"Employees on the Balance Sheet" Revenue Based Model in Human Resource Accounting–An Empirical Study

Uma Hattikal[1], Dr Prakash M[2]

[1]PhD Research Scholar, Jain University, Bangalore, India

[2]Director of studies, Sheshadripuram Education Institutions

Abstract: *Human Resource is the most valuable asset to any organisation. Unlike other assets people are the only greatest potential liability. Organisations are comprised of three types of major assets that are necessary for an organisation's ability to produce goods and services namely, Financial Assets, Physical Assets and Intangible assets. Intangible assets include intellectual capital (product patents, Product designs, and process technology), goodwill and Human Capital, Which is most valuable intangible asset. Human capital is not just the people working in an organization. It's broad combination of their experience, attitudes, abilities, culture education, knowledge which contributes for the success of the organization. Human resource is the most vital part of any organization, as it makes sure there exists a symbiosis between financial and all other physical resources towards the achievement of organizational objectives and goals. Conventionally, financial assets are accounted in the books of accounts as per the general principles of accounting, but does not count the human asset. The physical assets like land, building, plant and machinery are recorded in the books of accounts at their purchase price. Now, depreciation on these assets is considered as the cost for the particular year and debited to profit and loss accounts and the remaining balance is shown in the balance sheet as written down value of the assets. Hence, on similar lines the human resources should also be evaluated, recorded in the books, operated and disclosed in the financial statements. In this paper it is elaborately discussed about the objectives and process of HRA in the Indian context. The basic objective of the paper is to study the Human Capital which is the most important intangible asset and how it affects an organisation's productivity, Human Resources Accounting practices, to identify the issues and challenges, to examine these issues and challenges and lastly, to give suggestions based on the findings of the study.*

Keywords: Human Capital, Physical Assets, Human Resource Accounting (HRA)

1. Introduction

Human Resource Accounting is a Process of Identifying and Measuring data of Human Resources and Communicating this Information to ten interested parties. It is an attempt to identify and report the Investments made in Human Resources of an Organisation that are currently not accounted for in the Conventional Accounting practices.

Man, money and material are three basic factors of production for any business enterprise. Management consistently tries to increase their profitability by reducing the cost and increasing the productivity of these three components of production. In recent times it has become quite challenging due to the intense competitive situation around the world. At strategic level there are numerous mergers and acquisitions, procurement of fund through innovative instruments, diversification in products and territory and all possible measures to synergize capabilities. At the operational level a persistent nurturing of these factors of production leads to better results.

Even though many efforts have been made by thinkers in this field, a suitable and fully validated model of performance based accounting in the Indian context is not available. The past few decades have witnessed a global transition from manufacturing to service based economies. Human resource accounting is of recent origin and is struggling for acceptance. Human resource is the vital input of any organization in this era of globalization, as it pulls on all other physical and financial assets/resources towards the achievement of organizational goals. Conveniently financial assets are accounted in the books of accounts as per the general principles of accounting except human asset. Though Human Resources Accounting (HRA) was introduced way back in the 1980s, it started gaining popularity in India recently. 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, skill and contribution of the human elements as well as that of the organizational processes like recruitment, selection, training, etc which are used to build and support these human aspects is developed.

Thus, Human Resource Accounting is a term applied by Accountancy Professional to quantify the cost and Value of Employees of their employing Organisation.

2. Definitions

The American Accounting Society Committee (AASC) (1973) has defined, "HRA as the process of identifying and measuring data about human resource communicating this information to interested parties". The American Accounting Society Committee was the first body to define HRA, which in fact initiated serious research efforts.

M N Baker defines, "HRA is the word used by the accountancy profession to quantify the cost and value of employees to their employing organisation".

HRA evolve from this definition focusing on cost. The value of the human resources recognises the cost incurred on acquiring and training and developing the human resources as an investment; record and communicates the worth of organisation in terms of Human capital.

