A STUDY ON HUMAN RESOURCE ACCOUNTING METHODS AND PRACTICES IN INDIA

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ABSTRACT

It is highly complicated in the today’s market find well knowledge, coached, and highly motivated people. Human resource is one of the most important back office operations of any organization or business. Their skills, creativity, ability human cannot be replaced by machines. We can lose efficiency in work if no qualitative people. At all levels and areas of the business or firm human efficiency is required with machine efficiency. Human can work without machine but machine can’t. Hence, industry like advertising and direct marketing for instance human talent is more valuable among other else. No machine can ever come up with a unique advertising idea without the human input. Thus companies must learn to recognize and appreciate the value of their employees. It is worth and capital investments. That is why firms also need to search people those are on capital investment along with capital (money) while many entrepreneurs are focused on securing capital they have to make sure they have the right management team and employer in place if they want to attract investor create value and maximum wealth. Solid management team in what sets a company apart with venture capitalists. The article highlights the significance of Human resource valuation and methods to measures human assets value. The article describes views of the authors and finds out the organizations those have tried to implement human resource accounting. The article depicts the advantages of human resource valuation.

KEYWORDS: Human resources accounting, human resource valuation, cost, model, investment.

Introduction

All the processes of the organization are operated by human resource, hence valuation of this resource is very necessary and information about the valuation should be given to the investors, the management and others through financial statements. Human resource accounting is basically an information system that tells management what changes are occurring over time to the human resources of the business. In the early 1990s industries were recognized the value and importance
of human assets. When service sector started major contribution to a country’s economy the
significance of human assets got prominence. Knowledge sectors like Information Technology
(IT), Banking, Teleservices and others the intangible asset especially humans contributed highly
to the building of shareholder value. Intellectual power of employees only major input to these
sectors. The critical success factor for any knowledge based company is its skilled and
intellectual work force.

“Real assets will not appreciate much as businesses get commoditized; Innovation and
Intellectual power are going to be the key to the future” (Mohandas Pai, CFO, INFOSYS).
Employees are the most valuable resources of comparison in the services (software, Banking,
Management Consultancy, etc) sectors. Like all other resources the company the employees
possess value because of providing future services” (Samarat Gupta, MIS Manager, DSQ
Software Ltd). Human resource accounting is an attempt to identify and report investment made
in resources of the organization that are not presently accounted for under conventional
accounting practice "(woddruff). There is an almost universal belief among business executives,
investment managers and other stakeholders that consistent human capital metrics would be
valuable. Moreover, investors would take human capital data into consideration if it could be
provided on a reliable basis that would enable intelligent comparison (scott-jackson et al.,
2006)1. Flamholtz (1979) describes the HRA paradigm in terms of the “psycho-technical
systems” (PTS) approach to organizational measurement. According to the PTS approach, the
two functions of measurement are: 1) process functions in the process of measurement and 2)
umerical information from the numbers themselves. Whereas one role of Human resource
Accounting (HRA) is to provide numerical measures, an even more important role is the
measurement process itself1. Prof. Sidney Davidson defines human resource accounting as a
‘term used to describe a variety of proposals that seek to report and emphasize the importance
of human resources-Knowledgeable, trained and loyal employees-in a company’s earnings process
and total assets”. American Accounting Association defines it “as a process of identifying and
measuring data about human resources and communicating this information to interested
parties”. E.Flamholtz says “it is the measurement of the cost and value of people for the
organization”.

Origin of Human Resource Accounting
Recognizing human being as asset as old one. Form the observation of Indian History, it is
evident that Emperor Akbar gave importance to the nine jewels. Freedom fighters in India like
Shri Motilal Nehru, Mahatma Gandhi, Sardar Vallabh Bhai patel, PanditjawaharLal Nehru
cannot be removed from the historical pages of freedom movement of India. In spite of the
uncountable sacrifices forgone by the above individuals, no one make efforts to allocate any
monetary values to such individuals in the Balance sheet of India.
The suitable work was started to determine the cost and value of human beings by behavioral
scientists from 1960 onwards. The experts in this field were Shultz (1960), William Pyle(1967),
Flam Holtz(1973), Kenneth Sinclare (1978) and Dr Roa (1983), etc who contributed appropriate
methodology and correct methods for finding out the value of the employee to the organization.

World demand of Human Resource Accounting
It is fact that the 21st 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 say 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 Practicing Companies In India**

Even though, many benefits have contributed by HRA, yet its development and application in different 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:

1. Bharat heavy Electrical Ltd (BHEL).
2. Steel Authority of India Ltd (SAIL).
3. Oil and Natural Gas Commissioning (ONGC).
4. Oil India Ltd
5. Project and Equipment corporation of India.(PEC).
6. Engineers India limited
7. Mineral and Metal trading Corporation of India.(MMTC).
8. Electrical India Ltd.
9. Hindustan Shipyard Ltd.
10. Cement corporation of India. (CCI).
11. Infosys Technologies Ltd.
12. Tata Engineering and Locomotive Works

**Human Resource Valuation Approaches followed by companies in India**

Human resources have been given much priority in the present service sector since identifies 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:

**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.
Replacement Cost Model
According to this model the value of employee is estimated as the cost of replacement with a new employee of equivalent 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 accounted in individual replacement cost. When an 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.

