

HUMAN RESOURCES ACCOUNTING: CONCEPTS, OBJECTIVES, MODELS AND CRITICISM

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ABSTRACT: *The success of large organizations relies heavily on its Human Resources as it is the most valuable asset. Human Resources play a fundamental role in creating the uniqueness of most successful organizations. This paper discusses the concept of Human Resources Accounting. It gives a comprehensive roadmap to its definitions, purposes, models and criticism.*

KEYWORDS: Human Resources, Human Resources Accounting

INTRODUCTION

Human resources management may be defined as the activities and tasks that are useful in maximizing employees' performance in the organization, and that it is a dynamic and evolving practice used by leaders and managers throughout a firm to enhance productivity, quality, and effectiveness (Gilley et al, 2009, p.1). While the essence of human resources management is the human being, the need to develop models and ways to measure this valuable and most effective resource has increased dramatically, with all the implications of productivity value, economic value and consumer value, as well as the need to recognize and maintain the human resources who add the most value to the organization has been developed and became a must, in order to develop the organization's human resources to be its competitive advantage. Increasingly, technology drives economic activity in both the service and manufacturing industries. In many industries, rapid technological growth and change happen routinely. The creation and maintenance of information contribute to the economy at an ever-increasing rate. Views of the modern business firm and its purpose in society also are changing rapidly. A recent national public opinion poll indicated that many people view corporations as socioeconomic entities with obligations to workers and communities, as well as to their shareholders. Contemporary financial reporting reflects none of these changes (Stovall, 2001, p.2).

Current accounting principles virtually treat all labour costs, including wages, benefits, recruiting, and training, as expenses. This treatment is like commodities such as materials or supplies, which doesn't suit the accounting for human resources as an asset. And In an economy based on knowledge, people being knowledge holders become the most asset of an organization (Vatasoiu, et al, 2009). There is a lot of increasing interest of human capital.

The number of documents produced containing the term "human capital" increased from almost 700 in 1993 to over 8,000 in 2003. This growth coverage underscores the importance of human capital in the management of organizations. While the term human capital is commonplace in organizations, management role in this important resource is often unclear. This lack of clarity leads to the mystery of human capital investment. Investment in this

resource now commands much executive time and attention requiring a concerted pursuit for the optimum investment level.

The concept of human capital is not novel. It has been used by economists as far back as Adam Smith in the eighteenth century. From an economist point of view, human capital designates investments in improving competencies and skills. The management community has a broader view of human capital. For example, The Human Resources Glossary by William R. Tracey, published by St. Lucie Press, defines human capital as the return an organization gains from the loyalty, creativity, effort, accomplishments, and productivity of its employees. It equates to, and may exceed, the productive capacity of machine capital and investment in research and development.

Human Resources Accounting

According to the Dictionary of economy Ed. Economics, Bucuresti, 1999, Resources are "all human, material, real and monetary elements that can be drawn and used in the production of economic goods to satisfy social needs" Human capital refers to a set of knowledge and competence, skills and training, innovation and capabilities, attitudes and skills, learning ability and motivation of the people who form the organization.

The concept of human resource accounting can be better understood if one goes through some of the important definitions given by the competent authors in the accounting field.

1. The American Accounting Society Committee on Human Resource Accounting defines Human Resource Accounting as "the process of identifying and measuring data about human resources and communicating this information to interested 10 parties". In simple terms, it is an extension of the accounting principles of matching costs and revenues and of organizing data to communicate relevant information in financial terms. Human Resources Accounting, thus, not only involves measurement of all the costs/ investments associated with the recruitment, placement, training and development of employees, but also the quantification of the economic value of the people in an organization (AAA, 1973).
2. Flamholtz et al (2002) defined human resource/capital accounting as accounting for people as an organizational resource. It involves measuring the costs incurred by organizations to recruit, select, hire, train and develop human assets. It also involves measuring the economic value of people to the organization (Okpala and Chidi, 2010, p.66).
3. Mr. Woodruff Jr. Vice President of R. G. Batty Corporation defines Human Resource Accounting as "an attempt to identify and report investments made in human resources of an organization that are presently not accounted for in conventional accounting practice. Basically, it is an information system that tells the management what changes over time are occurring to the human resources of the business".
4. Baker defines Human Resource Accounting as "the term applied by the accountancy profession to quantify the cost and value of employees to their employing organization". Thus, human resources accounting may be defined as a process of accounting which identifies, quantifies and measures human resources for the use of management to cope up with the changes in its quantum and quality so that equilibrium could be achieved in between the required resources and the provided human resources (Johanson, et al, 1998).

