

Application of Human Resource Accounting in Heavy Industries

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ABSTRACT

Since the beginning of globalization of business and services, Human elements are becoming more important input for the success of any corporate enterprise. It helps the management to frame policies for human resources. Human Resource Accounting is a process of identifying and measuring data about human resources. Measurement of the investment in human resources will help to evaluate the charges in human resource investment over a period of time.

This paper aims at analyzing the application of Human Resource Accounting in heavy industries covering the period from 2001-2010 with the case study of The Hindustan Copper Limited, a public sector undertaking. The case study helps to analyze that the value of production per employee is increasing or decreasing.

Keywords: Human resource, accounting for human resource, human resource accounting concepts, human resources accounting model.

1. INTRODUCTION

THE past few decades have witnessed a global transition from manufacturing to service based economies. Human elements are becoming more important input for the success of any corporate enterprise. It helps the management to frame policies for human resources. Human resource accounting (HRA) is a process of identifying and measuring data about human resources. It means accounting for people as an organizational resource. It involves measuring the cost incurred by an organization to recruit, select, hire, train and develop human assets and also involves measuring the economic value of people in the organization. It is concerned with measurement of cost and value of people in the organization. In every business concern physical assets as well as human resources are required for its success. Physical assets like plants, machinery, building etc. are unproductive without human resources.

The concept of human resource accounting was first developed by Sir William Petty in the year 1691. But research into true human resource accounting began in the 1960 by Renis Likert. Prof. Flamholtz defines human resource accounting as accounting for people as an organizational resource.

Thus, human resource accounting provides quantitative information about the value of human assets, which helps the top management to take decisions regarding the adequacy of human resources. The basic Theory underlying the HRA is -

- That people are valuable resources of an organization or enterprise.
- Information on investment and value of human resource is useful for decision making in the organization.

2. OBJECTIVE OF HRA

HRA is a management tool which is designed to assist senior management in understanding the long term cost and benefit implications of their HR decisions so that better business decisions can be taken. HRA serve the following objectives -

- It furnishes cost/value information for making management decisions about acquiring, allocating, developing and maintaining human resources in order to attain cost - effectiveness.
- It allows management personnel to monitor effectively the use of human resources.
- It provides the sound and effective basis of human asset control, that is, whether the asset is appreciated, depleted or conserved.
- It helps in the development of management

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principles by classifying the financial consequences of various practices.

3. MEASUREMENTS IN HRA

It is known facts that measurement is the process of representing the properties or qualities of objects in numerical terms. But the biggest challenge in HRA is that of assigning monetary values to different dimensions of HR costs, investments and the worth of employees. The two main approaches usually employed for this are:

3.1 Cost Approach

It involves methods based on the costs incurred by the company, with regard to an employee. Cost is a sacrifice incurred to obtain some anticipated benefit or service. The various methods of measurements of costs and valuation of human resources are Historical cost method, Replacement cost method, Opportunity cost method, Standard cost method, Current Purchase Power method, and Economic value method.

3.2 Economic Value Approach

It includes methods based on the economic value of the human resources and their contribution to the company's gains. This approach looks at human resources as assets and tries to identify the stream of benefits flowing from the asset. The value of an object, in economic terms is the present value of the services that it is expected to render in future. The methods for calculating the economic value of individuals are Lev and Schwartz model, Eric Flamholtz model, Jaggi - Lau's model. Of these Lev and Schwartz model become popular. According to this model, the value of human capital represented by a person of age is the present value of his remaining future earnings from his employment. They have given the following formula for calculating the value of an individual. According to this model, the value of human capital embodied in a person who is 'y' years old, is the present value of his/her future earnings from employment and can be calculated by using the following formula -

$$E(V_y) = \sum_{t=0}^{T-y} \frac{I(t)}{(1+r)^{t+1}} \sum_{t=0}^{T-y} P_y(t) \frac{I(t)}{(1+r)^{t+1}}$$

Where,

$E(V_y)$ = expected value of a 'y' year old person's human capital

T = the person's retirement age

$P_y(t)$ = probability of the person leaving the

organization

$I(t)$ = expected earnings of the person in period I

r = discount rate

Most, companies adapt this model to their practical requirements by making necessary alterations. For instance, different organizations use different discount rates for ascertaining the present value of future cash flows.

