Human Resource Accounting - A Case Study with Special Reference to Visakhapatnam Port Trust

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ABSTRACT

Human Resource Accounting (HRA) is a Voluntary Disclosure, which involves accounting for the organization’s workforce or employees. Many theories and techniques have been developed by eminent researchers on human resource valuation. HRA as a concept gained popularity in many developed countries, which have considered the significance of Human Resources in their organizations development. In India, HRA is slowly being attracted by MNC’s in order to understand and also motivate the employees for their effective contribution. The present study is an attempt to analyze the importance of Human Resource Accounting in the organization’s performance and in their decision making process. The authors have taken up a case study in evaluating the HRA process by selecting Visakhapatnam Port Trust. The study was carried out by taking into consideration the administrative data for duration of 4 years period i.e. from 2008-09 to 2011-12 of VPT by adapting Lev & Schwartz Model to value VPT’S human resources. The outcome of the study states that VPT had been giving absolute importance to its employees & all its stakeholders through its initiatives. The study also throws light on the quantitative information about the value of human asset calculated from the HR information that is provided in their financial statements. This value of human assets would be of great help to the management of VPT in taking effective managerial decisions.

I. INTRODUCTION

Valuation of Human Resources is an improvement in the business reporting along with the basic financial statements. Financial Statements are the only source, to get the information about the resources of an organization and its performance. Human elements of an organization are generally not considered in the traditional accounting system. This was noticed and expressed by Behavioral scientists, scholars and economists about the limitations of traditional accounting system. Their collective efforts have evolved a new branch of accounting, known as Human Resource Accounting (HRA) in the late 1950’s. The behavioral scientists have also emphasized through their research the significance of HRA in enhancing the organizations performance. HRA has been defined by the American Accounting Association as “the process of identifying and measuring data about human resources and communicating this information to interested parties”. HRA aids the management in making better decision making also it increases the performance of the organization. The below studies emphasizes on importance of human resource accounting.

Business professionals K.U.Khan, et.al (2010) conducted a survey, with which, they revealed that, many of the Human Resource directors of the organizations consider, healthy workforce as an important asset. But in general, the accounting and financial experts who worked with private sectors found to have least concern about the well-being of the employees.

According to R. Nisha Rasikbhai & P.Makwana (2012) conducted a survey to know the manager’s perception regarding the use of HRA in the managerial decision making. They calculated mean and standard deviation for various aspects of human resource accounting on its managerial uses. It was found that, human resource accounting is useful in providing the estimation for cost of recruitment, developmental activities within the firm.

L.N.Dash (2008), in his study selected the port sector, which is playing a major role, and was thrown...
open to private participation to improve efficiency, productivity and quality of services, and to bring competitiveness in port services. This is in connection with the liberalization and globalization initiated, i.e. after 1991. In the present study Visakhapatnam Port Trust (VPT) was considered, which is one of the foremost major ports of India, which has been playing an energetic role in nurturing the country’s foreign trade and economic development. VPT was formerly considered as an outlet for manganese ore exports in 1933, the Port has grown from asset to asset, adopted itself to the needs of fast changing sea transportation system.

The focus of traditional accounting system concentrates on the commercial and economic accountability of the companies, but social responsibility disclosures deal with social impacts of corporate actions. Thus investors should be provided with additional and improved information enabling them to measure the performance of companies in an improved way. The present study is an attempt to understand the current practices of conventional accounting system and recognition of the organizations stakeholders contribution to the overall performance of the organization.

With the above importance, the present study was carried out with the following objectives

II. OBJECTIVES OF THE STUDY

1. Familiarize the need for Human Resource Accounting and practice in Visakhapatnam Port Trust
2. Examine the data relating to human resources of Visakhapatnam Port Trust and calculate human resources value of Vishakhapatnam Port trust
3. The study intends to benefit the organisation by identifying the importance of human resource accounting practices for optimum utilisation of human resources and increase the profitability.

III. RESEARCH METHODOLOGY

This research is based on the 4 years financial performance of the Visakhapatnam Port Trust which is one of the major ports in India. Period of study from 2008-09 year to 2011-12 year was taken from the secondary sources of Visakhapatnam Port Trust’s Annual Reports. Lev and Schwartz model was selected for measuring the value of human resources.

IV. LITERATURE REVIEW

A number of studies and articles published in different journals that discussed HRA with its various aspects and its application and effects were reviewed and cited within this research, and the reviews are sorted according to date from the oldest to the newest.

The following studies have direct relationship to this research, matching its purpose and objectives, and they helped in setting its dimensions taking into consideration its application.

