Human Resource Accounting (HRA)

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Abstract— Human Resource Accounting is the process of identifying and measuring data about Human Resources and communicating this information to the parties' interested. It attempts to identify and report the Investments made in Human Resources of an organisation that are currently not accounted for in the Conventional Accounting Practices. In order to estimate and project the worth of the human capital. It is essential that some method of measuring the worth of the knowledge, skill, motivation, and contribution of the human elements as well as that of organizational processes, like recruitment & selection, training, etc which are used to build, develop and support these human aspects, must be properly developed and implemented. HRA implies this process of measurement of Human Resources. Like in Accountancy, fixed assets like Building or Premises, Land, Plant and Machinery are recorded in the books of accounts at their purchase price or invoice price. Now, depreciation charged on these assets is considered as the cost for the particular financial year and debited to profit and loss accounts and the remaining balance is shown in the balance sheet as written down value of the assets. Likewise, on similar lines the human resources should also be measured and evaluated, recorded in the books, operated and disclosed in the financial statements.
The primary aim of HR Accounting is to depict the worth of the employees in quantifiable term, i.e. monetary terms. This concept can be viewed from 2 directions –
1. Cost of Human Resources- the expenditure incurred for recruiting, enhancing the quality of the employees, staffing and training.
2. Value of Human Resources- the yield which the above investment would yield in the future.

Index Terms— **HRA, Human Resources Capital, Management, Human Resource Valuation, Cost, Model, Investment, Accounting History, Financial Reporting.**

I. INTRODUCTION

Human Resource Accounting is a process of identifying and measuring data about human resource and communicating this information to parties interested. Therefore, it is an attempt to identify and report investment made in resources of an organization that are

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not presently accounted for under conventional accounting practices. Human resource accounting is basically an information system that tells management what changes are occurring over time to the human resources of the business. 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 is the most vital part of any organization, as it makes sure that there exists a symbiosis or harmony between financial and all other physical resources towards the achievement of organizational objectives and goals. Though, financial assets are accounted in the books of accounts as per the general principles of accounting, but do not count the human asset. Although many efforts have been made by many thinkers in this arena, a proper/appropriate and fully validated model of performance based on accounting in the Indian context is not yet available. In the past few decades, we have witnessed a global transition from manufacturing to service based economies. Though, Human Resource Accounting (HRA) was introduced way back in 1980s; it started gaining popularity in India recently. Although HRA has important implications for external financial reporting, in the modern day economic environment and HRA has greater significance as powerful managerial tool in internal human resource management decisions. Human resource accounting helps to measure the value of employees, which helps the management to take important decisions related to human resources in order to increase production. It requires the measurement of the performances of an organization and the optimum use of the resources under the direct and indirect control. Hence, it is necessary that overall valuation must be done to make proper decisions making to achieve the organizational objectives and improve the output. In order to estimate and project the worth of the human capital, it is important that some method of quantifying the worth of the knowledge, skill, motivation, and contribution of the human elements as well as that of organizational processes, like recruitment & selection, training, etc. which are used to build and support these human aspects, are properly developed. HRA denotes this process of quantification/ measurement of Human Resources. The tangible assets like premises, land, plant and machinery are recorded in the books of accounts at their original price. Now, depreciation on these assets is considered as the cost for the particular year and debited to profit and loss accounts and the remaining balance is shown in the balance sheet as written down value of the assets. Hence, on similar lines the human resources should also be measured, recorded in the books, operated and disclosed in the books or financial statements. Human resource is the vital input of any organization in this era of globalization, as it drives all

other physical and financial assets/resources towards the achievement of organizational goals.

The system may serve both the internal and external users, providing management (internal users) with relevant data on which to base training ,recruiting, managerial and developmental decisions and supplying investors, lenders and other external users of financial statement with information concerning the investment in and utilization of human resources in the organization. The biggest challenge in HRA is that of assigning monetary values to different areas of HR costs, amount to be invested and the worth of employees. HRA provides the information of total cost of human assets which can use for calculating their benefits for business by comparing it with the benefits provided by employees.HRA is top work in the field of accounting because in accounting , we includes all physical assets and intangible assets but before making of HRA accounting we are ignoring a very important asset and its name is human being who works in any company or industry. Human resource accounting is very important where human element is more important than any other factor of production or services. For instance education sector is top sector that HRA must be used for maintaining the accounts of education department.

