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### **Human resource accounting: A study of perceptions of investors and managers**

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#### **Abstract**

In the past, the main factors of production were seen as capital, raw materials, and physical resources, all of which were considered valuable assets and recorded on a company's balance sheet. However, with the emergence of the knowledge economy, there has been a shift in perspective, acknowledging the critical role of human resources (HR) and human capital. Today, management recognizes that human resources are the driving force behind capital accumulation, the utilization of natural resources, and the construction of social and economic organizations. Therefore Human Resource Accounting (HRA) is advocated to provide a more comprehensive understanding of a company's worth. The present paper has been undertaken to examine stakeholders' perspective on designing an HR accounting and reporting model, including HR valuation, their accounting and reporting format that is in accordance with the expectations of stakeholders. A self-structured questionnaire is used for the primary survey of investors and managers to seek their opinions about setting up of effective and reliable HRA system in companies. The data has been analysed using MS Excel and SPSS by relevant statistical methods. The survey has suggested that companies should form a committee of human resources managers, and accounting and finance managers. The committee should be responsible for setting up system for collecting data relating to significant human resource related disclosures and presenting the same in prescribed format to relevant stakeholders as required. Besides this, the study also identified the human resources indicators perceived as most important by the managers and investors. These can be used as guide by accounting and regulatory bodies while setting up standards for human resource disclosures by the companies.

**Keywords:** Human resources, accounting for HR, valuation of HR, disclosures and reporting formats, HR indicators

#### **1. Introduction**

Traditionally, the primary factors of production were considered to be capital, raw materials, and physical resources, which were viewed as valuable assets reflected in a company's balance sheet. Labour or human resources did not receive the same level of importance and were treated as expenditures. With the rise of the knowledge economy, there has been a shift in focus towards recognizing the significance of human resources and human capital. Management now acknowledges the vital role played by human resources, as they are the active catalysts that accumulate capital, utilize natural resources, and build social and economic organizations. Consequently, among all the key resource factors, human resources are now recognized as the most strategic and critical.

In today's management practices, the challenge lies in developing and nurturing human resources. Human resources encompass the energy, skills, talents, and knowledge of individuals that can be applied to the production of goods or the provision of services within a company. Therefore, companies are investing more than ever in the development of their human resources, aiming to enhance knowledge, skills, and efficiency. Human resources have become a crucial factor for sustainable and accelerated company growth.

This emphasis on human resources is often reflected in a company's annual report, where directors acknowledge and appreciate the efforts of employees, staff, and executives. These statements usually convey a qualitative assessment, demonstrating sensitivity, appreciation, and attitude towards human resources. Though, some companies also attempt to quantify the value of their human resources by measuring per capita output. This recognition of the value of a company's human resources and its communication to stakeholders is often referred to as human resource accounting (HRA).

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### Development of Human Resource Accounting System

The current accounting system, based on double-entry bookkeeping, originated in 14th century Italy to improve recording of profits from trade. Accounting evolved during the industrial shift in the 19th century, with the balance sheet being used to assess liquidity and the income statement gaining importance as financing relied more on stock offerings. The cash flow statement was later introduced to explain the relationship between profits and liquidity. Accounting practices adapt to economic changes and stakeholder needs. In words of Von Krogh *et al.*, (1998)<sup>[27]</sup> and Stewart, (1991)<sup>[24]</sup>, as societies are beginning to transition to a knowledge-based economy, terms like knowledge, intellectual capital, and knowledge management are gaining significance, rendering traditional frameworks obsolete. For a lay person, balance sheet of a knowledge-based company appears unimpressive as compared to that of an industrial (manufacturing) company. In knowledge-based companies, intangible assets such as talent (intellect, creativity, leadership, innovations, etc.), processes (software, systems, fluid hierarchies, project-based teams, and other similar aspects) and relations (with employees, customers, and suppliers) hold greater value than tangible assets. In fact, management has already perceived the change and accordingly replaced the term personnel with human resources.

