

# Human Resource Accounting: Practical Challenges in Recognition, Measurement, Accounting Treatment Procedure and a Possible Way Out.

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**Abstract:** Human resource accounting (HRA) is the process of identifying, measuring and communicating data regarding human resources to the interested parties for pertinent decision making. Human resource is very vital component to run an organization efficiently and effectively and hence it is imperative to include all the transactions relating to human resources under conventional accounting practices, though there exist a constant debate among the academicians, accountants and standard setters as how to derive appropriate way out to recognize, measure and accounting treatment procedure of human resources and thus it becomes the real challenge of HRA. The present study aims to focus on practical challenges of HRA by bringing the views of different researchers on this concept, its practicability and valuation methods. Descriptive and content analysis were used through documented texts and journal articles in conducting the study. This paper proposes a way out of the challenges of HRA in line with the existing framework of accounting that can aid the standard setters and accountants.

**Keywords:** Human Resource Accounting, Human Capital, Human Resource Valuation Models, HRA Implementation Challenges, Intellectual Capital.

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## I. Introduction

In today's competitive business world, success of any organization largely depends upon the efficient and effective human resources. It is the human knowledge and their efforts that lead the organization towards success. HRA is a new affiliate of accounting. American Accounting Association (1980) has defined HRA as follows: "HRA is the process of identifying and measuring data about human resources and communicating this information to interested parties" [1].

The traditional concept of HRA is that all expenditure on human capital formation is taken as a charge against the revenue of the period as it does not create any physical or financial asset. Modern view is that cost incurred on human resources need to be capitalized as it provides benefits commensurable in monetary terms. Measurement of cost and value of the human to organization is very important, costs incurred in recruitment and selection; training and development of employees along with their economic values are very much relevant for HRA. The challenge is how to ascertain the economic value of the people to the organization and various cost based measures to be taken for human resources. The investment related to employees and the value generated by them is the main two components of HRA. All costs incurred in increasing and upgrading the employees' skill sets and knowledge of human resources are called investment in human capital. The output that an organization generates from human resources is regarded as the value of human resources.

Thus primarily HRA is involved in measuring the various aspects related to human assets. Its basic purpose is to facilitate the effective management of human resources by providing information to acquire, develop, retain, utilize and evaluate human resources and to help the stakeholder to take critical investment decisions. A little effort has been made by the researchers in this field to develop models for valuation of human resources, whereas most of the models so far developed are not free from major limitations and practical challenges. In this paper it has been tried to surface the lacking of several proposed models and based on that a good number of HRA implementation challenges has been identified and some suggestions have been put forth to overcome those challenges. Thus the present study contributes to the existing literature on HRA by identifying the practical challenges and by proposing some way outs in this regard.

## II. Concept of HRA

The concept of human resource accounting can be basically examined from two dimensions

- a. The investment in human resources (cost)
- b. The value of human resources (benefits)

The expenditure incurred for creating, maintaining and updating the human resource quality is known as investment in human resources. Such investment yields fruitful outcomes like higher productivity and higher

income to the organization. The outturn that investment in human resources propagates will be considered as the basis of human resource value. Human resource accounting is the art of valuing, recording and presenting the work of all human resources in accounts of an organization.

### **III. Objectives of HRA**

The major objectives of HRA are as follows:

- Identification of human resource value.
- Measurement of the cost and value of people to organization.
- Provide cost-value data for managerial decision regarding acquiring, developing, allocating and maintaining human resources so as to attain cost-effective organizational objectives.
- Furnish potential investors with a more comprehensive and realistic picture of the organization's financial strength. (Hicks and Gullet, 1987) <sup>[2]</sup>.

### **IV. Objectives of The Study**

- To review the available models of HRA in order to unveil their strengths and weaknesses.
- To highlight the major characteristics of HRA along with the practical challenges in implementation.
- To understand the needs and significance of HRA in the context of business performance measurement.
- To provide suggestions for developing such accounting practices in our business enterprises.
- To propose a solution in line with the existing framework of accounting that could be adopted by the standard setters.

