

Problem with Human Resource Accounting and A Possible Solution

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Abstract

The idea of Human Resource Accounting (HRA) has been a debatable issue by academicians, accountants and standards setters universally. This study critically assesses the concept of HRA in order to unveil its strengths and weaknesses. Descriptive and content analyses were used in collecting data through documented texts, journal articles and other publications. The existing models proffered under the HRA were adequately reviewed and objectively criticized so that more comprehensive could be developed. The study revealed that the conceptualization of HRA, the ideas incorporated therein, and arguments are good for the accounting profession and corporate financial reporting. But the existing models yet proposed are not in a state to implement HRA practice worldwide. Hence this paper proposes a solution in line with existing framework of accounting that could be adopted by the standard setters. The study, however, recommends that more interest should be accorded to the concept of HRA in order to stimulate more comprehensive researches aimed at simplifying the concept and boosting its applicability.

Key Words: Human Resource Accounting (HRA), Human Capital, Intellectual Capital, Matching principle, IAS, International Financial Reporting Standards (IFRS)

1. Introduction

Success of corporate undertakings, in today's competitive business world, largely depends upon the quality of human resources. It is accentuated that the Human element is the most important input in any corporate enterprise. The investments directed to raise knowledge; skills and aptitudes of the work force of the organization are the investments in human resource. In this context, it is worthwhile to examine and human resource accounting practices in corporate sector worldwide.

Human resource accounting (HRA) is of topical origin and is struggling for acceptance. It is clearly said that, Human resources accounting is an accounting measurement system and a large body of literature has been published in the last decade setting for the various procedures for measurement. At the same time the theory and underlying concepts of accounting measurement have received generous attention from academicians and a substantial body of literature has been developed. Under conventional accounting system, human resources are not recognized as physical or financial assets.

Though Human Resources Accounting was introduced back in the 1980s, it started gaining popularity in India after it was adopted and popularized by NLC. Human Resources accounting, also known as Human Asset Accounting, is an information system involved in identifying, measuring, capturing, tracking and analyzing the potential of the human resources of a company and communicating the resultant information to the stakeholders of the company. It is a method by which a cost is assigned to every employee when recruited, and the value that the employee would generate in the future. Human Resource accounting reflected the potential of the human resources of an organization in monetary terms, in its financial statements.

Back in mid of 1980's, behavioral scientists criticized the conventional accounting system for its failure to value the human resources of the organization. In this changing perspective the accountants were also called upon to play their role by assigning monetary value to the human resources deployed in the organization. Furthermore, the sturdy growth of international financial reporting standards (IFRS) is another indication that the environment for financial

accounting reporting is one that potentially encourages the consideration of alternative measurement and reporting standards.

Human Resource Accounting involves the dimension of cost incurred by the organization for all the personnel function. Hence the challenge is how to measure the economic value of the people to the organization and various cost based measures to be taken for human resources. The two main components of Human Resources Accounting were investment related to employees and the value generated by them. Investment in human capital included all costs incurred in increasing and upgrading the employees' skill sets and knowledge of human resources. The output that an organization generated from human resources was regarded as the value of its human resources. Human Resources accounting is used to measure the performance of all the people in the organization, and when this was made available to the stakeholders in the form of a report, it helped them to take critical investment decisions. All the models stressed that human capital was considered an investment for future earnings, and not expenditure.

2. The Concept of Human Resource Accounting (HRA)

In economics we find the major factors of production are the land, labor, capital and entrepreneur. Every organization reports on and includes land and capital in its financial statements, but labor and entrepreneur are not given much attention and hence, they only represent a charge against the profit made by the organization (Abubakar, 2006; Glautier, 1974). The two factors, labor and entrepreneur, are the human assets or resources organizations have.

Human Resource Accounting (HRA) is the process of identifying, recording and reporting the Investments made in the Human Resources of an Organization that are presently not accounted for in the conventional accounting practices. In other words, it is an extension of the existing "Expense recognition principle" or "Matching Principles" that requires revenue to be matched with expenses incurred to earn that amount of revenue and of organizing data to communicate relevant information. This effort to quantify the value of Human Resources helps the management to cope up with the changes in its quantum and quality so that equilibrium can be achieved in between the required resources and the benefit derived from such resources.