II. REVIEW OF LITERATURE

The performance of every enterprise is based in large measure upon the quality of human resources. Able employees must be, trained, organized and secured into effective interacting groups. Favorable relationships must also be developed with external human resources such as stockholders, bankers, customers, creditors and underwriters. These unquantified assets are becoming progressively more important. Since the turn of the century, labor force trends data indicate that those occupational classes requiring the highest skills have exhibited much greater relative growth than the more unskilled low investment occupations. [1]

An analytical study of human resource accounting Practices states that Human resource accounting has very high significance not only for the Management and employees but also for business analysts. Human Resource Accounting gives information regarding inner strength of organization and helps in making decisions regarding long-term investment in that organization. The study focuses on the calculation of the value of human resources at different levels of organization & to determine the human resource efficiency quotient. The study based on the primary data related to the measurement of human resources. [2] In1971, Lev and Schwartz gave model for valuing human resources. In India, Lev and Schwartz is the most popular model for calculating the value of HR used by public sector like SAIL and BHEL. The model is basically based on future earnings of an employee till his retirement. According to this 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,
Vr= value of an individual or r years old
I(t)= the individuals 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 skilled , semi- skilled, unskilled, technical and managerial staff and so on and also into different age groups. By using this formula, we calculate average earnings for different classes and age groups and present value of HR. Lev & Schwartz also recommended that, the use of cost of capital in the organizations is used for the purpose of discounting the future earnings of the employees to arrive at the present value. They recognized individual employee's contribution and economic value and to the organization. [3]

A human resource accounting transmission seeks to present the positions and conclusions of scholars to support a proposition that the asset approach to human resource accounting has failed and also provides an argument and rationale to demonstrate that a liability paradigm would be compatible with normal accounting and reporting procedures. the proposed paradigm would focus on the liabilities that organizations incur when they employ people. It would shift the focus on the management for the liability exposure. Such a focus also allows an substitute, and maybe more satisfactory way, to account for and report HR financial information. This paper makes no claim that all the details have been worked out. If there is to be a future, seems to reside in shifting to this new liability paradigm and then getting on with the normal science of working out for the latest details. [4]

Human resource accounting traces the history and development of human resource accounting. HRA involves accounting for people as human assets. Although HRA has important significances for external financial reporting, in the present economic environment. HRA possesses a greater significance as a powerful managerial tool in internal human resource management decisions. In addition to improving internal managerial decisions such as in layoffs, HRA's implementation will lead to better overall firm valuation techniques and better decisions making in buy-sell-merge transitions. [5]

III. OBJECTIVES

Following are the key objectives which formed the basis for our analysis-
- ➢ To review the applicability of HRA and their appropriateness.
- ➢ To foreground the characteristics of HRA and its practical difficulties in implementations.
- ➢ To understand the significance of HRA in the business.
- ➢ To provide suggestions and optimal solutions for developing such accounting practices in our business practices.

IV. METHODOLOGY

For our research purpose or primary source of data collection was Questionnaire. Based on the data collected from primary sources like Websites, Journals and other related articles, we had made an attempt of survey which consisted 12 questions and

the same was distributed among the employees of various organizations. The purpose was to determine how HRA module has been implemented in their organization and what benefits they are deriving we have taken sample size of 20, which included both male and female employees. These employees were within the age bracket of 25-30 years in age.

V. TOOLS FOR ANALYSIS

In our research study, we had used 'IBM SPSS' software. For testing purposes, we had used 't-test', since the sample size was less than 40. With the help of this software, we were able to analyze our data in variety of tabulated data like Group Tests and Independent Samples Test. For our study purpose, our primary focus was to check the hypothesis whether they were being accepted or rejected based on the tabulated value.

Case Processing Summary

		N	%
Cases	Valid	21	100.0
	Excluded[a]	0	.0
	Total	21	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.612	.634	12

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
VAR00002	Male	11	1.9091	1.13618	.34257
	Female	10	2.4000	.96609	.30551
VAR00003	Male	11	2.1818	1.07872	.32525
	Female	10	2.1000	.31623	.10000
VAR00004	Male	11	1.8182	.75076	.22636
	Female	10	1.7000	.48305	.15275
VAR00005	Male	11	1.8182	.40452	.12197
	Female	10	1.9000	.31623	.10000
VAR00006	Male	11	2.4545	1.03573	.31228
	Female	10	1.7000	.82327	.26034
VAR00007	Male	11	1.9091	.53936	.16262
	Female	10	1.7000	.82327	.26034
VAR00008	Male	11	2.7273	.90453	.27273
	Female	10	2.1000	.99443	.31447
VAR00009	Male	11	2.8182	.87386	.26348
	Female	10	2.1000	.87560	.27689
VAR00010	Male	11	1.9091	1.13618	.34257
	Female	10	2.4000	1.07497	.33993
VAR00011	Male	11	1.9091	.94388	.28459
	Female	10	2.0000	.81650	.25820
VAR00012	Male	11	2.0000	.63246	.19069
	Female	10	2.1000	.31623	.10000
VAR00013	Male	11	1.7273	.78625	.23706
	Female	10	2.3000	1.25167	.39581