### **V. Methods And Procedures Followed**

This study is qualitative in nature based on extensive review of relevant studies done earlier on various aspects of HRA to get clear idea about the theme of the study in line with the objectives mentioned above.

### **VI. Literature Review**

According to Hai Ming Chen and Ku Jun Lin (2004), human capital plays a pivotal role in generating competitive advantages for many companies today. However, under traditional accounting practices, all forms of expenditures on human resources are considered as expenses, which are deducted from revenues, thus misleading decision-makers into fallacious judgments <sup>[3]</sup>.

According to G. S. Batra (1996), the human resource valuation system to be a complete system of accounting, it must follow an equally competent auditing system. Application of HRA, therefore, must also be followed by a separate HR audit to ascertain the authenticity and fairness of manager's performance to the overall interest of the organization <sup>[4]</sup>.

According to Shraddha Verma and Philip Dewe (2004), in order to improve the theoretical and practical level of HRA, more research on valuation methods and models and the practical implications of these is necessary by engaging both human resource and accounting professionals <sup>[5]</sup>.

Robin Roslender and Robin Fincham (2001) found that the measurement and reporting of intellectual capital has developed an increasing interest among the accounting researchers prompting a lively and comprehensive debate <sup>[6]</sup>.

Flamholtz et al. (2003) found that employee's participation in a management development program increased the value of the individuals to the firm by utilizing the HRA measure of expected realizable value. Authors further noted that HRA measures provided upper level management with an alternative accounting system to measure the cost and value of people to an organization <sup>[7]</sup>.

According to Punita Jasrotia (2002), although it is common for most firms to show elaborate information about their tangible assets like plant and machinery, land and building, transport and office equipments, there exists no formal record of investment in employees. Human resource accounting (HRA) that includes measurement and reporting of the cost and value of people as organizational resource is still to become an accepted trend in the Indian IT industry <sup>[8]</sup>. Despite research on HRA has been conducted for several decades, specific methods of HR cost and values still remains in the embryonic stage.

### **VII. Models And Methods For Valuation Of Human Resources**

Different models have been developed for valuing human resources. Some of the models to valuation of human resources are:

#### **7.1 Historical cost method**

The first exertion towards employee valuation made by a foot ware manufacturing company R.G. Barry Corporation of Columbus, Ohio with the help of Michigan University in 1967. This method measures the

organization's investment in employees using some parameters: recruiting, acquisition; formal training and familiarization; informal training and informal familiarization; experience; and development of human resource which is equal to the value of workforce. In this model, instead of charging the cost to "Profit and Loss Account" it should be capitalized in balance sheet.

Cost are amortized over expected working lives of individuals or shorter and unamortized cost written –off to profit and loss account, for example an individual leaving the company, his experience becomes obsolete or his health impaired, on recommendations of operating managers from their quarterly review of their staff balances. Thus, the capital cost of HR decreases through amortization. This method is the only method so far proposed of human resource accounting which complies with the basic concepts of conventional accounting.

Limitations of Historical Cost model

- The valuation method is based on false assumption that the dollar is stable.
- There is no independent check of valuation of human resources because this asset cannot be sold.
- It takes into account only a part of the employees acquisition cost and ignores the aggregate value of their potential services.
- Because of the above problem, it will be difficult to determine a precise rate of amortization. A question may arise as to whether it should constant, increasing or decreasing.
- The economic value of human resources increase by gaining experience. But under this method, the capital cost decreases with amortization. The question arises as how the difference could be reconciled.

### **7.2 Replacement cost method**

This method is proposed by Renis Likert (1967). According to this model the value of employee is estimated as the cost of replacement with a new employee of equivalent ability and efficiency. Replacement cost includes recruitment, selection, compensation and training cost including the income foregone during the training period. This method is useful in deciding whether to dismiss or replace the employee <sup>[9]</sup>.

This method has been simply put by Walker as "People are worth what they cost to replace on the open market". As a better approach to historical cost where people may be worth more or less than was actually paid out, the replacement cost concept asks, if all employees were replaced tomorrow what would it cost to replace them at their present level of competence? (Walker, 1995) <sup>[10]</sup>.