However, conventional accounting practices fail to properly recognize and account for the significance of human resources within a company. Despite being the most important asset, human resources are treated as expenses rather than valuable investments. Traditional accounting statements do not adequately capture the cost and value of human resources, resulting in incomplete assessments and distorted decision-making. This inability to adapt accounting systems to changes in the economy leads to information asymmetry among users and preparers of financial information. The growing disparity between market value and book value of companies highlights the need to incorporate measures that accurately reflect intangibles like brand value and human resources. Human Resource Accounting (HRA) is necessary to disclose the value and productivity of human resources, providing a more comprehensive understanding of a company's worth. Social psychologist Rensis Likert (1967)<sup>[14]</sup> has argued that the conventional accounting system can inadvertently lead to the misallocation or ineffective utilization of human resources by prioritizing short-term profits over long term performance. Managers often focus on immediate earnings and resort to cost-cutting measures, such as layoffs, which ultimately result in increased turnover and additional expenses for hiring and training. Likert suggests that human resources should be integrated into the accounting system to address these issues.

The importance of innovative, skilled, and motivated employees as a competitive advantage is widely recognized, particularly in-service industries. The increased global competition in the 1980s and a worldwide recession in the early 1990s drew attention to the effectiveness of investments in human resources, even in labour-intensive industries. As human resources are expensive to develop and maintain, it is crucial to give them significant attention and continuously monitor the impact of human resource

practices on business performance. Human resource accounting serves as a means for organizations to account for the valuation of human resources and evaluate the effects of investments in recruitment, training, and development, enabling informed decision-making. Reporting HRA information can help bridge the information gap between users and preparers of financial statements, providing external stakeholders with insights to assess the investment worthiness of a company. Moreover, it provides managers with valuable information to make better decisions regarding the recruitment, development, and retention of human resources. Therefore, HRA is advocated for two reasons: to reduce the informational gap between stakeholders and companies and to empower managers to make informed decisions regarding human resources.

However, a review of available literature on the area of Human Resource Accounting (HRA) reveals that stakeholders are generally not involved in formulating policies or strategies related to reporting the true value of a company's human resources. There are a few exceptions, such as isolated pilot projects at the enterprise level initiated by dedicated managers, particularly in Scandinavian countries. However, even these countries have not established clear policies in this regard. Most of the work in HRA focuses on testing and theorizing, rather than actively promoting reporting frameworks for making informed decisions. There is a clear need to involve stakeholders in developing proper systems for human resource measurements, valuation, accounting, and reporting. The benefits of HRA can only be maximized only when the system can provide objective and reliable information that meets the stakeholders' needs. The objective of this study is to address this research gap and fulfil these requirements.

The overall research objective of this paper is to design an HR accounting and reporting model, including HR valuation, their accounting and reporting format that is in accordance with the expectations of stakeholders.

### To fulfil this objective, the paper seeks to answer following research questions

RQ1: What should be the appropriate method for accounting of HR costs?

RQ2: What should be the basis of valuation of HR?

RQ3: What are determinants of the value of HR?

RQ4: Where should the HR related information be reported?

RQ5: Which department should be entrusted with task of setting up and managing HRA System?

RQ6: Which is the most important category of employees for valuation?

RQ7: Which management level regards HR information as highly relevant?

RQ8: Which are the most important HR indicators?

Respondents were also asked to give suggestions to make HRA systems more useful and effective. In addition, an attempt is made to examine whether managers and investors have similar perceptions regarding setting up of HRA system. It is important to find out whether the stakeholders' expectations match so as to establish such HRA system that can satisfy their basic requirements.

The paper is organized in 5 sections. Section 1 provided introduction and an insight into the need of HRA. Section 2

gives a comprehensive Literature Review. Section 3 discusses the Research Design and Methodology. Section 4 is dedicated to detailed Result Analysis and in-depth Discussion of the related issues. Section 5 gives the Summary and Implications. It also mentions the Limitations and Future scope of the work; and finally References.