In summary, human resource accounting is the art of valuing, recording and presenting systematically the worth of human resources in the books of account of an organization. This definition brings out the following important characteristic features of human resource accounting:

1. Valuation of human resources
2. Recording the valuation in the books of account
3. Disclosure of the information in the financial statements of the business.

Furthermore, some considers Human Resources as part of the intangible assets that are defined as either 'assets' or 'skills'. Assets include the intellectual property rights of patents, trademarks, copyright and registered designs, as well as contracts, trade secrets and databases. Intangible resources, which are skills or competencies, include the expertise of employees, suppliers, distributors and the culture of the organization, enabling it to cope with change, put the customer first, etc. In addition to being categorized as assets or skills, intangible resources may be categorized as being people dependent and people independent.

Lowendahl and Haanes provide definitions on many intangibles for the purpose of strategic management of professional service firms. Because there is no consensus on the definition of resources, they suggest that resources consist of

1. Physical, human and monetary resources that are needed for business operations to take place and
2. Information-based resources, such as management skills, technology, consumer information, brand name, reputation and corporate culture. After further elaboration on the concepts of intangible resources, intangible assets, capabilities and competencies, Haanes & Lowendahl categorise intangible resources into competence and relational resources. By the latter is meant reputation, client loyalty, etc., which are conceived as being fundamental to the performance of the firm. Competence is defined as the ability to perform a given task and exists at both the individual and organisational level. On the individual level, it includes knowledge, skills and aptitudes; on the organisational level, it includes client specific databases, technology, routines, methods, procedures and organisational culture (Johanson, et al, 1998).

Objectives Human Resources Accounting

There following summarize the most important objectives and purposes of HRA:

1. It provides companies with information about the cost and value of its human resources.
2. It provides companies with a guide for human resource decisions about acquiring, allocating, developing, and maintaining human resources to attain cost-effectiveness.
3. It motivates managers and decision makers to look at decisions through a human resource point of view (Toulson & Dewe, 2004).
4. It allows management personnel to monitor effectively the use of human resources.

5. It provides a sound and effective basis of human asset control, that is, whether the asset is appreciated, depleted or conserved.
6. It helps in the development of management principles by classifying the financial consequences of various practices (Sharma & Shukla, 2010).

Why Human Resource Accounting

Human Resource Accounting provides useful information to the management, financial analysts and employees as stated below (Kouhy, et al, 2009)

1. Human Resource Accounting helps the management in the Employment, locating and utilization of human resources.
2. It provides a basis for planning of physical assets vis-à-vis human resources.
3. It assists in evaluating the expenditure incurred for imparting further education and training in employees in terms of the benefits derived by the firm.
4. It helps to identify the causes of high labour turnover at various levels and taking preventive measures to contain it.
5. It helps in locating the real cause for low return on investment, like improper or under-utilization of physical assets or human resource or both.
6. It helps in understanding and assessing the inner strength of an organization and helps the management to steer the company well through most adverse and unfavourable circumstances.
7. It provides valuable information for persons interested in making long term investment in the firm.
8. It helps employees in improving their performance and bargaining power. It makes each of them understand his contribution towards the betterment of the firm vis-à-vis the expenditure incurred by the firm on him.

Investment in Human Resources

HRA system consists of two aspects namely: a) The investment made in human resources and b) The value of human resources. Measurement of the investments in human resources will help to evaluate the charges in human resource investment over a period. The information generated by the analysis of investment in human resources has many applications for managerial purposes. The organizational and human performance can be evaluated with the help of such an analysis. It also helps in guiding the management to frame policies for human resource management. The present performance results will act as input for future planning and the present planning will have its impact on future results. The same relationship is also applicable to the areas of managerial applications in relation to the human resource planning and control. (Babu, et al, 2010).