The American Accounting Association (1973) defined Human Resource Accounting as the process of identifying, measuring and communicating information about human resources in order to facilitate effective management within an organization. Human capital can be defined as the knowledge that individuals acquire during their lifetimes and use to produce goods, services or ideas in market or non-market circumstances. This definition considers HRA as the process of recognition and the quantification of human resources for the purpose of assisting the effective management of an organization. The definition is however unfinished as it is not specific as to what constitute the human resources expenditure and how it is to be recognized.

Flamholtz (1985) gave more specific definition of HRA, which refers HRA as the process of measuring the cost incurred by business firms and other organizations to recruit, select, hire, train and develop human asset. This definition gives a view as to what expenditure on the human resources should be recognized for valuation and reporting purposes. In other words, Flamholtz (1985) regards HRA as involving the measurement of economic value of people to organizations.

Friedman and Lev (1974) and Lau and Lau (1978) consider HRA as a method for systematically measuring both the asset value of labor and the amount of asset creation that can be attributed to personnel activities. Considering the contribution aspect of human resources this definition incorporates the economic benefit attributable to the human resources in addition to recognizing their cost implication.

In his view, Gupta (1991) defines the HRA as basically an information system that tells management what changes are occurring overtime to the human resources of the business. It involves accounting for investment in people and their replacement costs, and also the economic value of people in an organization. Therefore, HRA provides a comprehensive look at one method of using human resource cost and value information in the decision-making process.

Newman (1999) defined, HRA as the measurement of the abilities of all employees of a company, at every level – management, supervisory and ordinary employees – to produce value from their knowledge and the capabilities of their minds. He considered the current growth in the service industry where the knowledge and intellectual capabilities of employees are the key for success. Here, HRA is seen as the wealth of the employees' knowledge and intellectual capabilities added to the organization thereby making it to earn profit that result in success.

Jasrotia (2004), in her definition, also views HRA as a measurement and reporting of the cost and value of people as organizational resources. The uniqueness of this definition is on the reporting aspect of the HRA. This definition rests on the premise that knowledge and intellectual capabilities of employees are becoming more and more important in corporate investment decision-making. This is because of the fact that service industries are now overtaking the manufacturing industries and in service providing business, the knowledge and intellectual competences of employees matter more than any other tangible asset.

From the above definitions, we therefore define the concept as the measurement process which recognizes cost and value of employees in the financial statements of an organization, as an intangible asset, so that the true value of the organization can be presented thereby assisting the various users of the financial statements in making their respective decisions.

3. Why we favor human resource accounting?

From the point of advertisement for a particular post to the point of departure, organizations do commit some financial resources to the employee. Many reasons culminated into the spending nature of organizations on their human resources. Abubakar (2006) identifies that getting the best human brain, achieving the pre-determined objectives of the organization, Commanding Respect in the Eyes of Stakeholders, gaining Competitive Advantage, Becoming the Pace Setter and Market Leader are some of the reasons why organizations do invest a lot of financial resources on their human capital.

However, Lau and Lau (1978), Steffy and Maurer (1988), Roslender and Fincham (2001), and Leffingwell (2002) also revealed areas through which organizations invest money relative to their human resources. The identified areas are Advertisement, Recruitment and Selection, Familiarization and Training, Training and Development, Medical and Entertainment.

HRA is not useful to the management solitarily in achieving its economic goals. It could also be the source of important information for investment decision purposes. The inclusion of appropriate human resource information in published financial statements would, in all likelihood, make such statements for more meaningful in predicting future performance which is, of course, the principal concern of investors (Jawahar Lal, 2009).

Sveiby (1997) argued that organizations acquire Human Resources to generate future revenues, and therefore Human Resource should be considered when valuing a company by capitalizing instead of expensing them in the current period. According to him human capital, intellectual capital and structural capital concepts are similar to other assets. Human resources is largely seen as an integral part of the firm's value – creating processes (Pike et al 2000, Holland, 2003; Bukh et al, 2005) as well as creating and maintaining competitive advantage (Holland, 2006). In today's dynamic business environment, firms invest heavily in human capital assets. The problem however, is that these investments are either immediately expensed in the financial statement or arbitrarily amortised and therefore are not fully reflected in the balance sheet. Consequently, the book values of firms with significant amounts of human capital investments are unrelated to the market values (Amir and Lev, 1996; Brennan, 2001; Lev, 2001; Holland, 2003).

