suggested that expenditure on human resource is treated as a **charge against revenue** as it does not create any physical asset. At present there is a change in this concept and the expenses incurred on any asset (as human resources)

should be treated as capital expenditure as it yields benefits which can be derived for a long period of time and could be measured in monetary terms.

The following are the reasons why Human Resources Accounting has been receiving so much attention in the recent years.

Firstly, there is genuine need for reliable and complete management of human resources.

Secondly, a traditional framework of Accounting is in the process to include a much broader set of measurement than was possible in the past.

The people are the most important assets of an organization but the value of this asset yet to appear in financial statements. It does not get included in management information systems too. Conventional accounting of human resources took note of all expenses of Human capital formation which does not seem to be correct or meeting the actual needs.

Human Resource Accounting is the measurement of the cost and value of people to the organization. It involves measuring costs incurred by the organizations to recruit, select, hire, train and develop employees and judge their economic value to the organization.

Historical Score Card of Human Resource Accounting:

The concept of considering the human beings as an asset is an old one. The importance which Emperor Akbar gave to the nine jewels (courtiers) is a strong evidence for the same. The history of our freedom movement will not be complete without mentioning the names of distinguished freedom fighters such as

Shri Motilal Nehru, Mahatma Gandhi, Sardar Vallabh Bhai Patel and several others but no effort was made to assign any monetary value to such individuals in the Balance Sheet of the Nation.

Sir William Petty was the pioneer in this direction. The first attempt to value the human beings in monetary terms was made by him in 1691. Petty considered that labour was “the father of wealth” and it must be included in any estimate of national wealth without fail. Further efforts were made by William Far in 1853, Earnest Engle in 1883. The real work started only when behavioural scientists vehemently criticized the conventional accounting practice of not valuing the human resources along with other resources. As a result, accountants and economists realized the fact that an appropriate methodology has to be developed for finding the cost and value of the people to the organization. For a long period of time, a number of experts have worked on it and produced certain models for evaluating human resources. The important among them are Shultz, Flamholtz, Lav and Schwartz, and Kenneth Sinclair.

Human Resource Accounting was first started with simple measures of trying to convert output data into contributions. When an HR programme had effected a change in the output especially for organizations operating on profit basis, its value was determined by calculating the profit contribution.

Rensis Likert in the 1960s was the first to research in HR and emphasized the importance of strong pressures on the HR's qualitative variables and on its benefits in the long-run. According to Likert's model, human variables can be divided into three categories: (i) causal variables; (ii) intervening variables; and (iii) end-result variables. The interaction between the

causal and intervening variables affect the end-result variables by way of job satisfaction, costs, productivity and earnings. Historically the first major systematic effort at evaluation was made by RG Barry Corporation of Columbus in 1967. Their annual report detailed the inauguration of HRA procedures developed by the company to enable them to report accurate estimates of the worth of the organization's human assets. Accumulated costs under the categories namely recruiting and acquisition; formal training and familiarization; informal training and familiarization; experience; and development were accounted. Costs for the expected working lives of individuals (or sometimes shorter periods) were amortized, and unamortized costs (for example, when an individual left the company) were written off. That is, today, known as the Historical Cost Approach to employee valuation. Improvement over the years has helped evolve other bases of valuation, which have been providing supplemental information.

Today they fall under three major categories namely replacement cost, present value of future earnings and present value to the organization, i.e. profit contribution.

The formation of a separate Ministry for human resources development by Government of India with an initial outlay of Rs.1500 crores infused a new vigor into all human development programmes of the nation. Creating such portfolio by every company creates the necessity of accounting for the same. Human resources is one of the most valuable assets and needless to say that the human beings co-ordinate the best of machines, men and money. Computers, of course, may challenge the human resources but computer is not a brain and it simply carries out

human commands. Therefore, Accounting for such human resources is very essential for the organization.

