# THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

# **Human Resource Accounting: Evolution and Challenges**

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#### Abstract

It is fact that the 21<sup>st</sup> century is era of Human demand, countries those have labor quality ruling the world with dominant technology. Countries like china and Japan forerunners in technology advancement, is all result of work force performance. Hence whole world realized that human resource is the real investment into business ventures that should only catch and stick the success waves. It can be said that INFOSYIS, Bharat heavy Electrical Ltd (BHEL), DR.REDDY'S and Steel Authority of India Ltd (SAIL) are ever profit generators because recognized value of quality of labor and ordered peak priority so as company's yields ripped fruits with assistance of ripped force (quality employees) and can stand against any business storm and cope up effectively. Human resource accounting is the process of identifying and reporting the investments made in the human resources of any institution that are currently not accounted for in the traditional accounting system. Simply, it is an expansion of the Accounting Principles of organising data to communicate relevant information and of matching the costs and revenues. Even though, many benefits have contributed by HRA, yet its growth and applicability in various industries has not been encouraging. Because Indian companies act 1956, does not provide any scope for showing any information about human resources in financial statement.

Keywords: Human Resource Accounting, Evolution, Challenges, Models

#### 1. Introduction

The past few decades have witnessed an overall transition from manufacturing to service-based economies. The importance of service sector and its contribution in a country's economic development is increasing day by day in this era of globalization. The most vital part of any organisation in this era is, 'Human resource'. Nowadays human resources are the most considerable part of any organisation to achieve the desired goals successfully.

Human resource accounting is the concept of recent origin and is struggling for wide acceptance. It involves accounting for expenditures related to human resources as assets as opposed to traditional accounting which treats these type of costs as operating expenses that reduces firm's operating profit. According to the American Accounting Association's Committee on Human Resource Accounting (1973), "It is the process of identifying and measuring data about human resources and communicating this information to interested parties." Thus, HRA involves measurement of all the costs related with the employees such as expenses incurred for recruitment, placement, training, development etc. Moreover, it involves the assessment of the employees' economic value.

The current environment having wide acceptance of International Financial Reporting Standards (IFRS) have encouraged the consideration of non-traditional approach towards the human resources. There is a possibility that future financial reports may include more and more non-traditional measurements—such as value calculated—of human resources using various HRA models. This paper provides a brief overview of the evolution of human resource accounting and its popular models.

#### 2. Objectives of the study

The study focuses on the following objectives:

- To provide a brief overview of the evolution of human resource accounting.
- To explain the models present
- To enumerate the challenges in the application of HRA.

# 3. Review of Literature

This section provides a review of the existing literature in the field of Human Resource Accounting.

Singh and Gupta (2010) concluded that Human Asset Value is composed of both qualitative and quantitative variables. Also, the difference between average of total human resource value and average value of an individual shows that the various organizational and environmental factors have an influence on the value of human resource of an organization along with individual's contribution. The organization having lower labor turnover and higher output per employee have

- the higher value of their human resource as compared to others because, the low labor turnover index and high output per employee has a positive effect on the Organization's human resource value.
- Pandurangarao. et. al (2013) observed that even valuing human resources appear to be important to Indian organizations, most organizations do not value their human resources and plans to implement valuation of human resources are at a very early stage. Cherian and Farouq (2013) examined that the task of assessing the human resources is daunting. There are no precise evaluation measures to assess the human resources. However, by measuring these intangibles even though imprecise, it will help improved decision making on evaluating the value of the firm.
- Rahman, Hossain and Akter (2013) stressed that in the future, the reporting of the information related to Human resource accounting in the financial statements may be compulsory. Hence, the focus for policy should be to develop preeminent model for valuing Human capital; establish guidelines for reporting and encourage compliance with said guidelines. Islam, Kamruzzaman & Redwanuzzaman (2013) examined the benefits and constraints of human resource accounting. They asserted that the major benefits are that HRA brings effective managerial decision making, improves quality of management, increases the productivity of human asset, prevents misuse of human resources, boosts morale, increases job satisfaction and creativity, etc. The constraints involved are that the uncertainty of human resources creates uncertainty in valuation of human resources. Nature of amortization is another difficulty, valuation of human resources, their accounting treatments is also difficult as there is no specific IAS/IFRS for such treatment.

#### 4. Evolution of HRA

According to Falmholtz (1999), the development of HRA as a systematic academic activity began in sixties. He divides the development process of HRA in five stages.