“Importance of Human Resource Accounting Practices and Implications of Measuring Value of Human Capital: Case study of Successful PSUs in India” , published in XIMB Journal of Case Research, author Neerja Kashive (2002), explained in his study that many companies in India have understood the importance of measuring human capital and disclosing it values in their balance sheet. The practice of publishing HR information helps the firms to recognize worth of their tangible and intangible assets. It improves the brand name.

Ramakanta Patra, S.K. Khatik (2003), “Human resource accounting policies and practices: a case study of Bharat Heavy Electricals Limited, Bhopal, India” published in International Journal of Human Resource Development and Management. The study focused on how HRA helps to measure the value of human resources and its effects on vital decisions which increase the production. The study found that, there is a correlation between the total human resources and their impact on production of BHEL. The HRA valuation is important for decision making in order to achieve the organizational objectives and to improve the output.

H.K. Singh & Vivek Singh (2009) in their study “Human Resource Accounting Practices In Infosys Technologies Ltd. - An Evaluation” is an attempt to evaluate the HRA practices of Infosys technology limited (ITL) as well as its usefulness in decision Management, which is published in Management Insight. The study found that ITL requires more efforts in disclosing information on human resources and HR ratios to make effective decision making.

Mamta Ratti (2012), in his study “An Analytical study of Human Resource Accounting Practices – An Indian Experience” which is published in Integral Review - A Journal of Management, focused on the valuation of human resources at different levels of an organization to measure the efficiency quotient. The study based on the primary data for valuing of human resources. The study found that incorporation of the HR is very expensive and not easy to value human resources many efforts should be done in the area.

D.PanduRanga Rao et.al (2013), insights in to the significance of valuation of Human resources the article depicts the uses of publishing human resources value in financial statements in their study, “Study on Human Resource Accounting Methods and Practices in India” published in International Journal of Social Science & Interdisciplinary Research. The study found that, there is huge research should be done on its practical usage. More
practical implications on human resource accounting are required.

“Comparative analyses of Human Resource Accounting Disclosure Practices in Nigerian Financial Service and Manufacturing companies” the study made an attempt to analyzing the financials of 12-selected companies which are disclosing human resource value in their reports. Which is published in IOSR Journal of Humanities and Social Science, and the author Oyewo Babajide (2013), was the found that there is a positive connection between the volume of financials and human resource reporting. To improve the credibility of financial reports, firms may have to consider human resources in their financial statements.

N. Ijeoma & C.O.Aronu (2013), in their study “Effect of Human Resource Accounting (HRA) on Financial Statement of Nigerian Banks”, published in International Journal of Advancements in Research & Technology, dealt with the effect of human resource accounting on financial statement of Nigerian Bank using Zenith Bank Plc as a case, the study focused on whether the valuation of human resources have any impact on financial situation. The study used a survey method by using a questionnaire and interviews. The study found that, valuation of human resources will improve the financial position of the Zenith Bank.

Dr. Namita Srivastava (2014) in her study “Human Resource Accounting: a strategic approach to corporate excellence”, published in International Journal for Research in Applied Sciences and Engineering Technology, stressed on the importance of Human Valuation and its publication. The profitability of any firm depends on its ability to attract competent personnel, which in turn leads to profitability. Human resources are not the cost for the firm, but a revenue.

P.S.Vohra & Vipula Chaudhary (2014), “Human Resource Accounting Practices leads firms Performance” published in International Journal of Business and General Management. The research, insight into, to understand the effects of HRA practices in organizational performance and the study found, several insights on the relationship between human resource accounting and firms performance. The research attempt has proposed several hypothesis concerning job performance of the employees, valuation of employees, and productivity and capabilities of employees and all were empirically validated the same.

V. MEASUREMENT OF HUMAN RESOURCES

The present study used the Lev and Schwartz model, to value Human Resources, this method states that the human resource of an organization is the summation of value of all the Net present values of expenses on employees. The human capital embodied in a person of age r is the present value of his earning from employment. The following are the major steps to measure HR Value.

The importance behind selecting the Lev and Schwartz model for accessing human resource value of Visakhapatnam Port Trust, is because it was observed that, many of the public and private sector organizations who publish their HR values in their annual reports, had followed the same model. This model is considered the basic model, most widely used and is an appropriate method that is why the authors used the same model in the present study.

VI. STEPS IN DETERMINING THE HUMAN RESOURCE VALUE

Step 1: Employees are divided by Age, Class and Income levels

For the purpose of valuing the Human Resources of Visakhapatnam Port Trust, the employees are classified into 5 age groups viz.