The “Extended” Ulrich Model

The most well articulated and accepted model for modern HR was presented by Dave Ulrich in his 1997 book *Human Resource Champions*. Ten years later, the model still works well (and he extended it with his 2005 book, *The HR Value Proposition*). Ulrich presents a simple 2x2 model, in which the horizontal axis is a focus on either process or people and the vertical axis is a day-to-day operational focus or a future-strategic focus (see Exhibit.1). In the lower left quadrant (process and operational focus) is the administrative expert role; in the lower right quadrant (people and operational focus) is the employee relations expert role; in the upper left (process and strategic focus) is the strategic partner role; and in the upper right (people and strategic focus) is the change agent role. This focus on changing roles has provided a vocabulary to allow a deeper discussion of the evolution that is occurring in HR. Nobody would argue that the day-to-day operational focus is not important. When this is done well, nobody notices; yet, if it is fouled up it leads to a lot of attention, lawsuits, or even front-page headlines. This is also most often the content for the “outsourcing of HR.” Let us take some license with Ulrich’s model by adding more detail. The four role definitions are fully described in the *HR Champions* book, to which we have added the further detail of 16 accountabilities for which HR is typically held responsible. In

Exhibit.1 have sorted these 16 accountabilities into the four roles so we can explore and differentiate the

transactional parts of HR (ripe for outsourcing in some way) and the transformational parts of HR (essential for adding value to the organization, and key to the internal consulting role). In addition, the 16 accountabilities can be placed on a graph in which the horizontal axis is time (over the last 100 years) and the vertical axis represents HR's impact on or contribution to the business (from limiting liability and protecting against the downside of usually legally mandated things, up to adding value and maximizing the upside of a strategically differentiated employment proposition). Exhibit 5 shows the result of this analysis; note that the author published an earlier version of this summary (Vosburgh, 2004).

Exhibit. 1 Role of Players in Human Resource Accounting



Source: evolution of HR, Richard M. Vosburgh, MGM MIRAGE

However, in order to estimate and project the worth of the human capital, it is necessary that some method of quantifying the worth of the knowledge, motivation, skills, and contribution of the human element as well as that of the organizational processes 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, Flamholtz'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.

Table 3. Approaches to Human Resource Accounting

a) Cost based approaches:	i) Historical Cost ii) Replacement Cost iii) Opportunity Cost iv) Standard Cost
b) Monetary Value based approaches:	i) The Lev and Schwartz Model ii) The Eric Flamholtz Model iii) Morse Model
c) Non-Monetary Value-based approaches:	i) Likert Model ii) The Flamholtz Model iii) Ogan Model

Role of Human Resource Accounting in HR

It is true that worldwide, knowledge has become the key determinant for economic and business success, but Indian companies focus on 'Return on Investment' (ROI), with very few concrete steps being taken to track 'Return on Knowledge'. What is needed is measurement of abilities of all employees in a company, at every level, to produce value from their knowledge and capability. "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,” says P K Gupta, the director of strategic development-intercontinental operations, of Legato Systems India. Organisations can actually find out how much they can earn from an individual, as the intellectual assets of a company are often worth three or four times the tangible book value. Human capital also provides expert services such as consulting, financial planning and assurance services, which are valuable, and very much in demand.

Human resource accounting and the Indian practice

India like the rest of the country has not given much consideration to issues related to human resource accounting. In India this concept is struggling for acceptance and has not been introduced so far as a system. Indian companies do not require company to furnish information related to personnel cost in their annual report. However in the past decade there has been a growing trend toward measurement and reporting of human asset. Human resource accounting was first used in public sector by Bharat Heavy Electrical Ltd (BHEL) in fiscal year 1972-73. Later other organization both in public and private organizations started to furnish information related to human resource in the annual report. Some of organizations include;

- Infosys
- Bharat Heavy Electrical Ltd (BHEL)
- Reliance Industries

To assess the growth and use of human resource accounting in India various companies both from private and public sector will be used. An analysis of this company will help in understanding the use of various HRA models discussed earlier and to find out

whether information generated by HRA can be used to influence the decision of various users of accounting information. In addition an analysis of this company will help determine the way through which human resource accounting can be introduced in India.