3. Objectives of the Study

1) To examine the variables influencing Human Resources Accounting Values.
2) To determine the inter relationship between the variables that contribute to the HRAV
3) To assess the value of human asset based on the proposed revenue approach model.
4) To determine the relationship between human resource asset value and organisational performance.
5) To draw a comparative analysis of HRAV between the selected companies and identify the significant variables of HRAV.

4. Major Issues of Human Resource Accounting

In the recent past, it has been observed that the value based measures of HRA are finding more acceptances with Flamholtz approach being progressively used. However, this approach depends heavily on the measurement of an individual's or a group's contribution of valuation. But, measurement of contribution, especially at the managerial levels, is quite a difficult task. As a result, this factor proves to be a hindrance in the development of the concept of HRA.

The physical assets can be owned and traded by an organization but the human assets cannot and can be only utilized in this regard. The physical assets have some realizable value of retirement but the human resources do not have any such value. They may involve payments of retrenchment, compensation, gratuity and other benefits. Human resources is an appreciating asset since manpower improves with time, with due regard to their ageing constraint, but for physical asset its increasing value at the time of its installation, starts immediately depreciating.

If an individual is to be valued normatively, the model given by Flamholtz expects that the career path of individuals should be plotted over the span of his probable stay with the organization in the light of the current promotion, and retirement policies of the organization. But such exercise is tedious.

5. The Challenges of Human Resource Accounting

1) Each employee's cost to company (CTC) should be forecasted and discounted back separately. Thus a separate database comprising compensation details, age and experience details, historical promotion pattern for each employee should be constructed. This database serves as a powerful MIS tool for value interpretation.
2) The measurement of Human Resources is subjective as different firms will use different methods for this purpose. Till date there is no model for valuation of Human Assets, which is widely acceptable and used worldwide.
3) The attrition rates for the company/Industry should not be considered as a deduction factor as the employees who leave the company will be replaced by others to maintain the level of production.
4) The concept of human resource accounting is not recognized by Tax authorities and therefore, it has only academic utility. If the accounting standards board makes it mandatory to disclose the values of Human capital or Human Assets, then only the Direct or Indirect Tax Authorities will take into concern of HR Accounting.
5) There is no empirical evidence to support the idea that HRA is an effective tool to measure the economic value of people to their organization. There is very little data to support the contention that it facilitates better and effective management of human resource.

6. Benefits of Implementing Human Resource Accounting in the Organisation

1) Human Resource Accounting helps the company ascertain how much investment it has made on its employees and how much return it can expected from its investment.
2) The ratio of human Capital to Non human capital computed as per the Human Resource Accounting concept indicates the degree of labour Intensity of an Organisation.
3) Human Resource Accounting provides valuable information to Investors interested in making long term Investments in companies.
4) Human Resource Accounting provides a basis for planning of physical assets Vis- a Vis Human Resource.

By adopting and implementing HRA in an organization, the following important information could be obtained:

1) Cost per employee
2) Human Capital Investment Ratio
3) The amount of wealth created by each employee
4) The profit created by each employee
5) The ratio of salary paid to the total revenue generated
6) Average salary of each employee
7) Employee absenteeism rates
8) Employee turnover rate and retention rate

7. Methodology of the Study

Human resource accounting identifies, quantifies and reports the amount of expenditure incurred and the capital employed to recruit, train and familiarize and develop the human resources. So, the objective of this paper is to:
1. To study the Human Resources accounting practices
2. To identify the issues and challenges
3. To examine the issues and challenges
4. To give suggestions based on the findings

The current accounting system is not able to provide the actual value of employee's capabilities and knowledge. This indirectly affects future investments of a company, as each year, the cost on human resource development and

recruitment increases. The human resource accounting system generates information on various aspects of human resources (such as acquisition, development, allocation, utilization and replacement) in the same manner the financial accounting system is for physical assets. So, it also measures the value of human resources to the organization in terms of monetary units.