## 2. Literature Review

### Abroad

Most of the research in the area of HRA has been confined to the development of valid and reliable measures of human resource cost and value and assessing the impact of HRA on decision making. Some of the important studies in this area were conducted by Hermanson (1964) <sup>[10]</sup>, Likert (1967) <sup>[14]</sup>, Lev and Schwartz (1971) <sup>[13]</sup>, Flamholtz (1971) <sup>[7]</sup>, Morse (1973) <sup>[15]</sup>, Friedman and Lev (1974) <sup>[8]</sup>, Jaggi and Lau (1974) <sup>[11]</sup>, and Ogan (1976) <sup>[17]</sup> that focussed on HR valuation models. These researchers identified the variables determining human resource cost and values. Some researchers, notably Tomassini (1977) <sup>[25]</sup>, Oliver and Flamholtz (1978) <sup>[19]</sup>, Bayes (1985) <sup>[2]</sup> and Ellingson and Wambsguass (1986) <sup>[6]</sup>, examined the effect of HRA information on managers' decision making. Studies by Elias (1972) <sup>[5]</sup>, Hendricks (1976) <sup>[9]</sup>, Schwan (1976) <sup>[22]</sup>, and Acland (1983) <sup>[1]</sup> assessed of effect of HRA information on stock investment decisions and financial decisions. But these studies were restricted in their scope and used students as surrogate investors. In addition, these studies were merely focused on external users' viewpoint with a specific decision. From the time the idea of valuing and putting people on balance sheet was floated, objectives of HRA have also gone for major change and now includes the use of HRA information in efficient human resource management, framing better human resource practices in companies and making informed investment decisions.

Verma and Dewe (2008) <sup>[26]</sup> conducted a survey using questionnaires to examine stakeholders' perceptions of Human Resource Accounting (HRA) and the practices adopted by companies and local authorities in the UK. The study found that the knowledge and skills of individuals are the most crucial sources of sustained competitive advantage. HRA was perceived as a highly useful tool for internal decision-making, as it not only assists in strategic planning but also aligns human resource plans with business objectives. However, several challenges hinder the widespread adoption of HRA, including a lack of understanding of HRA methods, the absence of objective and universally accepted measurement methods and reporting formats, varied approaches followed by different companies, and the high costs associated with implementing HRA systems. In the absence of proper HRA systems, companies rely on proxies such as absence and accident rates, training costs, turnover rate, cost of labour, client satisfaction surveys, and competencies to make human resources decisions. Nonetheless, managers of knowledge-intensive companies expressed optimism that significant progress would be made in developing suitable HRA systems in the coming years.

Khan and Ali (2010) <sup>[12]</sup> reported in their study of intellectual capital reporting by private commercial banks in Bangladesh and survey to explore the stakeholders' perceptions of intellectual capital disclosure practices that

stakeholders are in favour of such disclosures but at the same time want an objective and comprehensive method for reporting.

### India

In India, not much work has been done to identify variables affecting HR valuations, setting up HRA systems, and examining impact of and usefulness of HRA information on the internal management decisions. Very few researchers have attempted to develop methods to value human resources and to identify the importance of HRA information for various decisions by managers and investors. Notable among them are Chakraborty (1977) <sup>[3]</sup>, Rao (1983) <sup>[21]</sup> and Rajeshwar and Subramanya (1989) <sup>[20]</sup>. Rao (1983) <sup>[21]</sup> had undertaken the research of designing and implementing the HRA systems in Hindustan Shipyard, Vishakhapatnam (India). The basic objective of his work was designing, implementation and usefulness of HRA in the company. However the study suffered from a major limitation that all the conclusions arrived at were only useful for unit for which the systems were designed and no generalisation could be made. But the study made a useful contribution in the area of HRA by specifying different elements of cost and value of human resources in Indian context.

In recent years, some companies in India that are regularly computing the value of human resources and reporting the same through their annual reports in the form of supplementary statements. Studies by Shah and Khedkar (2006) <sup>[23]</sup>, Narayan (2010) <sup>[16]</sup> and Dalwadi (2010) <sup>[4]</sup> observed that companies are mostly using Lev and Schwartz model of valuation of human resources. Besides this, no formal system of HRA exists in any of the companies although many companies are disclosing human resource related information (indicators) in their annual reports. But such disclosures (HR) are mainly voluntary and unstructured. Implicitly, the information so disclosed does not serve the purpose for stakeholders. Although researchers have tried to examine the extent of HR disclosures in India but they are yet to come up with an acceptable list of human resource variables which should be disclosed in a certain format so that all the stakeholders can seek such information. Even the regulatory bodies are yet to come up with such requirements so as to make this information objective and reliable.

