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Case Study

HUMAN RESOURCE ACCOUNTING: A WAY TO DEPICT THE POTENTIAL OF HUMAN RESOURCE IN MONETARY TERMS: A CASE STUDY OF ONGC

Dr. Sandeep Ojha

Assistant Professor, Department of Business Administration, College of Applied Sciences, Salalah, Sultanate of Oman.
Email: sandeepojha555@gmail.com
Contact: +96895617464

ABSTRACT

Now the day's businesses have reached at its developed stage. In any type of business two types of resources are used; active resources and inactive resources. A business cannot be operated unless there is human resource. There are different compositions of the human resource. Human resource is called as active resource as it uses the other non-active resource and makes it possible to the best utilization of that inactive resource. We also know that in modern manufacturing environment the quantity of human resource has been reduced up to a great extent but still without a minimum quantity and quality of human resource, a business cannot be operated. Hence, the human resource will always have an upper hand over the other inactive resources.

As the HRA is compulsory neither under the Companies Act, 1956 nor under the Accounting Standards, this paper is an attempt to explore prevailing practices of HRA in Oil & Natural Gas Corporation Ltd by applying Lev & Schwartz model.

Key Words: HRA, Active Resources, Inactive Resources, ONGC, Human.

Introduction

One of the most notable omissions of our conventional accounting system is information concerning the human capital employed. The only reference to be found in the financial statements about human resources is entries

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in the Profit and Loss Accounts, in respect of wages, salaries and directors' fees. These entries refer only to the current expenses incurred in money terms by the employment of labour whereas other assets employed in the income producing process are shown on the balance sheet either in the form of capital subscribed by shareholders or as assets acquired with this capital such as fixed assets and current assets but the balance sheet is silent as to the value of human capital employed. Hence, under conventional accounting system the accounting procedures of most of the companies reflect the level of inventories, investment in the plant and equipment and the condition of plant and equipment but ignore attention towards human organization that staff the plant its loyalty, skills motivation and capacity of effective interaction communication and decision making.

The total absence of any information regarding the value of human capital is a serious handicap to decision making both by managers employing quantitative means to arrive at quantitative goals and to investors likewise seeking to make more rational decisions concerning shares which they hold or propose to buy. From this it is clear that under existing traditional accounting system most of the important policy decisions are based on something 25-50 percent accounting because of human resources, the magnitude of the income producing assets, being ignored and not included in financial reporting.

In the words of Michael.W. Glautier: "Many Executives say that people constitute the most priceless asset of the business yet current account practices neither measure nor report their value."

Today, human and intellectual capitals are perceived to be the strategic resources and therefore, clear estimation of their value has gained significant importance. The increased pressures for corporate governance and the corporate code of conduct demanding transparency in accounting have further supported the need for developing methods of measuring human value. In India, human resource valuation has not yet been institutionalized some public as well as private companies have adopted HRA. The Companies Act, 1956, does not explicitly provide for disclosure on human assets in the financial statements of the companies. But sensing the benefits derived from valuing and reporting the human assets, many companies have voluntarily disclosed all relevant information in their books.

The aim of HRA is to depict the potential of HR in monetary terms, while casting the organization's financial statements. The concept can be examined from two dimensions: (i) the investment in HR; and (ii) the value of HR. The expenditure incurred for recruiting, staffing and training and developing the HR quality is the investment in HR. The fruits of such investments are increased productivity and profit to the organization. The yield that the investment generates is considered as the basis for HR value.

OBJECTIVES OF THE STUDY

The present study has been taken up with the following objectives:

(i).   To investigate current practices in ONGC in valuing their human resources.

(ii).   To analyze the current human resource valuation practices of ONGC.

(iii).   To ascertain whether human resources valuation is worthwhile for internal management purposes as well as for decision making by investors, financiers and creditors.

(iv).   To ascertain the viewpoint of professional accountants and shareholders about the desirability of public disclosure of human resource data by corporate enterprises.

(v).   To suggest effective human resources accounting model for Indian corporate companies.

LITERATURE REVIEW

According to Flamholtz, the value of an individual is the present worth of the services that he is likely to render to the organization in future. As an individual move from one position to another, at the same level or at different levels, the profile of the services provided by him is likely to change. The present cumulative value of all the possible services that may be rendered by him during his/her association with the organization is the value of the individual. Typically, this value is uncertain and has two dimensions. The first is the expected conditional value of the individual. The second dimension of an individual value is the expected realizable value, which is a function of the expected conditional

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value, and the probability that the individual will remain in the organization for the duration of his/her productive service life.