The chartered institute of management accountants noted that all drivers of performance and value should be provided to investors including the non financial ones such as intangibles (Starovic & Marr, 2003). The financial Accounting Standard Board (FASB) addressed this issue by encouraging business to voluntarily disclose information regarding their intangibles and intellectual capital (FASB 2001).

Intellectual capital resources (including human capital) are increasingly important factors on the successful achievement of organizational objectives (Guthrie and Petty, 2000). For stakeholders to fully understand an organization and the effectiveness of its managers, it is therefore important that corporate reports adequately reflect all resources used and developed to further the organization's achievement (Boedker et al (2008). Williams (2001) predicted that there exists a positive relationship between a firm's level of performance and its level of intellectual disclosure. Contrary to the prediction, the researcher found a statistically significant inverse relationship between the level of a firm's intellectual capital disclosure and its level of performance.

It is true that human life is uncertain and at any time we may lose a life. But, shouldn't a company recognize the car it won in the balance sheet even though there is risk of losing or damaging the car? A corporation that has ship running on the sea may be sunk at any moment. Still we find the ship in the company's financial statements. So, why not human skills or expertise be recognized in the financial reports?

4. Argument against Human Resource Accounting

Many factors serve as deterrents to the application of HRA. According to Gates (2002) and Akinsoyinu (1992), the problems of HRA rest majorly on the reporting companies themselves. In other words, the writer concentrated on the reporting entities in pin-pointing the problems of HRA. Based on his research, the following are the obstacles that make it difficult to report human capital values by companies.

- (a) The main obstacle for reporting human capital externally is that the information reported could be sensitive to the reporting companies and regarded as something that should not be shared externally because of the information may give important insight to competitors or could lead to a negative interpretation on the part of the various stakeholders.
- (b) According to Gates (2002) Companies do not attach first priority to the measurement of human assets; rather they face more urgent issues like human resource requirement and allocation.
- (c) Where the Human Resource Manager does not give enough importance to the concept of HRA, the senior management will give it even less importance and resources, leaving no time for measurement.
- (d) Gates found in his research, managers do think that the formal establishment of indicators of performance hardly adds any value to the external stakeholders. In other words, there is no return observed by many managers on the investment and effort required in reporting the human capital. The managers interviewed by Gates mentioned that without an established measurement criteria there would not be value in the reporting of Human Capital Value.
- (e) Another disincentive to the acceptance of HRA is the lack of universal approach to its reporting thereby defining the standards that would allow for valuable and meaningful comparisons. Because there is a current absence of universal definition, the companies that are proactive enough to measure, do it 'their way' (Gates, 2002).

From another perspective, Jasrotia (2004) looked at the trends in the field of HRA and came up with some factors that deter the progress in the area and the application of the concept are low level of awareness and acceptance of HRA, absence of an industry standard, Extensiveness of the Research Involved, Dynamism of Some Industries like the information technology are very dynamic due to frequent discoveries and technological advancement.

On another viewpoint, human resources, according to Kodwani and Tiwari (2007), Abubakar (2006), Roslender (2004), Jasrotia (2004), and Flamholtz (1985), have some special attributes, which in turn make their valuation so peculiar. These attributes include the following:

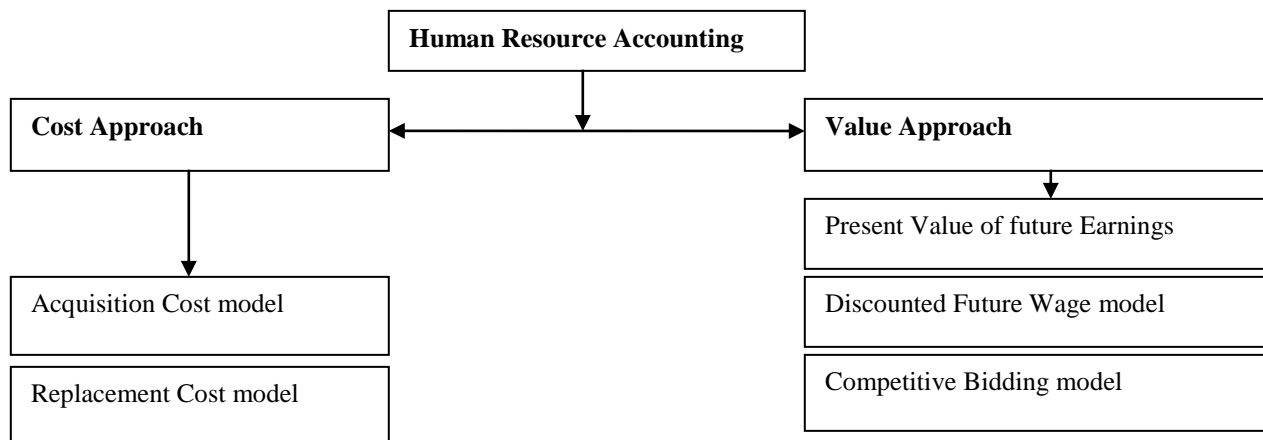
- (i) Uncertainty of the service period because of the free mobility of employees whenever they so desire. An employee can leave a job for another one at anytime without notice.