- Stage-1: (1960-1966)
  - In this period, the HRA concepts were primarily derived from other management studies such as psychological theories of leadership, economic theory of capital, the concepts of human resources etc. This was the beginning of the academic interest in HRA.
- Stage-2: (1966-1971)
  - During this era, the main concentration was on developing the various models of HRA. There was a need of HRA models, which could help the management bodies in assessing and managing the human resources of their respective firms. Especially, a number of research projects were undertaken to develop the methods and models of HRA, by the researchers being inspired by Roger Hermanson.
- Stage-3: (1971-1976)
  - There was a rapid growth of research in the field of HRA during these yearrs. The prime focus was on the problems of application of HRA in various organizations.
- Stage-4: (1976-1980)
  - The issues related to application of HRA were being more and more critical and needed much wider and deeper researches in this field. Though the organizations were impressed with HRA, they didn't found it needful to invest big amounts in this type of researches. So, the progress of this concept was slow during these years.
- Stage-5: (1980 onwards)
  - After 1980, more and more economies were shifting from manufacturing to service economies. They felt the need for having consideration towards human assets. This change was obvious because the growth and profits of most of organizations were being more and more dependent on the intellectual assets than on the physical assets. So there was a sudden zoom in attention towards the HRA after 1980.

This resulted in the shift of focus from the academic application to the greater application of HRA to management. Today, the intellectual capital is believed to be a strategic resource and therefore, the clear estimation of its value is now very important. The increased pressure of ethical issues and codes of conduct demanding for transparency in accounting have helped the need to develop the methods of measuring value of human assets.

# 5. Human Resource Valuation Approaches followed by companies in India

Even though, many benefits have contributed by HRA, yet its growth and applicability in various industries has not been encouraging. Because Indian companies act 1956, does not provide any scope for showing any information about human resources in financial statement. Due to the development of business and industries, some of the Indian companies, both public and private, value their human resources and report this information in their annual report. The companies, who are presently reporting human assets valuation, include Bharat heavy Electrical Ltd (BHEL), Steel Authority of India Ltd (SAIL), Oil and Natural Gas Commissioning (ONGC), Oil India Ltd, Project and Equipment corporation of India.(PEC), Engineers India limited, Mineral and Metal trading Corporation of India.(MMTC), Electrical India Ltd., Hindustan Shipyard Ltd, Cement corporation of India (CCI), Infosys Technologies Ltd., Tata Engineering and Locomotive Works, Southern Petrochemicals Industries Corporation Ltd (SPIC), Associated Cement Company Ltd (ACC), National Thermal Power Corporation Ltd (NTPC). Human resources have been given much priority in the present service sector since they have identified its importance. In order to quantify the talent, skills and knowledge of employees or workforce various models were suggested. Some of the models to valuation of Human Resources are:

#### 5.1. Historical Cost Method

This method was developed by William C.Pyle and adopted in 1969 by R.G.Barry Corporation, a

leisure footwear company in Columbus, Ohio, USA. Historical cost method calculates actual cost incurred on recruiting, selecting, hiring and training and development of human resource (HR) which is equal to the value of workforce. The economic value of HR increases overtime and they gain experience. However, according to this model, the capital cost of HR decreases through amortization.

#### 5.2. Replacement Cost Model

According to this model the value of employee is estimated as the cost of replacement with a new employee having equal ability and efficiency. There are two costs, individual replacement cost and positional replacement cost in this model. Cost of recruiting, selecting, training and development and familiarization cost are account in individual replacement cost. When a employee present position to another or leave the organization cost of moving, vacancy carrying and other relevant costs reflect in individual replacement cost. Positional replacement cost refers to the cost of filling different position in an organization and this model is highly subjective in nature.

#### 5.3. Opportunity Cost Model

Opportunity cost is the maximum alternative earning that is earning if the productive capacity or asset is put to some alternative use. Quantifying HR value is difficult under this method. Because alternative use of HR within the organization is restricted and at the same time the use may not be identifiable in the real industrial environment.

#### 5.4. Stochastic Rewards Model

Stochastic Rewards Model was developed by Eric G.Flamholtz. This model identified some major variables that are help to determine the value of an individual to the organization. He determined the movement of employees from one organization to another as Stochastic Process. Eric G.Flamholtz suggested different approaches to assess the value of HR of the company in this model. In order to quantify human resource value the period any employee work in the organization, role of employee and value of present position are determined and discounted expedited service rewards.

To be precise an employee value is the product of individual conditional value and the profit that the individual offers to the organization in his/her service life. The conditional value comprises of productivity, transferability and promotability, skills and activation levels are also the determinants of an individual"s conditional value.

Flamholtz has measured the expected realizable value of an individual as

$$E(RV) = \sum_{i=1}^{n} y \left[ \sum_{i=1}^{n} \left( R_t * \frac{P(R_t)}{(1+r)^t} \right) \right]$$

Where

E (RV) = expected realizable value

 $R_t$ =Value derived by an organization in each possible sate

 $P(R_t)$  =Probability that the organization will have  $R_t$ 

t= time

n= state of exit r= discount rate i=1,2,3.....

#### 5.5. Sk. Chakra Borty Model

Sk. Chakraborty of Indian institute of management Calcutta was the first Indian to attempt at valuation of resources. This model was similar to historical cost model, he noticed the cost of recruiting ,learning, selection, training and development of each employee should considered for acquisition cost method of valuation and be treated as different revenue expenditure, this is subject to gradual written off.