1. 20 and < 20 age group: (18 years is considered as the age of the employee under this category) Median age for this group is 10 years, and it is impossible to be employed at the age of 10 years, it is observed from the Visakhapatnam Port Trust data, the minimum age of employees, at the time of joining was 18, so it is assumed 18 years as the age of the employee under this classification)

2. 21-30 age group: (Median age 25 years is considered as the age of the employee under this classification)

3. 31-40 age group: (Median age 35 years is considered as the age of the employee under this classification)

4. 41-50 age group: (Median age 45 years is considered as the age of the employee under this classification)

5. 51- 60 age group: (Median age 55 years is considered as the age of the employee under this category) Median age for this group is 55 years.

Note:
- The data is relevant to number of employees, irrespective of number of employees in annual reports
- Retirement age of the employees 60 years
- Assuming, that employee retain in the organization till his/ her retirement
- Salary includes bonus, dearness allowance, housing and all costs to the organization.
- Discount rate assumed to be 12%

Similarly the employees are classified into 4 classes and income levels

Employees of Visakhapatnam Port Trust are classified into 4 important classes namely Class I, Class II, Class III, and Class IV and their income levels (VPT Payroll)

Step 2: Ascertaining Average Earnings of each group

In Step 1, each Class of employees are categorized on the basis of their age and income levels, in
Step 2: Each Class and Age group of employees total earnings are determined and multiplied by the number of employees in that respective Class, in order to ascertain the Average Annual Earnings.

**Step 3: Calculation of Present Value of future earnings**

To calculate the present value of future earnings of each Class of employees, the average annual earnings per annum is discounted with a discount rate of 12%.

Present Value of future earnings = Average annual earnings per annum × Discount Rate (12%)

**Step 4: Calculation of HR value**

Summation of present value of future earnings of each Class and Age groups based on their income levels.

### Table No.1: Class wise HR Values of VPT for the study period 2008-09 to 2011-12

<table>
<thead>
<tr>
<th>Years</th>
<th>Class I</th>
<th>Class II</th>
<th>Class III</th>
<th>Class IV</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-09</td>
<td>673689903</td>
<td>387265093</td>
<td>684925493</td>
<td>130751324</td>
<td>972099243</td>
</tr>
<tr>
<td>2009-2010</td>
<td>776787293</td>
<td>452382454</td>
<td>787121747</td>
<td>2632986025</td>
<td>1176793940</td>
</tr>
<tr>
<td>2010-2011</td>
<td>917438433</td>
<td>526694641</td>
<td>9662330157</td>
<td>325592498</td>
<td>1442171787</td>
</tr>
<tr>
<td>2011-2012</td>
<td>1274585121</td>
<td>656718045</td>
<td>1015967949</td>
<td>3600966389</td>
<td>1567161034</td>
</tr>
<tr>
<td>Total</td>
<td>3705527771</td>
<td>1982866405</td>
<td>3454349867</td>
<td>11286768785</td>
<td>3517582568</td>
</tr>
</tbody>
</table>

### Chart No.1: Graphical presentation of Class wise HR values of VPT

**Analysis**

The number of employees falling into the Class III category is more than 65% of total employees at Visakhapatnam Port Trust during the study period, followed by class IV employees, with more than 20% during the study period. Class I and Class II employees together was less than 10% during the study period.

Human resources value is higher with the number of employees. The highest Human Resource Value contribution was made by class III employees during the study period followed by Class IV employees. 85% of overall HR contribution was made by Class III and Class IV during the study period. Class I and Class II employees contribution was less than 15% during the study period.

### Table No.2: Age Wise HR Values of VPT for the study period 2008-09 to 2011-12

<table>
<thead>
<tr>
<th>Years</th>
<th>&lt;20 and 20</th>
<th>21-30</th>
<th>31-40</th>
<th>41-50</th>
<th>51-60</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008-09</td>
<td>5138156.66</td>
<td>1383213131.12</td>
<td>2958145685.31</td>
<td>1754658571.59</td>
<td>854650585.52</td>
<td>972099243</td>
</tr>
<tr>
<td>2009-2010</td>
<td>4502772.70</td>
<td>1222356120.12</td>
<td>351068981.47</td>
<td>451899884.32</td>
<td>3524981708.95</td>
<td>11707193640</td>
</tr>
<tr>
<td>2010-2011</td>
<td>270734.14</td>
<td>14133897.23</td>
<td>305714850.08</td>
<td>811389236.63</td>
<td>425999705.96</td>
<td>1442171767</td>
</tr>
<tr>
<td>2011-2012</td>
<td>361563.34</td>
<td>1320302124.54</td>
<td>3358455797.52</td>
<td>1728729318.62</td>
<td>4598718737.58</td>
<td>15071216314</td>
</tr>
<tr>
<td>Total</td>
<td>13705106</td>
<td>350114932</td>
<td>15378901032</td>
<td>36177739683</td>
<td>13940885328</td>
<td>3517582568</td>
</tr>
</tbody>
</table>