It is evident from the above discussion that generally, the stakeholders are not involved in formulating policies or strategies concerning reporting on the real value of company's human resources. The exceptions come from relatively few and isolated pilot projects at enterprise level formulated by dedicated managers and, notably, from the Scandinavian countries. However, not even these countries have formulated clear policies. Most of the work is still dedicated to testing and/or theorising rather than decision making on or active promotion of reporting frameworks. There is a clear need to involve the stakeholders in setting up proper systems for HRA measurements, valuation, accounting and reporting. In fact the benefits of HRA can be optimal only if the system is able to supply the information according to the needs of the stakeholders in an objective and reliable manner. The objective of this study stems from this need.

### 3. Research Design and Methodology

**3.1 Research Design:** A self-structured questionnaire is used for the primary survey of investors and managers to seek their opinions about setting up of effective and reliable HRA system in companies.

**3.2 Sample Selection:** The sample included managers in NSE CNX 200 companies working at different management levels and investors of stocks of the companies listed on the major stock exchanges of India namely Bombay Stock Exchange and National Stock Exchange. The investors were identified through investor forums and personal contacts. Stock consultants were also approached to get references of investors. With reference of the investors so met and through friends and relatives, a network of investors was established. The investors have been chosen from Delhi and NCR purely for convenience reasons.

**3.3 Data Collection:** The questionnaire was sent through Google doc service. It was mailed to 1800 persons. It was followed by telephone conversations. In all, 82 responses were collected through it. With a view to collect more data,

managers and investors were approached personally and questionnaires were given in hard copy. In all, 1000 copies were distributed, of which 453 were returned. Of these 59 responses were rejected due to insufficient information supplied by respondents. In this way, 394 responses were complete. These along with 82 responses collected through emails made the overall sample of 476 responses.

**3.4 Technique of Analysis:** The research is essentially exploratory and descriptive. The data collected through questionnaire has been analysed using MS Excel and SPSS by relevant statistical methods namely mean, standard deviation, frequencies, and F-test to arrive at meaningful conclusions. The mode of study in this case is exploratory and descriptive.

## 4. Data Analysis and Findings

### 4.1 Demographic variables

The information relating to demographic variables is presented in following Table 1.

**Table 1:** Respondents Analysis

Socio-Demographic Variables	Frequency	%age
<b>Age-wise classification (Years)</b>		
Up to 30 years	154	32.35
31-40	182	38.24
41-50	105	22.06
51+ years	35	4.35
<b>Gender-wise classification</b>		
Female	215	45.17
Male	261	54.83
<b>Educational Qualification</b>		
Up to Graduate	191	40.13
Post Graduate	153	32.14
Professional	132	27.73
<b>Employment Status</b>		
Employed- Govt.; PSU	173	35.71
Employed- Pvt.; MNC;	235	53.15
Self Employed: Trade/business; consultancy etc.	40	8.41
Agriculture / Farming	3	2.10
Other	10	0.63
<b>Total Work Experience</b>		
Up to 10 years	203	42.65
More than 10 years	273	57.35
<b>Category of Respondents</b>		
Investors	231	48.53
Managers	245	51.47
	476	100.00

The data shows that maximum numbers of participants are in age groups of 31-40 years (38.24%) followed by age group of up to 30 years (32.35%). However least number of participants is from age group of 51+ years at 4.35%. Sample includes 54.83% males and 45.17% females. Majority of respondents (40.13%) are educated up to graduation graduates whereas 32.14% are post graduates or above. The respondents with professional qualification are 27.73% of total sample. Majority of the respondents (53.15%) are privately employed. Majority of respondents (57.35%) have more than 10 years of work experience. Respondents include 48.53% investors and 51.47%

managers.