Limitations of Replacement Cost Method

- This method does not reflect the knowledge competence and loyalties concerning an organization that an individual can build over time.
- It is difficult to find out the cost of replacing human resources and different persons may arrive at different estimates.
- It is not always possible to find out the exact replacement of an employee.
- This method may lead to an upwardly biased estimate because an inefficient firm may incur greater cost to replace an employee.

### **7.3 Present value of future earnings method**

According Baruch Lev and Aba Schwartz (1971), the future earnings of various groups of employees are estimated up to the age of their retirement and are discounted at a predetermined rate to obtain the present value of such earnings. This model gives somewhat realistic assessment of value of human resources <sup>[11]</sup>. Gogo (1987) described it as discussing on the estimated future earning streams or net contribution of human resources to an organization at a discounted value. It therefore encourages dark guess of the estimated period an employee would remain in the organization <sup>[12]</sup>.

Limitation of Present Value of Future Earnings Method

- This model does not give correct value of human assets as it does not measure their contributions to achieving organizational effectiveness.
- This model doesn't suggest how value of human resource should be recorded in Books of Accounts.
- This model takes wages & salary as a basis of value of human resource but value of human resource is not limited only to the extent of cost incurred on them.
- It ignores the probability that people may make role changes during the career. For example Assistant Manager will not remain in the same position throughout his expected service life in an organization.
- The model ignores the possibility and probability that individual may leave an organization for reasons 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.
- The model is an objective one because it is widely based on statistics such as census income return and mortality tables.

- A person's value to organization is determined not only by the characteristics of the person himself (as suggested by Lev and Schwartz) but also by the organizational role in which the individual is utilized. An individual's knowledge and skill is valuable only if these are expected to serve as a means to given organizational ends.
- The measure assigns more weight to averages than to the value of any specific group or individual.

#### **7.4 Competitive bidding method**

Competitive bidding method also called value to the undertakings by Heikman and Jones (1967) proposed that where an undertaking had several divisions seeking the same employee, then the employee should be allocated to the highest bidder and the bid price incorporated in that division's investment base <sup>[13]</sup>. For example the value of a professional footballer's service is often determined by how much money a particular team, acting in an open competitive market is willing to pay him or her.

#### Limitations of Competitive Bidding Method

- The prevalence of this valuation however depends on the information, judgment and impartiality of the bidder divisions.
- There is a difficulty in determining the bidding and how to determine the time limit for the bid.

#### **7.5 Opportunity cost model**

It is based on a conceptual economic approach, which is the value of an employee, in this case, in his best alternative. That is, valuation of human resources should be based on the worth of labor in terms of the value an employer is prepared to pay in an alternative company or industry. 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.

#### **7.6 Model of HRA proposed by Ravindra Tiwari**

This model prescribes HRA approach for two types of employees:

- a. Employees, who are key decision makers such as – MD, CEO (top executives).
- b. Employees, who execute the decisions taken by key decision makers.

In both cases, valuation should contain three parts which are as follow:

1. Real capital cost part.
2. Present value of future salary/wages payments.
3. Performance evaluation part.

First two parts will be same for both cases. Valuation for second part will be according to Lev and Schwartz method. Third part is different for both cases and reflects performance for that employee <sup>[14]</sup>.

#### Limitations of Ravindra Tiwari's Model

- Calculation process is lengthy and cumbersome.
- Lev and Schwartz valuation principles has been used at one point of time, so this model contains weakness of the Lev and Schwartz model.
- This model used net profit to quantify the value of human capital where this net profits itself in not a true amount because of limitation of accounting i.e. estimation, various method of depreciation. Moreover an organization may incur loss for some period.
- Another drawback of this method is that extra revenue is used to quantify the value of human resources this extra revenue may not be because of the talents of the employees rather it may be for some other reasons like volume of unit sold is higher than before, customer's choice might have been changed, capital gain on sale of fixed assets.
- This model assumes that one employee will not work in a same position, it's true. Hence he used different amount considering promotion to discount and get NPV of earnings to value the human capital of an organization. How unrealistic is that! For example, there are 50 executives working for an organization. Will all these 50 executives once be the manager of that company where the post of manager to manage these 50 executives is 6 only?
- Again this method measures mainly the costs to the organization at present value but failed to measure in a justified manner the value of the employee to the organization.