Thus, the model identifies an individual's expected economic value to the organization to his future earnings for his remaining active service life. His future expected income stream is discounted by an appropriate rate to arrive at the present value of his services. Thus, the model identifies an individual's expected economic value to the organization to his future earnings for his remaining active service life. His future expected income stream is discounted by an appropriate rate to arrive at the present value of his services. Besides this formula Dr. M. Singh has given his contribution in calculating Present value of human resource as follows:

$$PV(r) = \frac{RC + FC + DC + JC + P(Le + Og)}{ESP}$$

Where,

PV(r) = Present value of human asset.

RC = Recruitment Cost.

FC = Familiarization Cost.

DC = Development Cost.

JC = Job Cost.

ESP = Expected Service Period.

P(Le+Og) = Probability for loss of efficiency of human resources and for outgoing of the employees.

Human Resource Accounting system consists of two aspects namely:

- The investment made in human resources.
- The value human resource.

Human Resource Accounting in heavy industries:

As far as the statutory requirement go, the Companies Act, 1956 does not demand furnishing of HRA related information in the financial statement of the companies. The Institute of Chartered Accountants of India too, has not been able to bring any definitive standard as measurement in the reporting of human resource costs. But there are few organization, however, that do recognize the value of their human resources and furnish the related information in their

annual reports. In India, some of the companies are : Infosys, Bharat Heavy Electricals Limited(BHEL), Steel Authority of India Limited(SAIL), Minerals and Metals Trading Corporation of India Limited(MMTC), Southern Petrochemicals Industries Corporation of India, Associated Cement Companies Limited, Madras Refineries Limited, The Hindustan Zinc Limited, The Oil and Natural Gas Commission, The Cement Corporation of India Limited, etc.

4. CASE STUDY

Hindustan Copper Limited (HCL), a public sector enterprise of the Government of India, incorporated on 9th November 1967. It has the distinction of being India's only vertically integrated copper producing company encompassing mining, beneficiation, smelting, refining and casting of refined copper metal. The company deals in copper wire rod, copper cathodes, continuous copper rod and the byproducts such as copper sulphate and sulphuric acid.

HCL is spread across four operative units;

1. Indian Copper Complex, Jharkhand
2. Malanjkhand Copper Project, Madhya Pradesh
3. Khetri Copper Complex, Rajasthan
4. Taloja Copper Project, Maharashtra

Table - 1

Value and strength of Human Resources
(2001- 02 to 2006-07)

The Hindustan Copper Limited				
(Rs. in crore)				
Year	Value of production (Rs.)	Manpower (in Numbers)	Value per employee (Rs.)	Value added (Rs.)
2001-02	586.66	9502	0.062	153.09
2002-03	501.53	7865	0.064	147.37
2003-04	534.43	5995	0.089	212.3
2004-05	631.24	5665	0.111	328.53
2005-06	1053.34	5583	0.189	385.39
2006-07	1909.18	5451	0.350	781.08
2007-08	1991.24	5405	0.368	726.12
2008-09	1344.28	5440	0.247	402.06
2009-10	1506.04	5300	0.284	701.82

Source: Annual Accounts of Hindustan Copper Limited.

From the above table, we clearly analyze that the value of production per employee is increasing from 2001-02 to 2009-10. The value per employee in

2001-02 was 0.062crores and it increased to 0.368crores in the year 2007-08 and after this it comes to 0.284 in the year 2009-10. And the manpower is decreasing from 9502 in 2001-02 to 5300 in 2009-10 due to retirement.

5. CONCLUSION

However until now, the efforts are to be made in gaining popularity in the application of human resource accounting. The concept of human resource accounting is yet to gain momentum in India. For the betterment of the organizations, it is necessary to evaluate the worth of Human Resources in a systematic manner and record the information related to them in the financial statement of the organization to communicate their worth time to time to the users of the financial statement. The HRA concept itself represents a new way of thinking about people as assets. It has a great potential for future organization to understand the value of human forces and the same should mentioned in the financial statements.

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