Given the uncertainty and the difficulty associated with determination of the value of human capital, Baruch Lev and Aba Schwartz suggested the use of an individual employee's future compensation as a surrogate of his value. According to them, "the value of human capital embodied in a person of age x is the present value of his remaining earnings from employment. Hermanson (1964) proposed a model in his pioneering work at Michigan State University based upon the assumption that a relationship exists between a person's salary and his value to the organization. Hermanson suggested the discounting of wage payments to people as a measure of a person's value to an organization. He suggests the adjustment of his discounted future wage stream by an efficiency factor. To calculate Efficiency Ratio, he makes use of weighted average of firm's net income during the past five years. The weights are assigned in a reverse order – highest to the current year, i.e., 5 and 1 to the preceding 4th year.

Hekimian and Jones proposed Competitive Bidding Model.In this method, an internal market for labour is developed and the value of the employees is determined by the managers. Managers bid against each other for human resources already available within the organization. The highest bidder 'wins' the resource. There are no criteria on which the bids are based. Rather, the managers rely only on their judgment. Likert and Bowers propose causal, intervening, and end-result variables, which determine the group's value to an organization. Causal variables are those which can be controlled by the organization. These variables include managerial behavior and organizational structure. Intervening variables reflect organizational capabilities and involve group processes, peer leadership, organization climate, and the subordinates' satisfaction. Both, the causal and the intervening variables determine the end result variables of the organization. Diagram illustrates the elements used to measure human organizational causal and intervening variables. The Brummet, Flamholtz, and Pyle model follows the principle that a resource's value is equal to the present worth of the future services it can be expected to provide, and therefore, it can provide a basis of measuring the value of a group of people. According to this method, groups of human resources should be valued by estimating their contribution to the total economic value of the firm. Thus, a firm's forecasted future earnings are discounted to determine the firm's present value, and a portion of these earnings is allocated to human resources according to their contribution. This method was adopted to value the sales price in the insurance industry at the time of its acquisition or sale. Under this method an estimate is made of the contribution of human resources to the total economic value of the firm. Dr. S. K. Chakraborty has made a pioneering contribution by suggesting a model of valuation of human resources of an organization. He has suggested that it is the most appropriate to include human assets under the heading of Investment in the balance sheet of an organization.

Research Gap: Most of the models concentrate upon the uncertainty and the difficulty associated with determination of the value of human capital, and suggested the use of an individual employee's future compensation as a surrogate of his value. The researcher will divide group of employees into homogeneous groups of employees, such as unskilled, semiskilled, and skilled employees, engineers of different kinds, salesman, managerial staff, and etc. Average earnings profiles, based on census data, will be constructed for each group and the present value of human capital calculated. The sum of present values over the various employee groups will provide the total human capital value associated with the firm and will propose a refined model.

RESEARCH METHODOLOGY

1.   Sample Area: The present study is a resource approach to manpower. To make the study more concrete and meaningful, the researcher has selected ONGC for the purpose.

2.   Period of the Study: 2014-2015 to 2018-2019

3.   Valuation is based on most widely used "Lev & Schwartz" model.

4.   Aggregate future earnings during remaining employment period of employees, discounted @ 8% p.a for all the years under study, provide present valuation.

5.   Future earnings are based on current emoluments with normal incremental profile.

6. Methods of Data Collection

   a) Primary Sources: The primary data for the purposes of the study have been collected from the corporate office, zonal office and divisional office and branches of ONGC. Personal interviews were held at various levels of the enterprises viz. managers, executives, supervisors, technical staff, clerical and office staff, etc. to collect primary data.

   b) Secondary Sources: These include annual reports, journal and magazines, standard books, newspapers and other literature.

7. Sampling Technique: Sampling technique used in the study is deliberate sampling technique.

8. Data Analysis: Keeping in view the above objectives of the study, the researcher has adopted the following hypothesis to verify the results scientifically The Human Resource Accounting is in the initial stage of India and has not generally been adopted by most of the companies.

9. Statistical Tools: To test the given hypothesis and presentation survey findings, the appropriate statistical tools, wherever necessary, have been used.

The Lev and Schwartz Model

This Model is also known as the Compensation Model. Given the uncertainty and the difficulty associated with determination of the value of human capital, Baruch Lev and Aba Schwartz suggested the use of an individual employee's future compensation as a surrogate of his value. According to them, "the value of human capital embodied in a person of age x is the present value of his remaining earnings from employment." This value for a discrete income stream is:

$$Vx = \sum_{t=x}^{T} \frac{I(t)}{(1+r)^{t-x}}$$

i. Where Vx = the human capital value of a person x years old.