- (ii) Uncertainty of the Contribution Level of Recruits because an employee’s contribution level is too difficult to be estimated and forecasted with much reliability. His/her productivity fluctuates and depends on many other factors.
- (iii) In valuing human resources, the payments in terms of salaries and/or wages count a lot. An employee that is valued in terms of the future salaries and wages determined today would have his value affected whenever the government changes policy affecting his reward system or whenever there is an action from the workers union regarding the reward system.

5. Methods of Human Resource Accounting

Approaches to Human resource accounting was first developed back in 1691; the next stage was during 1691-1960, and third phase post-1960. For valuing human resources, different models have been developed. Mainly, there are two approaches to HRA. Under the **cost approach**, also called human resource cost accounting method or model, there is a) Acquisition cost model and b) replacement cost model. Under the **value approach** there are a) present value of future earnings method, b) discounted future wage model, c) competitive bidding model.

Figure 01: Methods of Human Resources Accounting



I) Acquisition Cost Model

The first attempt towards employee valuation made by a foot ware manufacturing company R. G. Barry Corporation of Columbus, Ohio with the help of Michigan University in 1967. This approach is developed by Brummet, Flamholmaytz and Pyle. This method measures the organization’s investment in employees using the five parameters: recruiting, acquisition; formal training and, familiarization; informal training, Informal familiarization; experience; and development. This model suggests that instead of charging the costs to “Profit and Loss Account” it should be capitalized in balance sheet. In case of human resource it is necessary to amortize the capitalized amount over a period of time. So here one will take the age of the employee at the time of recruitment and at the time of retirement. Out of these a few employee may leave the organization before attaining the superannuation. This is similar to a physical asset. For example, if a company spends one lakh taka on an employee recruited at 25 years, and he leaves the organization at the age 50, he serves the company for 25 years (his actual retirement age was 55 years). The company has recovered Tk. 83333.33 so the unamortized amount of Tk. 16666.66 should be charged to Profit and Loss Account i.e.

$$\begin{aligned}
 100000 \div 30 &= 3333.33 \\
 3333.33 * 25 &= 83333.33 \\
 100000 - 83333.33 &= 16666.67
 \end{aligned}$$

This method is the only method so far proposed of human resource accounting which is based on sound accounting principals and policies.

Limitations of Acquisition Cost Model

- The valuation method is based on false assumption that the dollar is stable.
- Since the assets cannot be sold there is no independent check of valuation.

- This method measures only the costs to the organization but ignores completely any measure of the value of the employee to the organization.

II) Replacement Cost approach

Proposed by Likert (1967) this approach measures the cost of replacing an employee. Replacement cost include recruitment, selection, compensation, and training cost including the income foregone during the training period. This method could be useful in deciding whether to dismiss or replace the employee.

Limitations of Replacement Cost approach

- Substitution of replacement cost method for historical cost method does little more than update the valuation, at the expense of importing considerably more subjectivity into the measure. This method may also lead to an upwardly biased estimate because an inefficient firm may incur greater cost to replace an employee.

III) Present Value of Future Earnings

According to Lev and Schwartz (1971) the valuation of employees based on the present value of future earnings, adjusted for the probability of employees' death/separation/retirement helps in determining what an employee's future contribution is worth today.

Under this model, the value of human capital embodied in a person who is 'y' years old, is the present value of his/her future earnings from employment and can be calculated by using the following formula:

$$E(V_y) = \sum P_y(t+1) \sum I(T)/(I+R)^{t-y}$$

where $E(V_y)$ = expected value of a 'y' year old person's human capital, T = the person's retirement age, $P_y(t)$ = probability of the person leaving the organisation, I(t) = expected earnings of the person in period I, R = discount rate.