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
VAR00002	Equal variances assumed	.091	.767	-1.061	19	.302	-.49091	.46272	-1.45939	.47758
	Equal variances not assumed			-1.069	18.928	.298	-.49091	.45801	-1.45187	.47005
VAR00003	Equal variances assumed	3.112	.094	.231	19	.820	.08182	.35491	-.66102	.82466
	Equal variances not assumed			.240	11.862	.814	.08182	.34027	-.66053	.82416
VAR00004	Equal variances assumed	1.468	.241	.424	19	.676	.11818	.27881	-.46537	.70173
	Equal variances not assumed			.433	17.215	.671	.11818	.27308	-.45742	.69378
VAR00005	Equal variances assumed	1.110	.305	-.513	19	.614	-.08182	.15964	-.41595	.25231
	Equal variances not assumed			-.519	18.616	.610	-.08182	.15772	-.41239	.24876
VAR00006	Equal variances assumed	.065	.801	1.835	19	.082	.75455	.41119	-.10609	1.61518
	Equal variances not assumed			1.856	18.696	.079	.75455	.40657	-.09735	1.60644
VAR00007	Equal variances assumed	4.672	.044	.695	19	.495	.20909	.30087	-.42063	.83882
	Equal variances not assumed			.681	15.298	.506	.20909	.30696	-.44407	.86225
VAR00008	Equal variances assumed	.061	.808	1.514	19	.146	.62727	.41429	-.23984	1.49439
	Equal variances not assumed			1.507	18.308	.149	.62727	.41626	-.24619	1.50074
VAR00009	Equal variances assumed	.633	.436	1.879	19	.076	.71818	.38218	-.08172	1.51809
	Equal variances not assumed			1.879	18.803	.076	.71818	.38221	-.08237	1.51873
VAR00010	Equal variances assumed	.076	.785	-1.014	19	.323	-.49091	.48395	-1.50382	.52201
	Equal variances not assumed			-1.017	18.962	.322	-.49091	.48261	-1.50116	.51934
VAR00011	Equal variances assumed	.057	.813	-.235	19	.817	-.09091	.38705	-.90100	.71919
	Equal variances not assumed			-.237	18.963	.816	-.09091	.38426	-.89529	.71347
VAR00012	Equal variances assumed	1.075	.313	-.451	19	.657	-.10000	.22189	-.56442	.36442
	Equal variances not assumed			-.464	14.996	.649	-.10000	.21532	-.55896	.35896
VAR00013	Equal variances assumed	1.420	.248	-1.269	19	.220	-.57273	.45143	-1.51759	.37213
	Equal variances not assumed			-1.241	14.890	.234	-.57273	.46137	-1.55675	.41130

VI. FINDINGS AND ANALYSIS

The following questions were included in our questionnaire. Along with questions, we have also mentioned their analysis and accept/reject of hypothesis generated from the results.

1. Is there lack of single universal and standard method of valuing human assets in India?

Analysis- The figure states that in independent samples test, while using T-test, that, the Tabulated Value (0.05) is less

than when compared to Sig. Value (0.767). Thus, the applicability of single and standard method of evaluating HRA is equal among both Male and Female sample population and much higher as compared to table value. Hence, we will accept this hypothesis.

2. Is the Human Resources Accounting in the initial stage and required for focus to implementation?

Analysis- Results proves that both the gender do not perceive in the same manner as required, because of the higher implementation costs which might affect organization's budget. However, the results show that the Sig. Value (0.094) is higher than Tabulated Value (0.05). Hence, we will accept this hypothesis.

3. Is there so much of scope for improving the widely adopted present defective system of Human Resources Accounting?

Analysis- The current system of HRA is an improved version of human evaluation. The scope of improvement always exists in any system, but both male and female feel that the existing system must be expanded to other departments as well so as to improve efficiency. Analysis shows that the sample population does not feel there is much more scope in improving the system. Thus, we will accept this hypothesis. (0.241>0.05)

4. HRA helps management in human resources conservation

Analysis- HRA helps management to overcome future shocks. It helps management to reduce turnover, promotions, rewards, and hikes in salary. When management combined HR functions with HRA it helps them to value the current worth of human asset by evaluating his/her performance to the organizational growth. Results show Sig. Value (0.305) is higher than Tabulated Value (0.05). Hence, we will accept this hypothesis.