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

   r = a discount rate specific to the person and

   T = retirement age.

ii. Because Vx is an ex-post value, given that I (t) is obtained only after retirement, and Vx ignores the possibility of death occurring prior to retirement age, the authors have refined the valuation model after incorporating Px(t) the probability of a person dying at age t in the following manner:

$$\Sigma(V'x) = \sum_{t=x}^{T} Px(t+1) \sum_{t=x}^{t} \frac{I'i}{(1+r)^{t-x}}$$

   i. Where I'i = Future annual earnings
   ii. Px(t)= the probability of a person dying at age t, and
   iii. ∑(V'x) = The expected value of a person's human capital.

The firm's labour force will be divided into homogeneous groups of employees, such as unskilled, semiskilled, and skilled employees, engineers of different kinds, salesman, managerial staff, and etc. Average earnings profiles, based on census data, will be constructed for each group and the present value of human capital calculated. The sum of present values over the various employee groups will provide the total human capital value associated with the firm.

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CASE ANALYSIS OF ONGC

After the conversion of business of the erstwhile Oil & Natural Gas Commission to that of Oil & Natural Gas Corporation Limited in 1993, the Government disinvested 2 per cent of its shares through competitive bidding. Subsequently, ONGC expanded its equity by another 2 per cent by offering share to its employees.

During March 1999, ONGC, Indian Oil Corporation (IOC), a downstream giant and Gas Authority of India Limited (GAIL), the only gas marketing company, agreed to have cross holding in each other's stock. This paved the way for long-term strategic alliances both for the domestic and overseas business opportunities in the energy value chain, amongst themselves. Consequent to this the Government sold off 10 per cent of its shareholding in ONGC to IOC and 2.5 per cent to GAIL. With this, the Government holding in ONGC came down to 84.11percent.

In the year 2002-03, after taking over MRPL from the A V Birla Group, ONGC diversified into the downstream sector. ONGC will soon be entering into the retailing business. ONGC has also entered the global field through its subsidiary, ONGC Videsh Ltd. (OVL). ONGC has made major investments in Vietnam, Sakhalin and Sudan and earned its first hydrocarbon revenue from its investment in Vietnam.

The company is continuously engaged in the human resource accounting during all the years under study.

The value of human resource increased in all the years under study. The highest value was in the age group of 41-50. It can be also seen that the highest value of executives, technical, was Rs.29,56,697 lakhs in 2017 while the highest value of non-executives, technical, was Rs. 10,16,023 lakhs in the year 2017. It can also be seen that the value of technical staff increased over the years gradually.

The value of human resource- non technical increased in all the years under study. The highest value has been found in the age group of 41-50. It can be also seen that in 2018 the highest values of executives and non-executives were at Rs. 7,40,081 lakhs and 6,85,355 lakhs respectively

CONCLUDING OBSERVATION

The company is continuously engaged in the human resource accounting during all the years under study. ONGC believes that its human resource is its greatest wealth. Therefore, it is the endeavor of the company to nurture and develop this wealth.

The company continues to extend several welfare benefits to its employees and their dependents by way of comprehensive medical care, education, housing, and social security. There are, however, methods to measure the potential ability of all employees across the ranks, to produce value out of their knowledge and skills. The standard "Lev and Schwartz" model used by the company equates the anticipated future earnings as the surrogate of the "value" of an employee.

ONGC is following HRA have discounted the value of Human Resource by using capitalization rate between 7% & 9% annually which seems to be near to their weighted average cost of capital.

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TABLES

Table-1: Age-Wise Distribution of Human Resource-Technical

Particulars	Year	Upto 30	31-40	41-50	51-60	Total
Executive	2014	379	2.670	8,371	3,269	14,689
	2015	473	2,408	8,855	3,533	15,269
	2016	448	2,387	10,714	4,707	18,256
	2017	509	1,831	9,788	5,340	17,468
	2018	574	1,519	9,869	6,731	18,693
Non-Executive	2014	452	2,980	3,880	611	7,923
	2015	150	1,641	3,072	432	5,295
	2016	101	1,352	3,085	537	5,075
	2017	70	994	3,156	620	4,840
	2018	43	775	2,615	632	4,065
TOTAL	2014	831	5,650	12,388	3,751	22,612
	2015	623	4,049	11,926	3,966	20,564
	2016	549	3,739	13,798	5,245	23,331
	2017	579	2,825	12,944	5,960	22,308
	2018	617	2,294	12,484	7,363	22,758

Source ONGC Annual Reports.