### 4.2 Accounting for Human Resource related Costs

The survey results in Table2 shows that majority of investors (45%) are of the opinion that human resources should be valued on basis of combination of expected realisable value from employees and their trait score. Similarly, majority of managers (51.6%) also agree to combination approach. In this way, it can be concluded that both managers and investors agree that human resources should be valued on the basis of combination approach. The t-test results confirm results of descriptive analysis.

**Table 2:** Managers’ and Investors’ Opinion regarding Accounting for HR Costs

Methods	Managers		Investors		Total	
	Freq.	Percent	Freq.	Percent	Freq.	Percent
Use the expenditure incurred in recruitment, training, bonus payment, etc as an investment/ asset for future returns and write off the same over the period of use	35	14.6	31	13.4	66	14.1%
Calculate the value of Human resources on the basis of the expenditure incurred in recruitment, training, etc and record the same	37	15.0	36	15.6	73	15.3%
Calculate expected realisable value from employee, taking emoluments given to employees as its proxy, during his stay in company, record and write off the same over the period of use	34	13.8	45	19.5	79	16.6%
Calculate value of human resources on the basis of employee traits-qualification, knowledge, skill, attitude, team spirit, leadership etc., record and write off the same over the period of use	12	5.0	15	6.5	27	5.5%
A combination of (3) and (4)	127	51.6	104	45.0	231	48.5%
Total	245	100.0	231	100.0	476	100.0%

F value 0.458

Significance 0.499

**4.3 Valuation of Human Resource**

Table3 shows that factors which can be included in their valuation are emoluments given, employee knowledge

domain traits, employee personality traits, employee performance indicators, and organisational attributes in the respective order of importance.

**Table 3:** Managers’ and Investors’ Opinion regarding Determinants of Value of Human Resources

Factors Representing Value	Managers		Investors		Total		F value	Significance
	Freq.	%	Freq.	%	Freq.	%		
Employee Personality Traits	132	53.7	127	55	259	54.40	0.058	0.810
Knowledge Domain Traits	110	44.7	96	41.6	206	43.30	0.539	0.463
Performance Indicators	81	32.9	94	40.7	175	36.80	2.985	0.085
Emoluments Given	169	68.7	149	64.5	318	66.80	1.073	0.301
Organisational Attributes	17	6.9	16	6.9	33	6.70	0.030	0.864

In this way, it is concluded that majority of the managers (68.7%) and investors (64.5%) are in favour of taking emoluments as a basis for valuation of the human resources followed by employee personality traits and then knowledge domain traits. F values reveal that their choice of determinants of value is not affected by their group in all cases.

The survey results in **Error! Not a valid bookmark self-reference.**4 indicate majority of the investors (52.8%) as well as managers (47.6%) support that HRA information should be given in a separate statement along with financial statements. Few respondents want this information to be included in financial accounts. An important reason for this can be that they are apprehensive about reliability and objectivity of combined financial statements because of lack of standardised and objective methods to do the same.

**4.4 Place of Disclosure of HRA information**

**Table 4:** Managers’ and Investors’ Opinion regarding Place of Disclosure of HRA Information

Placement of HRA Information	Managers		Investors		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
These should be embedded in the financial accounts just like other financial and physical resources	26	10.6	20	8.7	46	9.64
As a separate statement along with financial statements	117	47.6	122	52.8	239	50.10
As supplementary statements	51	20.7	42	18.2	93	19.50
In companies’ newsletters, press releases	21	8.5	18	7.8	39	8.18
In companies’ web pages	20	8.1	23	10.0	43	9.01
Corporate Social Responsibility Statements	10	4.1	6	2.5	16	3.35
Internal management reports only	1	0.4			1	0.21
Total	246	100.0	231	100.0	477	100.00

**4.5 Choice of Department for Setting up HRA System**

The survey results in

Table 5 indicate that there is a consensus among the respondent groups as to who should be entrusted with task of setting up and managing HRA system. Majority of the managers (58.9%) and investors (59.3%) are of the opinion that a committee of both human resources managers and accounting and finance managers should be responsible for valuation and reporting of HRA information.