Infosys company ltd

The company recorded an increase in income from Rs 15,648 crore in 2008 to Rs 20,264 crore in 2009. In 2009 the company reported a profit before tax of Rs 5,819 crore compared to Rs 4,470 in 2008. The earning per share increased from 78.25 to 101.65. There was also a growth in book value and profit before interest and tax. However market capitalization dropped from Rs 82,362 in 2008 to Rs 75,387 crore in 2009.

Infosys was the first company to value its employees in India. The software company did the first valuation in fiscal year 1995-96 using Lev & Schwartz model. The value of its 1,172 employees was Rs 1.86 billion. The company has always considered employee as critical to organization success and therefore the introduction of human resource accounting will further help the organization to focus on its workers. Murphy, the managing director of Infosys has supported HRA saying that "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."

As stated earlier Infosys technologies limited use Lev and Schwartz to value the company's human resources. The value of employee is taken as the present value of the future earning of workers. In

computing the present value of employees the following assumption are made.

1. Employee compensation comprises of indirect and direct benefit and includes income earned in India and abroad.
2. Incremental earning based on age or group
3. Discount rate/cost of capital of 12.18% and 13.32% the previous year.

As indicated above the total value of human resource increased in 2009 compared to 2008. However the value of human resource per employee decreased from 1.08 in 2008 to 0.97 in 2009.

Bharat Heavy Electrical ltd (BHEL)

The company was the first to report data on human resource in India and has continued to furnish information relating to personnel cost in its annual report. The company uses Lev & Schwartz model in valuing its human resource with the following assumption (Patra et al 1987).

1. Normal career growth according to present policies. If any vacancy arises it is filled with a level immediately below.
2. The present pattern of employee compensation is followed. This includes both direct and indirect benefit as well as the effect of wage revision.
3. Weightage for change in efficiency due to skills, experience and age.
4. A discount rate of 12% is used in calculating the present value of employees.

Reliance industries

It is the largest private sector player in the upstream oil and gas exploration and production sector. The company was the first in private sector to cross US\$ 1 billion mark in net profit and is ranked among the top 150 in profit generation. In financial year 2003/04 the company reported a net profit of US \$1,180. During the same year the market capitalization of the company was US \$ 17.2 billion (Rs 75,132 crore), making it the most valuable private company in India. This indicates that engineers comprise the highest number of staff in the organization. Furthermore majority of people in the organization are between 26 -35 years.

The future of human resource accounting in India and the rest of the nations may be linked to the balanced score card. In today's business application human resource accounting suffers due to the fact that it is not grounded in business strategy. When a balance score card is linked to human resource accounting this problem would be solved (Kaplan & Roll, 1972). In addition the measures developed within human resource accounting will be utilized by the balanced score card particularly in the area of learning and growth perspective which deal with measures such as skill sets, employees satisfaction, employees retention etc.

Conclusion

Human resource accounting provides quantitative information about the value of human resource, which helps the top management to take decisions regarding the adequacy of human resources. Based on these insights, further steps for recruitment and selection of personnel are taken. Outside the

organization, quantitative data on the most valuable asset has an impact on the decision of investors, clients, and potential staff of the company. When proper valuation and accounting of human resources is not done then management may not be able to recognize the negative effects of certain programs, which are aimed at improving profit in the short run. If not recognized on time this programs could lead to fall in productivity levels, high turn over rate and low morale of existing employees.

The HR Accounting system tries to evaluate the worth of human resources of an organization in a systematic manner & record them in the financial statement to communicate their worth with changes in time& result obtained from their utilization to the users of the financial statement. Hence, looking at the importance of HRA, now it is required under law & Government guidelines, for undertakings, to maintain a separate item in their balance sheet about such HR activities undertaken by them. Hopefully in future the HR practioners that budding leaders of future enterprises would work together to use HRA in every organization, which has helped to a great extent in differentiating humans from mere operators of machines to intellectual capital. The journey has thus begun as HRA is in its infancy & there are miles to go.

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