5. HRA helps in personnel selection process

Analysis-HRA helps in selection process, by evaluating the human's net worth or CTC with the organization's net growth. The same also helps to determine, to quote the expenses incurred on training, other miscellaneous expenditure. If the latter is higher, than the management can find out the possible reasons effectively. The Sig. Value (0.801) is higher than Tabulated Value (0.05). Thus, we will accept this hypothesis.

6. HRA helps in resource allocation among various HR development programmes

Analysis- The current trend shows that senior and middle management helps in effective allocation of resources for the programmes conducted. HRA is nowhere involved in allocation. Hence, the sample population strongly agree on this, thus the Sig. Value (0.044) is less than Tabulated Value (0.05). We will reject this hypothesis.

7. HRA helps in evaluation of performance of personnel

Analysis- The results derived from the questionnaire agrees that HRA helps in measuring the performance of the employee. As discussed about HRA, it helps in evaluating the expenditure incurred v/s the cost of benefit generated by him. This indicates the increase or decrease in employee's performance over his tenure. Here Sig. Value (0.808) is higher than Tabulated Value (0.05). Hence, we will accept this hypothesis.

8. HRA helps in performance evaluation process

Analysis- Performance evaluation process involves annual or periodic review of employee's performance. HRA measures the employee's net contributions made by him in organization's improvement and development. Also, it monitors the deviations, if any of employee to improve performance. Employees taken in sample agree that by showing Sig. Value (0.436) is

9. higher than Tabulated Value (0.05). Hence, we will accept this hypothesis.

HRA controls the loss due to turnover of employees

Analysis- HRA helps in overcoming the drawbacks of earlier human valuation system. Dissatisfied employees or least motivated employees can use this tool to prove their worth of service rendered to the organizations during their tenure with management. Management in turn can check their performance and can reduce such monotony and thus can save turnover. The Sig. Value (0.785) is greater than Tabulated Value (0.05). So, we will accept this hypothesis.

10. Is it essential to adopt HRA to face the acute competition in the era of globalization?

Analysis- In the rapid movement of business, organization needs to keep its employees satisfied and provide every comfort during and off the job. Using HRA, the same can check what their competitors are offering. In addition to that, it can also measure the market trends which industry is following. Sig. Value (0.813) is much higher than Tabulated Value (0.05). Thus, we accept this hypothesis.

11. HRA provides measurements for budgeting human resource acquisition & development

Analysis- It helps in measuring and budgeting the capital for each position. Also, the management prepares the blueprint in each financial year to estimate the budget allocation for the forthcoming financial year. It also evaluates the trainer's efficiency in minimizing the cost. However, some population from sample do not agree on this issue. Still, the Sig. Value (0.313) is higher than Tabulated Value (0.05). We will accept this hypothesis.

12. Does HRA help in taking managerial decision?

Analysis-HRA deals only with human worth valuation and its evaluation. Management is not completely dependent on this tool to make/manage its decision. The analysis among population shows that few of the employees feel that their organization use this for the same. The result generated shows Sig. Value (0.248) is slightly higher than Tabulated Value (0.05). Hence, we will accept this hypothesis.

CONCLUSION

Human resources are the vigours, knowledge and skills of people which are applied for the production of goods or rendering useful services. HRA identifies and measures data about human resources and communicating the same information to interested persons. While valuing HR, emphasis can be given on costs like acquisition, substitution, opportunity, replacement, non monetary measures, economic value models & standard cost method etc.

In the era of globalization and cost cuts, HRA would give an organization a correct vision towards the way ahead. In the final analysis it must be said that the concept of HRA has been revalued by the accounting profession and by and large its usefulness has also been acclaimed in the literature but unfortunately, its application has not expanded throughout the world. Therefore it is suggested that, beside modernization and technological upgradations, the organization should also make efforts towards competency development. They should

continue to work for developing capabilities and realization of best potential of its employees. The organization should also take continuous efforts for active participation by employees, making suitable working environment and ambience for showcasing their creativity and innovation by employees and ensuring a climate that reflects synergy and contagious enthusiasm has been at the core of HR initiatives and interventions.

Hence, considering the paramount of HRA, proper initiation should be taken by the Government as well as Professional Boards at the National and International levels in respect of formulation of specific accounting standard and suitable valuation models on the measurement and reporting of the value of HR.

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