**Table 5:** Managers’ and Investors’ Opinion regarding choice of Department for setting up HRA System

Department	Managers		Investors		Total	
	Frequency	Percent	Frequency	Percent	Frequency	Percent
Human Resources Manager	81	32.9	67	29.0	148	31.1%
Accounting and Financial Manager	20	8.2	27	11.7	47	9.9%
Committee of Both	145	58.9	137	59.3	282	59.0%
Total	246	100.0	231	100.0	477	100.00

F value 0.303  
Significance 0.582

**4.6 Category of Employees Most Relevant for HRA Valuation**

The survey results in Table6 show that opinion of managers matches with that of investors as both respondent groups

find the most important category of employees for valuation is senior managers followed by executive. Labour is found to be least important for valuation.

**Table 6:** Managers’ and Investors’ opinions Category of Employees Most Important for HRA Valuation

Employees	Managers		Investors		Total		F value	Significance
	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank		
Labour	2.602	3	2.596	3	2.599	3	.007	.933
Executive	1.74	2	1.755	2	1.748	2	.094	.759
Sr. Managers	1.554	1	1.547	1	1.55	1	.012	.914

**4.7 Management Levels requiring HRA Information in Decision Making**

The survey results given in Table 77 indicate that in opinion of managers, HRA information is highly relevant for CEO,

senior managers and human resources managers. It is least useful for the finance and accounting managers, supervisors and lower level managers.

**Table 7:** Managers’ Opinions Regarding Management Level requiring HRA Information

Management Level	Most Significant		Moderately Significant		Least Significant		Mean Score	Rank
	Freq.	Percent	Freq.	Percent	Freq.	Percent		
Supervisor	58	23.6	72	29.3	116	47.1	2.05	5
Lower/ middle level management	44	17.9	98	39.8	104	42.3	1.77	6
Senior manager	90	36.6	122	49.6	34	13.8	2.59	2
Finance and accounting managers	67	27.2	149	60.6	30	12.2	1.63	7
Human resource managers	152	61.8	82	33.3	12	4.9	2.50	3
CEO	176	71.5	52	21.1	18	7.4	2.75	1
Board of Directors	176	71.5	37	15.0	33	13.4	2.29	4

**4.8 Significant Human Resources Indicators**

Survey results given in Table 8 reveal that seven most important human resources indicators as preferred by both groups are performance indicators, average employee age/ experience/educational qualification, employees’ strength,

cost of training (per capita expenditure/ hours), attrition/turnover rate, employee satisfaction survey and staff break-up. The human resources indicators which are not so significant are retirement benefits, whistle blower policy and provisions of ESOP.

**Table 8:** HR Indicators Significant for Management and Stock Investment Decisions

S. No.	HR Indicators	Managers		Investors		Total	
		Mean	Rank	Mean	Rank	Mean	Rank
1	Employee Strength	0.52	3	0.51	3	0.515	3
2	Attrition/ turnover rate	0.48	4	0.40	5	0.441	5
3	Cost of Training (per capita expenditure/ hours)	0.46	7	0.50	4	0.479	4
4	Staff break-up: Executive/ non-executive staffs	0.46	6	0.34	7	0.402	7
5	Average employee age / experience/ educational qualification	0.53	2	0.54	2	0.535	2
6	Performance indicators: Profit/ sales per employee	0.61	1	0.65	1	0.629	1
7	Human Resource awards	0.23	10	0.29	9	0.259	9
8	Employee satisfaction survey	0.47	5	0.40	6	0.436	6
9	Provision of ESOP	0.18	12	0.12	14	0.151	13
10	HRA statement	0.04	16	0.13	13	0.084	16
11	Health and Safety Measures adopted by the company	0.30	8	0.22	11	0.261	8
12	Labour- Management Harmony	0.08	15	0.31	8	0.191	12
13	Economic value added (EVA) disclosures	0.20	11	0.24	10	0.219	10
14	Retirement benefits	0.10	13	0.10	16	0.100	14
15	Human Resource committee of Directors	0.26	9	0.16	12	0.212	11
16	Whistle blower policy	0.08	14	0.10	15	0.090	15