8. Significance of the Study

Constant attention on the various factors of production has been paid by organisations under the belief that they are possessed and utilized for years to come. In accounting, it is found both money (in terms of capital and debt) and material (in terms of inventory and assets) are projected in the balance sheet fulfilling the going concern concept. But human resources are shown as an expense and do not get its due worth in the financial statements. So need of the hour is, considering human resources as an asset to get the best out of it in terms of value creation.

The ongoing research efforts are evident of the growing concern for the Human Resource Accounting practices. In IT sector people deliver with their competence- knowledge, skills and abilities. For such a knowledge intensive organisation it is vital to know whether its the human resource is appreciating or not. HRA does not only help in making managerial decisions based on the availability and requirement of human resources but also, acts as a control technique. HRA helps in channelizing the competence of the employees appropriately. The quantification of the human resources gives the investors and the stakeholders an insight into the organisation's potential of future performance. HRA plays a vital role in obtaining the wealth generated by the employees.

9. Research Methodology

The proposed paper is based on the exploratory method of research and uses data from secondary sources.
a) Sampling and Sample- Minimum of 10 companies shall be considered for the study.
b) Data analysis tools and techniques- Data analysis shall be carried out with the aid of Predictive Analysis Software for Windows (PASW)
c) The Following statistical techniques shall be employed Descriptive Statistics Analytical and Inferential Statistics- correlation/Regression, paired sample T tests etc
d) CAGR- Compound Annual Growth Rate
e) Present Value Tables

10. Approaches to Human Resource Accounting

Sir William Petty was perhaps the first person to make an attempt to signify the HR accounting in around 1691. He treated the labor as the generators of wealth. Even Adam Smith had recognized the investment on human resources. The post 1960's witnessed a significant development of business people joining hands with the academics to evolve suitable methods to account for human resources.

Consequently, a number of models or approaches have been developed and suggested for the measurement and valuation of human resources. These approaches may broadly be classified into two types:

1. HR Cost Accounting (HRCA)
2. HR Value Accounting (HRVA)

Now let us discuss each of the above types individually.

HR Cost Accounting (HRCA) may be defined as the measurement and reporting of the costs incurred to acquire and develop people as organizational resources. It deals with accounting for investments made by an organization to the acquisition and development of human resource as well as the replacement cost of the people presently employed.

HR Value Accounting (HRVA) is the concept based on the view that difference in present and future earnings of two similar firms is due to the difference in their human capital or assets. The economic value of the firm can be determined by obtaining the present value of future earnings. A number of valuation models have been developed for determining the present value of future earnings.

11. Valuation Methodologies

The various definitions mentioned above entails the various approaches to the valuation of HRA (in terms of human cost or human value).The various methods available for Human Resource valuation are,
1) **Historical Method :** This method was proposed by brummet to measure a firm's investment in human Resources The Human resource costs are current sacrifices for obtaining future benefits and therefore o be treated as assets. The method suggests to capitalize the firm's expenditure on recruitment, selection, training and Development of employees and treat them as assets for the Human Resource Accounting.
2) **Replacement Cost Method:** This method involves assessment of replacement cost of individuals and rebuilding cost of the organization to reflect HR asset value of both the individuals and organization.
3) **Opportunity Cost Method:** This model envisages computation of monetary value and allocation of people to most promising activity and thereby to assess the opportunity cost of key employees through competitive bidding among investment centres.
4) Economic Model: This model takes into consideration the present value of money and also extract value of human resources from cost figures. Among the various models under various above mentioned methods three widely followed models are Lev and Schwartz Model, Flamholtz model and Hermansons model and the proposed model of revenue approach is based on the short comings of these models.

The Lev and Schwartz Model

The Lev and Schwartz model states that the human resources of a company is the summation of value of all the Net present value (NPV) of expenditure on employees.

Under this model, the following steps are adopted to determine HR Value.

