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

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### Abstract

In the past, traditional factors like capital, raw materials, and physical resources were considered key assets recorded on a company's balance sheet. However, in this knowledge economy era, human resources (HR) or human capital has gained significant recognition. Management now acknowledges that HR drives capital accumulation, the use of natural resources, and the formation of social and economic organizations. This shift has led to the advocacy of Human Resource Accounting (HRA) to offer a more comprehensive understanding of a company's value. This study aims to explore stakeholders' perspectives on designing an HRA and reporting model, encompassing HR valuation and accounting methods aligning with stakeholder expectations. A self-designed questionnaire was employed to survey investors and managers, gathering their opinions on establishing an effective HRA system. Data analysis was conducted using MS Excel and SPSS through relevant statistical methods. The survey highlighted the need for companies to form a committee comprising HR managers, and accounting and finance managers. This committee would be responsible for collecting essential HR-related data and presenting it in the required format to stakeholders. Additionally, the study identified crucial HR indicators perceived as significant by managers and investors, offering guidance for accounting and regulatory bodies in establishing standards for HR disclosures by companies.

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

### 1. Introduction

Traditionally, the fundamental elements of production included capital, raw materials, and physical resources, regarded as valuable assets displayed on a company's balance sheet. In contrast, labor or human resources were often considered mere expenses. They never got same level of importance as received by other assets. However, with the advent of the knowledge-based economy, there has been a paradigm shift, emphasizing the significance of human resources and human capital. Management now recognizes the pivotal role played by human resources, acknowledging them as active catalysts for capital accumulation, efficient use of natural resources, and the construction of social and economic organizations. Consequently, among all key resource factors, human resources are now acknowledged as the most strategic and critical.

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

This emphasis on human resources often finds expression in a company's annual report, where directors express gratitude for the efforts of employees, staff, and executives. These statements typically convey a qualitative assessment, showcasing sensitivity, appreciation, and a positive attitude towards human resources. Moreover, some companies 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 commonly stated 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 initiating a shift towards knowledge-based economies, 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 when matched against that of an industrial (manufacturing) company. In knowledge-based companies, intangible assets (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 physical assets. In fact, management has already perceived the change and accordingly replaced the term personnel with human resources.

However, traditional accounting methods inadequately acknowledge and incorporate the importance 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. The failure to modify accounting systems in response to economic changes leads to information asymmetry among users and preparers of financial information. The increasing gap between book value of a company and its market valuation highlights the need to incorporate measures that accurately reflect intangibles like brand value and human resources. Therefore, accounting for human resources is necessary to disclose the true value and productivity of these 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 and reporting system to address these issues.

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

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 evaluate the investment worthiness of a company. Moreover, it furnishes managers with valuable insights to enhance decision making concerning 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 concerning human resources.

However, a review of available research in 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 leaving aside a few exceptions, such as isolated pilot projects at the enterprise level initiated by dedicated managers, particularly in Scandinavian countries. Though, even such 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. Therefore, it is essential to involve stakeholders in developing proper systems for human resource measurements, valuation, accounting, and reporting. The advantages of HRA can only be maximized only when the system can provide objective and reliable information that meets the stakeholders' needs. The study has been undertaken with the objective to address this research gap and fulfil these requirements.

The overall research objective of the work is to design an HR accounting and reporting model, including HR valuation, their accounting and reporting format that is in line with the stakeholders' anticipations.

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

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

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

RQ3: What are determinants of HR value?

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 significant HR indicators?

Respondents were also asked to give suggestions to make HRA systems more useful and effective. In addition, it will also be examined whether managers and investors have similar perceptions regarding establishment of HRA system. It is imperative to find out whether the stakeholders' expectations match so as to establish such system of HRA that can fulfill 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 creating 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 the effect of HRA information on stock investment decisions and financial decisions. But these studies were limited in their scope and used students as surrogate investors. In addition, many of the studies concentrated 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 utilisation of HRA information in efficient management of human resource, framing better human resource management 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 most crucial source of sustained competitive advantage is knowledge and skills of individuals. 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 strategies 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 substantial costs of implementation of 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. However, they want an objective and comprehensive method for reporting of such information.

### India

Limited research evidence is available regarding identification of variables affecting HR valuations, setting up HRA systems, and examining impact of and usefulness of HRA disclosures on the internal management decisions in India. Very few studies have been conducted to develop methods to value human resources and to pinpoint 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 had a major limitation that the conclusions arrived at were only useful for unit for which the systems were designed and no generalisation could be made. But the study gave a useful impact in the area of HRA by specifying different elements of cost and value of human resources in Indian context.

In recent years, there are some companies in India which regularly conduct the valuation of human resources and report the same through their annual reports through 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 the companies even though several 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 to make this information objective and reliable.

It is clear 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. Majority of the efforts are still dedicated to testing and/or theorising rather than decision making on or active promotion of reporting frameworks. This calls for 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 in accordance with the needs of the stakeholders in an objective and reliable manner. The objective of this study arises from this need.