The balance, not the written off amount, should be shown separately in the balance sheet under the head of investment. To derive the present value of HR average feature tenure of employment of employee's and average future salary should discounted at an appropriate rate, it is shown as investment in the asset side of balance sheet which is to be added to the capital employed in the liability side.

separate valuation can be made for managerial and non- managerial employee the discount calculate the present value should take as expected average after tax return on capital employed, taken from the conventional balance sheet. The chakraborty model basically considered a combination of acquisition method and present value.

$$V = \sum_{i=1}^{n} \left\{ N_i * \frac{AS_i}{(1+k)^n} \right\} + AC$$

#### Where

- V= Value of a category of employee
- N=Number of employees
- AS= average annual pay
- K= after tax return on capital employed
- i=1, 2, 3.....n years (average tenure of employment)

#### 5.6. Lev and Schwartz compensation model

This model developed in 1971 by Lev and Schwartz for valuing human resources. Lev and

Schwartz model is popular for calculating the value of HR used by public sector like SAIL and BHEL. It is based future earnings of an employee till his retirement. According to the model value of human assets is estimated for a person at a given age which is the present value of his remaining future earning from his employment and this represented by the following.

$$V_r = \sum_{t=r}^{T} \left\{ \frac{I(t)}{(1+r)^{t-r}} \right\}$$

#### Where.

V<sub>r</sub>= value of an individual or r years old

I(t)= the individual"s annual earnings up to retirements age

T= retirement age

r= discount rate specific to the person t= active year of service

The model categorized whole work force in the various homogenous groups such as unskilled, semi-skilled, technical staff, managerial staff and so on and also into different age groups. By using the formula calculated average earnings for different classes and age groups and present value of HR.

Lev & Schwartz also recommended the use of cost of capital of the organizations for the purpose of discounting the future earnings of the employees to arrive at the present value. They recognized individual employee's economic value to the organization.

## 6. Challenges in the adoption of HRA

It would have been much better if we could have such a well developed and highly accepted model to recognize and report Human Resource in the Balance Sheet of an organization. Even though gradual development has been witnessed in this field, still the new approaches and models are being given. There are several methods and models currently in use to determine the value of an individual such as cost approach and the economic value approach. But none of these models is free from sizable limitations. Valuing human resource is not so easy rather it is very tough task because of various reasons. Some of the reasons are:-

- There is no proper clear cut and specific procedure or guidelines for finding costs and value of human resources of an
  organisation. The systems which are being adopted have certain drawbacks.
- Models so far developed reveals that without considering the regular pay amount no model for valuing human capital
  yet possible. So any model adopted for computing human value will give the scope of fraudulently reporting
  moderately skilled persons as highly skilled by offering them a higher regular pay package.
- The period of existence of Human Resource is uncertain and hence valuing them under uncertainty in future seems to be unrealistic.
- The much needed empirical evidence is yet to be found to support the hypothesis that HRA as a tool of management facilitates better and effective management of human Resources. Management can take their decision on performance measurement.
- As human resources are incapable of being owned, retained, and utilised, unlike the physical assets, there is a problem for the management to treat them as assets in the strict sense.
- There is a constant fear of opposition from the trade unions as placing a value on employees would make them claim rewards and compensations based on such valuations.
- In spite of all its significance and necessity, the Tax Laws don't recognise human beings as assets.

- There is no universally accepted method of the valuation of Human Resources.
- Now a day's technology has been changed. So human may be replaced by technology to a large extend. For decision we have AIS, MIS, DSS, ESS, Artificial intelligence.
- Self created goodwill also bring benefit to the organization, but we don't show this goodwill as assets in the balance sheet.
- Employees of an organization are its resources or not are reflected in the statement of financial performance trough earning profit or incurrence of loss.
- The output of human skill is the research and development; costs incurred in relation to this are currently capitalized as per IAS 38.
- In case operating lease we use the capital assets of other and pay the charge for using it. Similarly we are hiring the employee and paying for their skills.
- Evidence are there because of fraudulent activities of human deployed the organization collapsed. So how such human can be an asset to be recognized in the balance sheet?
- To apply HRA it is required to be backed by Human Resource Auditing.

#### 7. Conclusion

Assets are resources from which future economic value will flow to the entity. As an employee of an organization will not merely work for a single year, it seems rational to account for employee as an asset in the balance sheet on the ground that they will provide future economic benefit to the entity. Moreover, charging the cost of recruiting, Training and Development of the employee in the profit and loss account for a single period goes in contrary to the expense recognition principle of accounting. Like other physical assets as the incurrence of these costs gives benefit through more than one fiscal period, amortizing these costs over the benefit deriving period is highly accepted. So until and unless a sophisticated and accepted model for valuing human capital is developed, it will be worthwhile to capitalize and amortize the cost of recruiting, selecting, formal and informal training and, formal and informal familiarization. The amortization will be over the expected service period. This solution is in line with the existing historical cost approach.

Given the view expressed by both academicians and policy makers that the traditional financial reporting system not makes the grade to provide investors with value- relevant information, it may well be that in the future, the reporting of information related to Human resource accounting in the financial statements may be mandatory. Hence, the focus for policy should be to develop preeminent model for valuing Human capital; establish guidelines for reporting and encourage compliance with said guidelines.

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