**4.9 Suggestions for Setting up HRA system**

The responses of managers and investors regarding suggestions to set up HRA system in a company have been examined to find consensus among these. The results are summarised in **Error! Not a valid bookmark self-reference.9**. The descriptive analysis reveals that majority of investors as well as managers agree on importance of HRA for their respective decisions and strongly recommend that companies should provide separate cost sheet of

employees specifying costs incurred under various heads and changes therein. Both the respondent groups also agree that regulatory agencies such as company law board and ICAI should develop specific guidelines/standards for measuring human resource values /costs. Investors require that they should be provided with simple, easy to understand guidelines to understand how the company calculated its human resources costs and Values.

**Table 9:** Suggestions to set up HRA system in a Company

Statements	Managers		Investors		Total	
	Mean	Rank	Mean	Rank	Mean	Rank
Companies should include HRA information in a clear and precise manner (quantified data) and should be included as a part of financial statements	3.80	3	3.79	4	3.80	3
Regulatory agencies such as company law board, ICAI should develop specific guidelines/ standards for measuring human resource values / costs, as an objective indicator to help companies conduct human resource accounting	4.01	2	3.82	3	3.92	2
Year wise changes in HRA should be disclosed and explained to even normal investors	3.75	4	3.77	6	3.76	4
All companies should be mandated to follow HRA practices and allow investors access to such information through published reports or through company website	3.44	6	3.68	7	3.56	7
Investors and shareholders should be provided with simple, easy to understand guidelines to understand how the company calculated its human resources costs and Values	3.44	6	3.85	2	3.64	6
In order to estimate the true profit of the company, the cost of acquisition and development should be spread over the span of an employee’s tenure rather than costing it as expenditure for the year just like any other fixed asset	3.67	5	3.78	5	3.72	5
Companies should provide separate cost sheet of employees specifying costs incurred under various heads and changes therein	4.07	1	4.01	1	4.04	1

F value 2.075

Significance 0.150

**5 Conclusions, Implications & Future Directions**

The study was intended to seek opinions and suggestions from managers and investors regarding measurement, accounting, reporting, and format of reporting of HRA information by the companies in published statements as an aid to good decision making. The objective was to devise HRA system so that company reports can reflect specific

details about human resources in objective, comparable, and reliable format. The key findings of the analysis are categorised in two sections- one relating to setting up of HRA systems in companies; and the second relating to reporting of HRA information by companies. The results are in conformity with findings of Verma and Dewe (2008) [26]. The overall findings can be summarised in following table:

**Table 10:** Setting up of HRA Systems

Issues	Views of Managers and Investors
RQ1: appropriate method for accounting of HR costs	Cost of acquisition and development of HR should be spread over span of an employee’s tenure like any other fixed asset cost rather than costing it as expenditure for the year
RQ2: Basis/Method of valuation of HR	Valuation should be based on the calculation of expected realisable value from employees, taking emoluments as its proxy, and value so arrived at should be adjusted for employee traits-such as qualification, knowledge, skill, attitude, team spirit, leadership and record the same
RQ3: Determinants of the value of HR	Emoluments, employees’ personality traits, knowledge, and performance in the order of importance
RQ4: Placement of HRA information	HRA disclosures should be placed as a separate statement along with financial statements
RQ5: Department to be responsible for HRA	A committee of human resources managers and accounting and finance managers should be responsible for preparing and reporting of HRA information
RQ6: Category of employees important for valuation	Senior Managers followed by executives and labour in the order of importance
RQ7: Management level requiring such information	In the opinion of investors and managers, HRA disclosures are most important to CEO, senior managers and HR managers.
RQ8: Most important HR Indicators	performance indicators, average employee age/experience/educational qualification, employee strength, cost of training (per capita expenditure/hours), attrition/turnover rate, employee satisfaction survey and staff demographics

In addition, the analysis revealed following suggestions to make HRA systems more effective and useful:

- Companies should include HRA information in a clear and precise manner (quantified data) in published

statements.