Limitations

- This model doesn't suggest how value of human resource should be recorded in Books of Accounts
- This model takes wages & salary as a basis of value of human resource but value of human resource is not limited only to the extent of cost incurred on them.
- It ignores the probability that people may make role changes during the career. For example Assistant Manager will not remain in the same position throughout his expected service life in an organization.
- The Model ignores the possibility and probability that individual may leave an organization for reasons other than death or retirement. The model's expected value of human capital is actually a measure of expected 'conditional value' of a person's human capital-The implicit condition is that the person will remain in organization until death or retirement. This assumption is not practical.
- The model is an objective one because it is widely based on statistics such as census income return and mortality tables.
- A person's value to organization is determined not only by the characteristics of the person himself (as suggested by Lev and Schwartz) but also by the organizational role in which the individual is utilized. An individual's knowledge and skill is valuable only if these are expected to serve as a means to given organizational ends.
- The measure assigns more weight to averages than to the value of any specific group or individual.

IV) Value to the organization

Proposed by Hekimian and Jones (1967) this model state that where an organization had several divisions seeking the same employee, the employee should be allocated to the highest bidder and the bid price incorporated into that division's investment base. For example a value of a professional athlete's service is often determined by how much money a particular team, acting in an open competitive market is willing to pay him or her.

Limitations

- The soundness of the valuation depends wholly on the information, judgment, and impartiality of the bidder.

V) Expense model

According to Mirvis and Mac, (1976) this model focuses on attaching dollar estimates to the behavioral outcomes produced by working in an organization. Criteria such as absenteeism, turnover, and job performance are measured using traditional organizational tools, and then costs are estimated for each criterion. For example, in costing labor turnover, dollar figures are attached to separation costs, replacement costs, and training costs.

VI) Model on Human Resource Accounting prescribed by Ravindra Tiwari

This model prescribes Human resource accounting approach for two category of Employees.

- Employees , who are at strategic key decision making position such as MD ,CEO (Top Executives)
- Employees , who execute the decision taken by top executives

This Model arrives value of Human Resources as sum of below-mentioned three parts

1. Real Capital Cost part
2. Present value of future salary/wages payments
3. Performance evaluation part

Limitations of Proposed Model

- Calculation process is lengthy and cumbersome.
- Lev and Schwartz valuation principles has been used at one point of time , so this model contains weakness of the Lev and Schwartz model
- This model used net profit to quantify the value of human capital where this net profit itself in not a true amount because of limitation of accounting i.e. estimation, various method of depreciation. Moreover an organization may incur loss for some period.
- Another drawback of this method is that extra revenue is used to quantify the value of human resources this extra revenue may not be because of the talents of the employees rather it may be for some other reasons like volume of unit sold is higher than before, customer's choice might have been changed, capital gain on sale of fixed assets.
- This model assumes that one employee will not work in a same position, it's true. Hence he used different amount considering promotion to discount and get NPV of earnings to value the human capital of an organization. How unrealistic is that! For example, there are 50 executives working for an organization. Will all these 50 executives once be the manager of that company where the post of manager to manage these 50 executives is 6 only?
- Again this method measures mainly the costs to the organization at present value but failed to measure in a justified manner the value of the employee to the organization.

6. Why tough?

It would have been much better if we could have such a well developed and highly accepted model to recognize and report Human Resource in the Balance Sheet of an organization. Even though gradual development has been witnessed in this field, still the new approaches and models are being given. There are several methods and models currently in use to determine the value of an individual such as cost approach and the economic value approach. But none of these models is free from sizable limitations. Valuing human resource is not so easy rather it is very tough task because of various reasons. Some of the Attributes are:-

1. There is no proper clear cut and specific procedure or guidelines for finding costs and value of human resources of an organisation. The systems which are being adopted have certain drawbacks.
2. Models so far developed reveals that without considering the regular pay amount no model for valuing human capital yet possible. So any model adopted for computing human value will give the scope of fraudulently reporting moderately skilled persons as highly skilled by offering them a higher regular pay package.
3. The period of existence of Human Resource is uncertain and hence valuing them under uncertainty in future seems to be unrealistic.
4. The much needed empirical evidence is yet to be found to support the hypothesis that HRA as a tool of management facilitates better and effective management of human Resources. Management can take their decision on performance measurement.