Table-2: Age-Wise Distribution of Human Resource-Non Technical

Particulars	Year	Upto 30	31-40	41-50	51-60	Total
Executive	2014	202	414	2,130	1,202	3,948
	2015	205	357	1,952	1,187	3,701
	2016	175	430	2,243	1,523	4,371
	2017	135	403	1,886	1,741	4,165
	2018	157	442	1,945	2,173	4,717
Non-Executive	2014	348	1,521	3,071	1,685	6,625
	2015	229	1,239	2,899	1,459	5,826
	2016	199	1,191	3,163	1,672	6,225
	2017	131	997	2,915	1,749	5,792
	2018	87	891	2,996	2,111	6,085
TOTAL	2014	551	1,931	5,201	2,890	10,573
	2015	434	1,596	4,852	2,645	9,527
	2016	374	1,621	5,406	3,195	10,596
	2017	266	1,399	4,801	3,491	9,957
	2018	244	1,333	4,940	4,285	10,802

Source ONGC Annual Reports.

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Table-3: Valuation of Human Resource-Technical

(Rs. In Lakh)

Particulars	Year	Upto 30	31-40	41-50	51-60	Total
Executive	2014	83,301	5,18479	12,07620	2,05,806	20,15,206
	2015	1,06599	4,86,101	12,91,099	2,48,189	21,31,988
	2016	1,22,495	5,78,054	18,49,960	4,05649	29,56,158
	2017	1,51,062	4,83,960	18,20,543	5,01,132	29,56,697
	2018	1,84,875	68,554	19,71,278	6,76,892	29,01,599
Non-Executive	2014	59,770	3,50,339	3,80,382	25,995	8,16,486
	2015	20,230	1,98,936	3,10,355	20,635	5,50,154
	2016	16,024	1,99,494	3,86,518	33,093	6,35,129
	2017	14,079	1,74,072	4,42,042	3,85,830	10,16,023
	2018	8,398	1,40,410	4,11,638	50,863	6,11,300
TOTAL	2014	1,43,071	8,68,818	15,88,002	2,31,801	28,31,692
	2015	1,26,829	6,85,037	16,01,454	2,68,824	26,82,142
	2016	1,38,519	7,77,548	22,36,478	4,38,742	35,91,287
	2017	1,65,141	6,58,032	22,62,585	8,86,962	39,72,720
	2018	1,93,264	2,08,964	23,82,916	7,27,755	35,12,899

Table-4: Valuation of Human Resource-Non-Technical

(Rs. In Lakh)

Particulars	Year	Upto 30	31-40	41-50	51-60	Total
Executive	2014	4,31,000	78,642	2,78,091	73,268	4,73,061
	2015	44,546	70,169	2,57,166	79,262	4,51,143
	2016	46,394	1,02,360	3,55,534	1,24,207	6,28,495
	2017	38,817	1,04588	3,25,547	1,55,247	6,24,199
	2018	48,998	1,22,354	3,61,088	2,07,641	7,40,081
Non-Executive	2014	43,015	1,65,085	2,60,760	59,215	5,28,075
	2015	28,809	1,35,741	2,47,078	55,821	4,67,499
	2016	30,289	1,60,924	3.39,673	85,416	6,16,302
	2017	25,112	1,62,970	3,54,769	1,01,259	6,44,110
	2018	1,721	1,48,385	3,98,141	1,37,108	6,85,355
TOTAL	2014	86,115	2,43,727	5,38,811	1,32,483	10,01,136
	2015	73,355	2,05,910	5,04,244	1,35,083	9,18,592
	2016	76,683	2,63,284	6,95,207	2,09,623	12,44,797
	2017	63,929	2,67,558	6,80,316	2,56,506	12,68,309
	2018	50,719	2,70,739	7,59,229	3,44,749	14,25,436

Table-5: Valuation of Human Resource-Technical & Non-Technical

Year	Upto 30	31-40	41-50	51-60	Total
2014	2,29,186	11,12,545	21,26,813	3,64,284	38,32,828
2015	2,00,184	8,90,947	21,05,698	4,03,907	36,00,734
2016	2,15,202	10,40,832	29,31,685	6,48,365	48,36,084
2017	2,29,070	9,26,190	29,42,901	11,43,468	65,09,338
2018	2,43,983	4,79,703	31,42,145	10,72,504	49,38335