



HUMAN RESOURCE ACCOUNTING: COST OF HUMAN RESOURCE AND VALUE OF GOODWILL OF A FIRM - CAUSE & EFFECT

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ABSTRACT The conventional accounting system does not give importance to the most valuable asset of a business concern in spite of its great impact in the organisational performance. The most valuable asset of an organisation which we call Human Resource must be accounted for and required to be shown in the asset side of the balance sheet of a concern. This may represent the extra payment for hiring better quality and experienced personnel for the organisation or/and it may also represent the cost of training session which have been organised to develop the quality of work of the man power. Few experts may say, "The quality of Human Resource is nothing to the concern but the Goodwill is" - but this statement is not true in practical sense, because Goodwill is the popularity of the concern to the outsider but human resource is the inner strength of a concern, which plays a great role in effective performance and creating Goodwill. So the relation may be said as cause- effect relationship.

KEYWORDS : Human resource, Cause & effect, Goodwill, Human resource accounting

INTRODUCTION

Human Resource Accounting is the system of measuring and reporting of the cost and value of people as organizational resources. It involves accounting for investment in people and their replacement costs, as well as accounting for the economic values of people to an organization. The value of an employee to the firm may represent value of the difference between wage and marginal revenue generated by the employee. An employee's value drives from the ability of the firm to pay less than the marginal revenue product. Thus, it involves measuring the costs incurred by business firms and other organizations to recruit, select, hire, train and develop human resources. It also involves measuring economic value of people to organizations. In short, the term 'human resource' recognizes people who form organizational resources.

To quote Davidson, "Human resource accounting in the measurement of the cost and value is 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 earning process and total 'assets'".

In the words' of R.L. Woddruff Jr., Vice President, R.G. Barry Corporation, the company which undertook pioneering work (1960s) in developing human resource accounting - *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.* Woodruff further considers it to be an information system that tells management what changes over time are occurring to the human resources of the business.

Therefore, Human Resource Accounting (HRA) System requires and produces a great deal of information for an organization.

OBJECTIVES 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 principles by classifying the financial consequences of various practices.

Therefore, human resource accounting aims at: (1) increased managerial awareness of the values of human resources, (2) better decisions about people, based on improved information systems, (3) greater accountability on the part of management for its human resources, (4) developing new measures of effective manpower utilization, (5) enabling a longer time horizon for planning and budgeting, and (6) better human resource planning.

THE CONCEPT OF GOODWILL

Goodwill is one of the special aspects of Financial Accounting which must be valued and accounted properly to reflect actual position of an organization. Over a period of time, a well-established business develops an advantage of good name, reputation and wide business connections. This helps the business to earn more profits as compared to a newly set up business. In accounting, the monetary value of such advantage is known as "goodwill". It is regarded as an intangible asset. In other words, goodwill is the value of the reputation of a firm in respect of the profits expected in future over and above the normal profits. It is generally observed that when a person pays for goodwill, he/she pays for something, which places him in the position of being able to earn super profits as compared to the profit earned by other firms in the same industry.

In simple words, goodwill can be defined as "the present value of a firm's anticipated excess earnings" or as "the capitalized value attached to the differential profit earning capacity of a business". Thus, goodwill exists only when the firm earns super profits. Any firm that earns normal profits or is incurring losses has no goodwill.

Factors Affecting the Value of Goodwill

The main factors affecting the value of goodwill are as follows:

- Efficiency of management: A well-managed concern usually enjoys the advantage of high productivity and cost efficiency. This leads to higher profits and so the value of goodwill will also be high.
- Location: If the business is centrally located or is at a place having heavy customer traffic, the goodwill tends to be high.
- Nature of business: A firm that produces high value added products or having a stable demand is able to earn more profits and therefore has more goodwill.
- Market situation: The monopoly condition or limited competition enables the concern to earn high profits which leads to higher value of goodwill.
- Special advantages: The firm that enjoys special advantages like import licenses, low rate and assured supply of electricity, long-term contracts for supply of materials, well-known collaborators, patents, trademarks, etc. enjoy higher value of goodwill.

THE ACCOUNTING FUNCTIONS

A. Measuring Human Resource

Identifying the costs of an HRD program

It would seem evident that organizations would want to know what they spend on human resource development. Yet, in many organizations their expenditures are scattered in the budgetary accounts of various cost centers. Under Human resource accounting the expenditures on training of staffs, extra payment for hiring quality and experienced personnel should be treated as an investment in employees.

The logic behind this is straightforward, arguing that development costs produce benefits beyond the current accounting period. However, a number of researchers have challenged the accuracy and utility of human asset valuation.

Specifically, Lawler (1974) and others have questioned the legal and ethical implications of human asset valuation. To evaluate a specific HRD program, the researcher must distinguish the investment value-per-employee.

Measuring the benefits of an HRD program

Several accounting methods have been advanced to measure the benefits of valuation and accounting for human resource in monetary terms. Following an HRD program, major financial benefits could be realized in increased productivity and cost savings associated with reduced absenteeism and nonproductive behaviors.

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:

$$E(V_y) = \sum_{T=Y}^T P_y(t+1) \sum_{T=1}^T I(T) / (1+R)^{t-1}$$

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:

$$PV(r) = \frac{RC + FC + DC + JC}{ESP} \cdot \frac{P(L_e + O_g)}{ESP}$$

Where,

PV® = Present value of human asset.

RC = Recruitment Cost.

FC = Familiarization Cost.

DC = Development Cost.

JC = Job Cost.

ESP = Expected Service Period.