- Companies should provide separate cost sheet of employees specifying costs incurred under various heads and changes therein.
- Year wise changes in HRA should be disclosed and explained to even normal investors.
- Investors and shareholders should be provided with simple, easy to understand guidelines to understand how the company calculated its human resources costs and Values.
- In order to estimate the true profit of the company, the cost of acquisition and development should be spread over the span of an employee's tenure rather than costing it as expenditure for the year just like any other fixed asset.
- HR information is to be reported as a separate statement along with main report

The results of survey findings indicate that there is a consensus among the respondent groups that a committee of both human resources managers and accounting and finance managers should be responsible for setting up HRA system in companies. Both the stakeholders namely managers and investors are of the opinion that human resources should be valued on the basis of the combination of expected realisable value from employees and their traits score. Majority of the managers and investors agree that HRA disclosures should be shown separately. Majority of the managers and investors also agree that in order to estimate true profit of company, cost of acquisition and development of HR should be spread over span of an employee's tenure like any other fixed asset cost rather than costing it as expenditure for the year. Both respondent groups agree that senior managers are the most important category of employees for valuation followed by executives. The survey results indicate that majority of the investors as well as managers support that the HRA information should be given in a separate statement along with financial statements. They also agree that companies should provide separate cost sheet of employees specifying costs incurred under various heads and changes therein. In the opinion of investors and managers, seven most important human resources indicators as preferred by both groups are: performance indicators, average employee age/experience/educational qualification, employee strength, cost of training, attrition/turnover rate, employee satisfaction survey and staff break-up. The least preferred human resources indicators are whistle blower policy and retirement benefits.

### Implications of the Study

The study has been able to provide valuable insights which can be useful to the companies, regulatory bodies, accounting firms, and consultants. On theoretical and conceptual front, the study has made important contributions to the literature on human resource accounting and reporting systems. The study developed a research questionnaire to examine expectations of managers and investors about setting up of HR accounting and reporting systems. It explored the expectations of managers and investors for setting up of effective, objective and reliable HRA system in the companies. The results of this survey will certainly help companies, accounting and regulatory

bodies in making standards for setting up of HRA systems and disclosures. The suggestions given by the managers and investors outline the initiative needed on part of companies, accounting and regulatory bodies for setting up of HRA systems. It is suggested that accounting bodies and regulatory agencies such as company law board, and ICAI should develop specific guidelines/standards for measuring human resource values/costs, its accounting and reporting format to help companies' conduct human resource accounting. Accounting and regulatory bodies should make HR and HRA disclosures compulsory in annual reports with a fixed place of reporting. These may be reported after management discussions or in annexure but it is important to mark a place for these statements so that anyone needing this information can locate it.

For implementing HRA system in companies, it is suggested that companies should form a committee of human resources managers and accounting and finance managers. The committee should be responsible for setting up system for collecting data relating to significant human resource related disclosures and presenting the same in prescribed format to relevant stakeholders as required. For this purpose, committee can make use of disclosure format suggested in the study. The committee can decide about any other information that they find significant for disclosure considering the nature of company and its industry. Besides this, the study also identified the human resources indicators perceived as most important by the managers and investors. These can be used as guide by accounting and regulatory bodies while setting up standards for human resource disclosures by the companies.

### Limitations of the Study and Future Directions

Despite best efforts of researcher, there exist certain limitations to the study calling for future work to be carried in these directions. These are listed below:

1. The present study has considered only two groups of stakeholders namely managers and investors but there are other stakeholders like employees, accounting bodies, regulators and legislatures also whose opinions are yet to be explored.
2. The findings of questionnaire survey and conclusions reached are based on analysis of information supplied on questionnaire. It is quite common that responses are checked according to understanding of questions and perceptions of persons completing questionnaire and second, where matters of opinion are involved, the probability of a certain amount of subjectivity creeping into responses cannot be ruled out.

Therefore, in future the work can be extended by increasing sample size and involving other stakeholders like institutional investors, Government and regulatory bodies in the survey for setting up an efficient HR accounting and reporting system.

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