### **VIII. Challenges of HRA Implementation**

- Absence of specific procedures and guidelines for determining the cost and value of human resources makes it untenable to implement HRA in an organization.

- Existing models developed so far have come to a conclusion that, development of human capital model is subject to the consideration of regular pay amount paid to the employees. This condition leaves the scope of fraudulent reporting of a moderately skilled person as a highly skilled employee by offering them a higher regular pay amount.
- Since we don't know the exact period of existence of human resources, so valuing them under uncertainty in future seems to be unrealistic.
- The hypothesis that HRA is an effective tool for managing human resources better is supported by only on anecdotal evidence not by empirical evidence.
- Human being can't be owned, utilized and retained like other physical assets. They, therefore, can't command any value.
- It is likely that HRA may lead to dehumanizing and manipulations in employees. For example- A person having low value may feel discourage and thus, in itself, may affect his competency in work.
- The valuation of human resources depends on a large number of abstract factors not measurable precisely on monetary terms. Hence the valuation lacks objectivity and preciseness.
- The key challenge of reporting human capital externally is that, reported information could be sensitive and the reporting company could view it as something that should not be shared externally, as it may give important insight to competitors or could lead to a negative interpretation to different stakeholders.
- Human being is not recognized as asset under Tax Law in spite of its significance and necessity.
- Trade unions are in fear and opposing the valuation of employees since they must claim their rewards and compensations based on such valuations.
- Individual employee's goodwill also brings benefits to the organization, but we don't show this goodwill as asset in the balance sheet.
- IAS/IFRS/BASs does not provide any guidelines for the treatment of HRA approach.
- The nature and form of amortization to be followed is yet to be fixed up.
- Evidence exists that an organization collapsed due to deceitful activities of human employed there. So how such human can be an asset to be shown in the balance sheet?
- Proper Human Resource Auditing is required to apply HRA.

### **IX. Possible Way Out**

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 a basic accounting principle i.e. expense recognition principle. 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. Adjustment of human assets accounts becomes necessary in certain cases. Steps in accounting for Human Resources are as follows:

Step-1: The first step is to capitalize the cost of recruiting, selecting, formal training and familiarization, informal training and informal familiarization. Costs in these HR areas should be treated as assets if the expected benefits from them relate to future time periods.

Step-2: The second step is to amortize the cost incurred by an organization on its employees for recruiting, hiring, familiarizing, training and developing them. It involves measurement of that portion of the human assets service carrier, which is consumed during a particular accounting period.

Step-3: The third step is to appreciate the value of employees at a specific rate every year. This is because human resources appreciate in value over years because of their experience.

Step-4: The forth step is to adjust human assets accounts because of any of the factors, i. e. bad health, early retirement plan, technological obsolescence. The human assets need to be adjusted because of these material changes in an organization. This amortization of human assets is analogous to a write-off of physical assets.

On the other hand, salaries and wages should be debited in the year of payment because it is revenue expenditure and the compensation for services of that year.

### **X. Conclusion**

The central problem in HRA is recognition time and procedure of recognizing human resources. Our Companies Act, 1994 does not provide for valuation of human resources. As a result, to our business management, disclosure of such information has become voluntary. The focus for policy should be to develop preeminent model for valuing Human Capital; establish guidelines for reporting and encourage compliance with said guidelines. The model yet proposed to quantify human resources lacks the acceptability, this might suggest a willingness to recognize the need for and consider the measurement and use of proposed solution where acquiring and development cost are capitalized, then amortized over the service period and lastly adjusted the human assets accounts because of any material change in an organization which are related with human assets.

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