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.

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

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

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
- \( i = 1,2,3 \ldots \)
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 be 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.

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

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

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
- \( V_r \) = 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.

**Human Resource Valuation by INFOSYS**

A fundamental dichotomy in accounting practices is between human and non-human capital is considered as assets and reported in the financial statement, whereas human capital is mostly ignored by accountants. The definition of wealth as a source of income inevitably leads to the recognition of human capital as one of the several forms of wealth such as money, securities and physical capital. As standard practice, Infosys reports the value of its employees using the Lev & Schwartz model. We have developed a new model quantify this value, in partnership with GIST Advisory this year.

The INFOSYS GIST-HCX model is base o a present value calculation of the increase I future earnings of employees during their employment at Infosys. Unlike conventional model, it also accounts for the impact of attrition on our human capital value, and therefore also quantifies the value of the positive human capital externality being generated by Infosys. Human capital Externality refers to the benefit derived by society when employees whose human capital value is enhanced due to training and employee development at Infosys, leave the company. The model discounts future earnings at an appropriate discount rate, and utilizes a long-run inflation rate consistent with the Reserve Bank of India’s target for inflation expectations.

<table>
<thead>
<tr>
<th>Employees (no.)</th>
<th>2012</th>
<th>2011</th>
<th>Annual Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software professionals</td>
<td>1,41,788</td>
<td>1,23,811</td>
<td>14.52%</td>
</tr>
<tr>
<td>Support</td>
<td>8,206</td>
<td>7,009</td>
<td>17.08%</td>
</tr>
<tr>
<td>Total</td>
<td>1,49,994</td>
<td>1,30,820</td>
<td>14.66%</td>
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</table>

<table>
<thead>
<tr>
<th>Value of human resources</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Software professionals</td>
<td>1,15,900</td>
<td>89,507</td>
<td>29.49%</td>
</tr>
<tr>
<td>Support</td>
<td>9,817</td>
<td>8,640</td>
<td>13.62%</td>
</tr>
<tr>
<td>Total</td>
<td>1,25,717</td>
<td>98,147</td>
<td>28.09%</td>
</tr>
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<table>
<thead>
<tr>
<th>Value of human capital externality</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Software professionals</td>
<td>6,182</td>
<td>4,702</td>
<td>31.48%</td>
</tr>
<tr>
<td>Support</td>
<td>649</td>
<td>563</td>
<td>15.28%</td>
</tr>
<tr>
<td>Total</td>
<td>6,831</td>
<td>5,265</td>
<td>29.17%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total value of human resource capital and human capital externality</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total value of human resource capital and human capital externality</td>
<td>1,32,548</td>
<td>1,03,412</td>
<td>28.17%</td>
</tr>
</tbody>
</table>

| Ratio            |        |        |               |
| Value of human capital per Employee   | 0.84   | 0.75   | 12.00%        |

Source: Annual Reports of Infosys 2011-12
According to this report the worth of each Infosys employee in 2011 is 75 lakhs and as per 2012 it is 84 lakhs.

Five benefits of HRA

Human resource accounting helps in knowing whether human asset is being built up in the business or not. An executive may show good result in producing well, and so on but he might not have built the human resources properly. A good manager keeps the morale of his subordinates high so that they contribute the maximum in achieving the organizational objectives.

Benefits of HRA

Cost of developing human resources: HRA will give the cost of developing human resources in the business. This will enable the management to ascertain the cost of labor turnover also.

Proper investment: It can be seen whether the business has made proper investment in human resources in terms of money or not. If the investment is in excess, efforts should be made to control it.

Planning and executing personal policies: It will help the management in planning and executing personal policies. The management also makes use of its help in taking decisions regarding transfers, promotions, training, retirement and retrenchment of human resources.

Improving employee efficiency: It helps in improving the efficiency of employees. The employees come to know of the cost incurred on them and the return given by them in the form of output, and so on, which will motivate them to increase their worth.

Calculate Return on Investment (ROI): The return on investment can realistically be calculated only when the investment on human resources also is taken into account. The ROI is may be good because there is an investment on human beings.
Conclusion
Overall, 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. Despite the interest in valuation there will be little or moderate progress in the area over the next five to ten years. In order to show greater progress, more needs to be done at both the theoretical and practical level. More search into valuation methods and models, and the practical implication of these, is needed together with the engagement of both human resource and accounting professionals in the debate on valuation and its implementation in practice.

Bibliography:
- Infosys annual financial statement 2011-12