5. As human resources are incapable of being owned, retained, and utilised, unlike the physical assets, there is a problem for the management to treat them as assets in the strict sense.
6. There is a constant fear of opposition from the trade unions as placing a value on employees would make them claim rewards and compensations based on such valuations.
7. In spite of all its significance and necessity, the Tax Laws don't recognise human beings as assets.
8. There is no universally accepted method of the valuation of Human Resources.
9. Now a day's technology has been changed. So human may be replaced by technology to a large extent. For decision we have AIS, MIS, DSS, ESS, Artificial intelligence.
10. Self created goodwill also bring benefit to the organization, but we don't show this goodwill as assets in the balance sheet.
11. Employees of an organization are its resources or not are reflected in the statement of financial performance through earning profit or incurrance of loss.
12. The output of human skill is the research and development; costs incurred in relation to this are currently capitalized as per IAS 38.
13. In case operating lease we use the capital assets of other and pay the charge for using it. Similarly we are hiring the employee and paying for their skills.
14. Evidence are there because of fraudulent activities of human deployed the organization collapsed. So how such human can be an asset to be recognized in the balance sheet?
15. To apply HRA it is required to be backed by Human Resource Auditing.

7. A Possible Solution

Assets are resources from which future economic value will flow to the entity. As an employee of an organization will not merely work for a single year, it seems rational to account for employee as an asset in the balance sheet on the ground that they will provide future economic benefit to the entity. Moreover, charging the cost of recruiting, Training and Development of the employee in the profit and loss account for a single period goes in contrary to the expense recognition principle of accounting. Like other physical assets as the incurrance of these costs gives benefit through more than one fiscal period, amortizing these costs over the benefit deriving period is highly accepted. So until and unless a sophisticated and accepted model for valuing human capital is developed, it will be worthwhile to capitalize and amortize the cost of recruiting, selecting, formal training and, familiarization; informal training, informal familiarization. The amortization will be over the expected service period. This solution is in line with the existing historical cost approach.

8. Implementation and Recommendations

The findings of this study are of immense importance to both standard setters and organizations. The movement toward fair value accounting seen in recent years for international standards indicates a more sophisticated approach to the measurement of assets, tangible as well as intangible. Given the view expressed by both academicians and policy makers that the traditional financial reporting system not makes the grade to provide investors with value-relevant information, it may well be that in the future, the reporting of Human resource accounting information in the financial statements may be mandatory. Hence, the focus for policy should be to develop preeminent model for valuing Human capital; establish guidelines for reporting and encourage compliance with said guidelines.

As the model yet proposed to quantify Human Resource lacks the acceptability, this might suggest a willingness to recognize the need for, and consider the measurement and use of proposed solution where acquiring and development cost are capitalize and amortized over the service period. Such an approach reduces problems of prescriptive guidelines which require enforcing.

References

- Abubakar, S. (2006), "An Assessment of Human Resource Accounting Measures and Application Possibilities in Nigeria", Unpublished M. Sc. Accounting and Finance Thesis Submitted to the Postgraduate School, Ahmadu Bello University, Zaria, Nigeria.
- Akinsoyinu, A. B. (1992). "Human Resources Accounting: The Myth and Reality". *The Nigeria Accountant*, April/June, pp. 18-20.