**Chart No.2 Graphical Presentation of Age wise HR Values of VPT**

**Analysis**

The total HR value of VPT was in increasing trend during the study period. It was noticed that employees between the age groups of 41-50 years and 51-60 years contributed the highest, specifically in the years 2010-11 and 2011-12, there was 42.40% and 46.44% of total HR contribution was made by 41-50 age group, followed by 31.48% and 31.83% of total HR contribution was made by 51-60 years age group. Similarly, the other group which played an important role in terms of HR contribution was 31-40 age groups, which had contributed 30.43% and 30.19% in the year 2008-09 and 2009-10 respectively. There is a direct relationship between number of employees and HR value. It clearly shows that both age and experience of the employees has a direct effect on commitment levels towards their jobs and is the most important factor affecting the firm’s performance. The study also emphasis that work experience of the employees enabled the firm to benefit from the wastage in terms of time and effort which is comparatively low on one hand and the effectiveness of the employee are increasing on the other hand. With the existing Human Resources of Visakhapatnam Port trust can derive more contributions from all the classes of employees. The contribution made by the age groups 20 and <20 and 21-30 was less during the study period, similarly total percentage of employees under the above said age groups are very less.
3. Value Added is in the increasing trend in the study period, which is due to VPT’s efficiency in the reduction of operating expenses, which is possible only with the skilled manpower and their efficiency. This is due to continuous emphasis on training and multi skills exposure had enable VPT to achieve the highest ever services with less operating expenditure.

4. The total expenses to HR value were in a fluctuating trend throughout the study period mainly due to fluctuations in the raw material cost, changes in the stores and spares consumption expenses. It was found that, total expenses ratio was very high in the year 2011-12, this is due to employee provisions towards pension fund, gratuity fund etc. there are other influencing factors which leads to fluctuation are , employee benefits such as revised pay scales and increments in D.A etc.,

5. Total income of Visakhatapatnam Port Trust was in increasing trend during the entire study period. This ratio measures effectiveness of human resources based on the perspective that employee work together to achieve the objective of the organization by generating revenue. Despite of the decline number of employees throughout the study period, total income shows an increasing trend, this is only because VPT considers its human resources as its most valuable asset and has been continuously investing on workforce in terms of training and development and Research and Developmental activities and exposing them into the use of latest technologies and processes.

6. The HR value per employee is in increasing trend till the end of the study period, but it was noticed very high in the year 2011-12 and 2010-11 with 0.33 crores per employee and 0.29 crores per employee respectively.

7. Value added is the real contribution made to the organization’s success. While doing the activities or contributions most often produce measurable results for the organization. It includes reduction of wastage, increased production and sales, etc. Employees who have an identifiable, noteworthy value add impact on their organization are eligible for recognition, and appreciation. Value added to HR value ratio is fluctuating throughout the study period, due to various reasons viz., fluctuations in finance and miscellaneous expenses , fluctuations in operating expenses, funds towards purchase of new technologies, machineries , funds towards reserves etc.,

VII. CONCLUSION

According to Indian Companies Act, 1956, it is not mandatory to disclose the information which is related to HRA in the financial reports of the companies. Despite of an adverse environment in India, some of the public and private limited companies are producing HR information in their financial statements. VPT had given an utmost importance to its employees; Value Added during the study period is in the increasing trend which is due to VPT’s efficiency in the cutback of operating expenses.
which is possible only with the experienced personnel and their competence. Due to continuous emphasis on training and multi skills exposure had enabled VPT to achieve the highest ever services with less operating expenditure. Authors in the present study felt that, if VPT adopts HRA in its organization, it gives the quantitative information about the value of human asset, which helps the management of VPT in taking managerial decisions, such as which class of employees are contributing more, what is total income generated per employee, how much expenditure spend per employee, how much value added generated per employee etc., Proper valuation of HRA helps the management to understand the skills, knowledge and talents of their employees in a more improved way by implementing HRA.

And there is need to proper initiation taken by the Government as well as Boards at National and International levels with respect to formulating standards and suitable models for valuing human resources in order to value and report HR.

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