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

Human Resource Accounting system consists of two aspects namely:

- a) The investment made in human resources.
- b) The value human resource.

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.

Value per employee

Another measurement of the comparative value per employee may be determined by dividing total production in rupee or net profit of a particular time period by average number of employee of that period. Hence average number of employee is the average of number of employee at the beginning of a time period and that of at the end of that time period.

A. Measuring the value of Goodwill

Few years' purchase of super profit

Goodwill is the extra amount that an investor is ready to pay to buy equity share of a particular organization. The value depends on the earning capacity of super normal profit or consistent profit.

One of the famous methods of valuation of Goodwill is Super Profits Method.

Under the Super Profits Method the excess of actual profits over the normal profits is termed as super profits.

Super Profit = Actual Profit - Normal Profit

Where,

Normal Profit = Capital Employed × Normal Rate of Return

Let, an existing firm earns Rs. 17,000 on the capital of Rs. 1,50,000 and the normal rate of return is 10%. The Normal profits will work out at Rs. 15,000 (1,50,000 × 10/100). The super profits in this case will be Rs. 2,000 (Rs. 17,000 – 15,000). The goodwill under the super profit method is ascertained by multiplying the super profits by certain number of years' purchase. If, in the above example, it is expected that the benefit of super profits is likely to be available for 5 years in future, the goodwill will be valued at Rs. 10,000 (2,000 × 5).

Market value of share

The market value of equity share changes with the change in the performance, future prospects and goodwill of a firm. Therefore, it can be said that higher market price of equity share is an indicator of higher value of goodwill. In other words the market value of an equity share is the total of asset backing of the share and share of value of goodwill. An investor pays extra money for an equity share for Company's goodwill only. Therefore market value of equity share increases due to increase in the value of goodwill of the business.

RESEARCH METHODOLOGY:

For pursuing any research there should be a proper research methodology. A detailed plan of the research methodology is provided below:

Research Problem:

The research problem of the study is: "Human Resource Accounting: Cost of Human Resource and Value of Goodwill of a Firm are related as cause-effect"

Objectives of the Study:

The main objective of the study is to measure the value of human resources. However, the specific objectives are as follows:

- i) To study the value of human resources of an organization.
- ii) To study the method of valuation of Goodwill.
- iii) To determine the relationship between value of human resource and that of goodwill.

Period of Study:

The period of study is confined to 2001-10 as no data is available after this period, of the selected company.

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. Malanjhand Copper Project, Madhya Pradesh
- 3. Khetri Copper Complex, Rajasthan
- 4. Taloja Copper Project, Maharashtra

Table - 1 Value and strength of Human Resources of Hindustan copper Ltd. (2001-02 to 2009-10)

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

Source: Annual Reports of Hindustan Copper Limited.

From the table-1, we may 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 0.062 crores and it increased to 0.368 crores 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.

Table - 2 Market price of equity shares of Hindustan Copper Ltd. (2001-02 to 2009-10)

Year	Market Value of Equity shares at the end (Rs.)
2001-02	37.50
2002-03	28.50
2003-04	43.00
2004-05	67.95
2005-06	64.25
2006-07	89.40
2007-08	247.25
2008-09	118.00
2009-10	529.25

Source:

<http://www.moneycontrol.com/stockcharts/hindustancopper/charts/HC07#HC07>

Co-efficient correlation between value per employee and market price of equity share of Hindustan Copper Ltd.

Year	value per employee (X) Rs. (In Core)	market price of equity share (Y) Rs.	XY	X ²	Y ²
2001-02	0.062	37.50	2.325	0.0038	1406.25
2002-03	0.064	28.50	1.824	0.0041	812.25
2003-04	0.089	43.00	3.827	0.0079	1849.00
2004-05	0.111	67.95	7.542	0.0123	4617.20
2005-06	0.189	64.25	12.143	0.0357	4128.06
2006-07	0.350	89.40	31.290	0.1225	7992.36
2007-08	0.368	247.25	90.988	0.1354	61132.65
2008-09	0.247	118.00	29.146	0.0610	13924.00
2009-10	0.284	529.25	150.307	0.0807	280105.56

$\Sigma X = 1.728$
 $\Sigma Y = 1231.05$
 $\Sigma XY = 329.392$
 $\Sigma X^2 = 0.4634$
 $\Sigma Y^2 = 375967.33$

$$\text{Correlation}(r) = \frac{N \Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{[N \Sigma X^2 - (\Sigma X)^2][N \Sigma Y^2 - (\Sigma Y)^2]}}$$

$$= \frac{3293.92 - 2127.25}{\sqrt{[4.63 - 2.99][375967.33 - 1515484.10]}}$$

$$= \frac{1166.67}{1918.45} = 0.61 \text{ (approx)}$$

CONCLUSIVE THOUGHTS AND FUTURE PERSPECTIVE

As the co-efficient correlation is 0.61, therefore it can be said that the market value of equity share which is influenced by goodwill of the firm is related with the value per employee. The market value of the equity share depends on the value of goodwill which positively related with the performance of the business i.e., performance of manpower of the business. Therefore the value of human resource which is measured on the basis of quality, experience, training and development of the personnel of an organization is the cause and goodwill which is generated on the basis of performance of the business is the effect.

Human Resource Accounting provides another type of information that holds promise for the evaluation of human resource management and in turn assists in human resource 'planning policies and practices which invest in effective utilization of these resources. Human resource accounting places value on the human assets of the firm, which means accounting for an organization's employees among its other resources, measuring both the cost and the value of the personnel. In other words, it involves accounting for investment in people and their replacement costs, as well as accounting for the economic values of people to an organization.

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