- American Accounting Association (1973), "Report of the Committee on Accounting for Human Resources". *The Accounting Review*, 48, pp. 6-11.
- Amir, E., B. Lev. 1996. "Value-relevance of nonfinancial information: The wireless communications industry." *Journal of Accounting and Economics*, 22: 3-30.
- Boedker, C., Mouristan, J., & Guthrie, J. (2008). Enhanced business reporting: international trends and possible policy directions. *Journal of Human Resource Costing & Accounting*, 12(1), 14.
- Brennan, N. (2001). Reporting intellectual capital in annual reports: Evidence from Ireland. *Accounting, Auditing & Accountability Journal*, 14(4), p. 423.
- Bukh, P.N., Nielsen, C., Gormsen, P. and Mouritsen, J. (2005). Disclosure of information on intellectual capital in Danish IPO prospectuses, *Accounting, Auditing and accountability Journal*, 18 (6): 713-732.
- Flamholtz, E. G. (1985), *Human Resource Accounting*, 3rd Ed. San Francisco CA, USA: Jossey-Bass.
- Flamholtz, E. G. (1999), *Human Resource Accounting: Advances in Concepts (3rd Ed)*. San Francisco, USA: Jossey-Bass.
- Friedman, A. and Lev, B. (1974), "A Surrogate Measure of the Firm's Investment in Human Resources". *Journal of Accounting Research*, No. 12, pp. 235-250.
- Gates, S. (2002), "Value at Work: The Risks and Opportunities of Human Measurement and Reporting", *The Conference Board*, USA.
- Glautier, M. W E. (1974), "Human Resource Accounting: A Critique of Research Objectives for the Development of Human Resource Accounting Models", A Paper Presented at a Seminar on Human Resource Accounting held at the European Institute for Advanced Studies in Management, Brussels, November 28 – 29.
- Gupta, D. K. (1991), "Human Resource Accounting in India: A Perspective". *Administrative Staff College of India Journal of Management*, Vol. 20, No. 1, pp. 9-10.
- Guthrie, J. and Petty R. (2000), "Intellectual capital: Australian annual reporting practices", *Journal of Intellectual Capital*, Vol. 1 Iss: 3, pp.241
- Hekimian, J.S. and Jones, C. (1967). Put people on your balance sheet. *Harvard Business Review*, 45 (January/February), pp. 107 – 113.
- Holland, J. (2003). Intellectual capital and the capital market- organization and competence, *Accounting, Auditing and Accountability Journal*, 16 (1): 39-48.
- Holland, J. (2006). Fund management, intellectual capital, intangibles and private disclosure, *Managerial Finance*, 32 (4): 277-316.
- Jawahar Lal. (2009). Corporate financial reporting , theory and practice cases. University of Delhi. *Taxmann publications*, pp 280-302.
- Jasrotia, P. (2004), *The Need for Human Resource Accounting*, <http://www.itpeopleindia.com/20021216/cover.shtml>
- Kodwani, A. D. and Tiwari, R. (2007), "Human Resource Accounting – A New Dimension", A Paper Presented at the Canadian Accounting Association (CAAA) Annual Conference, January.
- Lau, A. H. and Lau, H. S. (1978), "Some Proposed Approaches for Writing Off Capitalized Human Resource Assets". *Journal of Accounting Research*, No. 16, pp. 80-102.
- Leffingwell, R. J. (2002), *Human Relations Accounting Moves Closer to Daily Use*. Michigan, USA: EBSCO Publishing.
- Lev, B. (2001), *Intangibles: Management, Measurement, and Reporting*. Washington, D.C.: Brookings Institution Press.
- Lev, B., & A. Schwartz. (1971). On the Use of the Economic Concept of Human Capital in Financial Statements. *The Accounting Review*, pp. 103-112.
- Likert, R. M. (1967). *The Human Organization: Its Management and Value*, New York: McGraw-Hill Book Company.
- Mirvis and Mac (1976), Accessed on http://books.google.com.bd/books?id=Q1-MM-MilRYC&pg=PA286&lpg=PA286&dq=mirvis+and+mac+1976&source=bl&ots=hwpHdU_na7&sig=1mzxg6wjJh3uNaKwDIEL7R04DQ&hl=bn&sa=X&ei=N7OUusasGIKThgeqwoDYDA&ved=0CDIQ6AEwAQ#v=onepage&q=mirvis%20and%20mac%201976&f=false
- Newman, B. H. (1999), *Accounting Recognition of Human Capital Assets*. New York: Pace University Press.
- Pike, S., Rylander, A. and Roos, G. (2000). Intellectual capital management and disclosure, *intellectual capital_Mgt_&_Disclosure.pdf*

- Ravindra Tiwari (2010), accessed on <http://www.ait.ac.th/news-and-events/2010/ait-in-the-news/jul/methods-and-accounting-treatment-of-hra/#.Ur6xac5XzIU>
- Roslender, R. (2004), "Accounting for Intellectual Capital: Rethinking its Theoretical Underpinnings". *Measuring Business Excellence*, Vol. 8, No. 1, pp. 38-45.
- Roslender, R. and Fincham, R. (2001), "Thinking critically about Intellectual Capital Accounting". *Accounting, Auditing & Accountability Journal*, Vol. 14, No. 4, pp. 383-399.
- Starovic, D., and Marr, B. (2003). *Understanding corporate value: Managing and reporting intellectual capital*. London: Chartered Institute of Management Accountants.
- Steffy, B. D. and Maurer, S. D. (1988), "Conceptualizing and Measuring the Economic Effectiveness of Human Resource Activities". *Academy of Management Review*, Vol. 13, pp. 271-288.