### 3. Research Design and Methodology

**3.1 Research Design:** A self-structured questionnaire is employed for the survey of investors and managers to gather their perspective on establishing an efficient 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 which are listed on the major stock exchanges of India. For the purpose, National Stock Exchange and Bombay Stock Exchange were chosen. The investors were identified through investor forums and personal contacts. Stock consultants were also approached to get references of investors. Based on interactions with the mentioned investors as well as through acquaintances and family connections, a network of investors was formed..

**3.3 Data Collection:** The questionnaire was sent through e mail 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 present work is essentially exploratory and descriptive. The information obtained via the questionnaire has been analyzed using MS Excel and SPSS by relevant statistical methods namely mean, standard deviation, frequencies, and F-test to gain insight into the perspective of investors and managers to arrive at meaningful conclusions.

### 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                            | 170       | 35.71  |
| Employed- Pvt.; MNC;                            | 253       | 53.15  |
| Self Employed: Trade/business; consultancy etc. | 40        | 8.41   |
| Agriculture / Farming                           | 10        | 2.10   |
| Other   | 3         | 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 majority of the participants are in age groups of 31-40 years (38.24%) followed by respondents of the age up to 30 years (32.35%). However least number of participants is from group of age 51+ years at 4.35%. Sample includes 54.83% males and 45.17% females. Most of respondents (40.13%) are educated up to graduation graduates whereas 32.14% are post graduates or above. 27.73% of total respondents are having professional qualification in the sample. 53.15% of the respondents are privately employed. Majority of respondents (57.35%) have work experience of more than 10 years. Respondents include 48.53% investors and 51.47% managers.

#### 4.2 Accounting for Human Resource related Costs

The survey results in Table 2 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 inferred 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 value of Human resources based on 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 based on the 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

Table 3 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 the 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 most 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 Table 4 indicate most of the investors (52.8%) and the managers (47.6%) support that HRA information must be given in a separate statement along with financial statements. Few respondents want this information to be placed in financial accounts. This could possibly be due to the reason that they are concerned 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 given in Table 5 indicate 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, 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

Table 6 shows the survey results which indicate that opinion of managers matches with that of investors.

Both the 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 for Decision Making

The survey results (Table 7) indicate that in the 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

| HR Indicators  | Managers |      | Investors |      | Total |      |
|--|----------|------|-----------|------|-------|------|
|  | Mean     | Rank | Mean      | Rank | Mean  | Rank |
| Employee Strength  | 0.52     | 3    | 0.51      | 3    | 0.515 | 3    |
| Attrition/ turnover rate                                     | 0.48     | 4    | 0.40      | 5    | 0.441 | 5    |
| Cost of Training (per capita expenditure/ hours)             | 0.46     | 7    | 0.50      | 4    | 0.479 | 4    |
| Staff break-up: Executive/ non-executive staffs              | 0.46     | 6    | 0.34      | 7    | 0.402 | 7    |
| Average employee age / experience/ educational qualification | 0.53     | 2    | 0.54      | 2    | 0.535 | 2    |
| Performance indicators: Profit/ sales per employee           | 0.61     | 1    | 0.65      | 1    | 0.629 | 1    |
| Human Resource awards  | 0.23     | 10   | 0.29      | 9    | 0.259 | 9    |
| Employee satisfaction survey                                 | 0.47     | 5    | 0.40      | 6    | 0.436 | 6    |
| Provision of ESOP  | 0.18     | 12   | 0.12      | 14   | 0.151 | 13   |
| HRA statement  | 0.04     | 16   | 0.13      | 13   | 0.084 | 16   |
| Health and Safety Measures adopted by the company            | 0.30     | 8    | 0.22      | 11   | 0.261 | 8    |
| Labour- Management Harmony                                   | 0.08     | 15   | 0.31      | 8    | 0.191 | 12   |
| Economic value added (EVA) disclosures                       | 0.20     | 11   | 0.24      | 10   | 0.219 | 10   |
| Retirement benefits  | 0.10     | 13   | 0.10      | 16   | 0.100 | 14   |
| Human Resource committee of Directors                        | 0.26     | 9    | 0.16      | 12   | 0.212 | 11   |
| 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 Table 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 present study was intended to seek opinion 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 relating to setting up of HRA systems in companies; and the reporting of HRA information by companies. The results are in conformity with findings of Verma and Dewe (2008) <sup>[26]</sup>. 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 acquiring and developing 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 done on the basis of 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 prominence  |
| RQ7: Management level requiring such information   | 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 supplied with simple, easy to understand guidelines to understand how the company calculated its human resources costs and Values.
- For estimating the true profit of the company, 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 survey findings show the 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 valuation of human resources should be based on the combination of expected realisable value from employees and their traits score. Most of the managers and investors agree that HRA disclosures should be shown separately. Most 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

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 accounting and reporting of human resources. The study developed a research questionnaire to examine expectations of managers and investors about establishing 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 survey results will certainly help companies, accounting and regulatory bodies in making standards for establishing 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 essential to mark a place for these statements so that anyone needing this information can locate it.

For implementing HRA system in companies, the study suggests 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 collection of the data pertaining 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 will serve as guide for the accounting and regulatory bodies while setting up standards for human resource disclosures by the companies.

### Limitations and Future Directions

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

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

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

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