- The entire labour force is classified under homogeneous groups like skilled, unskilled, semiskilled etc. and in accordance with different classes and age. (Classification is based on software professionals and support staff etc.)
- Construction of average earning stream for each group (Incremental earnings based on group/ age have been considered.)
- Discounting the average earnings at a predetermined rate in order to get present value of human resources of each group. Aggregation of the present value of different groups are capitalized to arrive at the wealth of human resources as a whole.(Discounting factor of 12% is considered)

$$Vr = I (t). \text{...................} (1+r) t\text{-}r$$

Where,

Vr = the value of an Individual r years old

I (t) = the individual's annual earnings up to retirement

t = retirement age

r = a discount rate specific to the cost of capital to the company.

This model considers the salary earned by the employees for his/her life time and cost as the basis rather than the output of the employee in calculating the HRAV.

Stochastic Reward Valuation Model

Flamholtz proposed HR value in parlance with the roles employees perform in accordance with the service position they occupy. Present value of future services are found out at different service states considering migration of an employee from one service state to the other. However the estimates of the employees occupying different service states in his/her career in the organisation can be highly probabilistic and unreliable.

Hermanson Model

Hermanson suggested present value of the future wages payable for the next five years as the human value for the organisation. The adjusted rate of return is the average rate of return on the owned assets of all firms in the economy multiplied by efficiency ratio of the organisation. This method attempts to bring into picture the effectiveness of ROI of the industry on the assumption that there are no extraneous factors and the results were due to the efforts of the employees.

12. Conclusion

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 tell 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. The current accounting system is not able to provide the actual value of employee capabilities and knowledge. This indirectly affects future investments of the company, as each year the cost on human resource development and recruitment increases.

This is an era of globalization and cost cuts, therefore, HRA would give an organization a correct vision towards the way forward. In the ultimate analysis it must be said that the concept of HRA has been appreciated by the accounting profession and by and large its usefulness has also been acclaimed in the literature but unfortunately, its application has not flourished throughout the world.

References

[1] Burla N N, *"Human Resource Accounting",* The Accounting World, X (2), 2010, 9-12.
[2] Bullen, And Eyler, *"Human Resource Accounting And International Developments: Implications For Measurement Of Human Capital",* Journal of International Business And Cultural Studies, V, 2010, ISSN 1941-5087.
[3] CK Sonara, *"valuation and Reporting Practices Of Human Resource Accounting In India",* The Accounting World, X (3), 2010, 50-55.
[4] Jain and Mehta, *"HR Metrics Moving Beyond Absenteeism and Turnover and Statistics"*, HRM Review, XI (01), 2011, 24-27.
[5] Banerjee N*, "Accounting For Intangibles",* The Accounting World, IX (8), 2009,15-27.
[6] KVV Raju, *"Human Resource Accounting"*, The Accounting World, IX (10), 2009, 9-13.
[7] A Vinayaagamoorthy and P Baby, *"Emerging Dimensions in Human Resource Accounting",* The Accounting World, X (1), 2010,50-53.
[8] Agarwal and Tripathi, *"Human Resources Accounting : Role and practices in an Organisation",* Finance India, XXIV (4), 2010, 1331-1345.
[9] A Vinayagamorthy, *"Human Resource Accounting A Comprehensive Analysis",* The Accounting World, IX (11), 2009, 21-26.
[10] Hea, Uzma and Singh, *"Intangibles Accounting Issues and Dimensions",* The Accounting World, IX (8), 2009, 19-27.
[11] Kouhy, Vedd, Yashikawa and Innes, "*Human Resource Policies, Accounting and Organisational Performance",* Charatered Institute of Management Accountants, V (4) ISSN 1744-7038.

Author Profile

Uma Hattikal holds a Master of Business Administration from Visveswariah Technological University Belguam, a Bachelor Degree in Business Administration from karnataka University, Dharwad and is Currently a Doctoral Student at Jain University, Bangalore India. She is working as a faculty in a Management College, Bangalore.

Dr Prakash M a PhD in Social Marketing, M Phil, M.Com from Bangalore University, has been full time academics for the past 3 decades. Presently working as Director of Studies in Sheshadripuram Education Institutions. He has been a author of many articles and books.