The prerequisites of Human Resources Accounting

To apply HRA effectively in an organization, some resources and aspects must exist such as:

1. Management support from all levels to facilitate the process.
2. Time and both financial and human resources are needed for data collection, setting criteria, monitoring employees and going on in the process of HR valuing.
3. Multi-functional team to work around in the process, as it needs variety of skills and way of thinking, and the process of measuring HR value is complicated.
4. Modern style HR team that embrace new changes and help other adapt with it.
5. Awareness campaigns from HR team to all employees about the valuation and to understand that they aren't going to be treated as objects, instead it's for their own sake.
6. Development of knowledge based Methodologies for measuring.
7. Measurements must be designed to be highly relevant to the strategic direction of the company (Verma & Dewe, 2004).
8. The Company's size should be large, because it is not economical for small firms to apply it as it involves heavy costs (Narayan, 2010).
9. Human resources information system should be developed that contains all personnel data, to be used in proper personnel administration (Narayan, 2010).

Human Resources Accounting Aspects

According to Barcons and Al, Human Resources Accounting can be treated from two perspectives (Vatasoiu, et al, 2009):

1. Treatment from a Financial Accounting Perspective: If future benefits are expected to come from these training costs, they can be treated as assets. However, this does not hold true. There is a clear absence of correspondence between the real assets in the present firms and those recognized in the balance sheet. In fact, assets are too related to its juridical conception (that is, owned by the firm...), in front of a pure economic approach where asset is every instrument or way that can be used in the production distribution firm's process or, in general, every category of economic value which can be transformed into goods or service or any instrument at the service of the firm or that the firm uses, regardless of its juridical state, and also all those goods and rights that the firm does not own now but used to own or will own later on, by virtue of collateral contracts or agreements which may induce it. So, a diagnosis is reached about the predominant asset concept. This situation can be explained by two important problems that are met when referring to intangibles, which are identifying the assets cost and estimating the period in which the asset should be amortized. It can be said then that not only are the limits unclear between intangible, fixed assets and deferred charges, but also which elements are considered assets and which elements are considered expenses.
2. Treatment from a Managerial Accounting Perspective: Personnel working for a determined enterprise are participating in a value-creation process. That is, any economic activity makes the firm incur costs. One traditional classification considers the cost categories of raw

materials, industrial plants, and personnel. When adding income flow to an organization's market goods and services, if it is superior to the cost flow, it becomes added value. This value is a consequence of the interaction between material and human resources in production. Because it is difficult to know and measure value, accounting has used substituted measures such as acquisition cost, substitution cost, and even opportunity cost.

Human Resources Accounting Models

Research during the early stages involved the continued development of concepts and models for measuring and accounting for human resource cost and value. According to Flamholtz's model for measurement of original human resource, human resource costs may be explained in terms of the two major categories of acquisition costs and learning costs. Acquisition costs include the direct costs of recruitment, selection, hiring and placement, and the indirect costs of promotion or hiring from within the firm. Learning costs include the direct costs of formal training and orientation and on-the-job training. In a human resource accounting system, these costs are reported in asset accounts with future economic benefits rather than as expenses costs (Flamholtz et al, 2002). There are many different methods of HRA. The different methods should be used depending on the purpose of the information and who will be the user of the information (Lilley & Yakhou, 2005).

The key challenge of human capital accounting is the best way to value human capital. Various methods for accounting for human resources have emerged, used at measuring, developing and managing the human capital in an enterprise. None of these methods however is generally accepted. There are different approaches used as a basis for determining the monetary value of human resources (Dawson, 1994):

1. Present Value model: In his present value method, Flamholtz et al (2002) suggests that people should be valued at the present value of expected future services to be rendered to the organization. Thus, they define individual 's value to organization as the present worth of the set of future services the person is expected to provide during the period he/she is anticipated to remain in the organization (Dawson, 1994).
2. Original Cost model: Brumment suggests that costs of training and development which are parts of original costs should be capitalized. His argument is that training and development are expected to have ongoing benefits to the employee and to the organization and as such would provide future benefits over years. On the other hand, he suggests that other costs associated with recruitment should be expensed as the period costs. The original cost method has been implemented by few companies like R. G. Barry. Others include Atlanta Braves, Flying Tigers Corp., Upjohn Co., and Touche Ross & Co. (Paperman, 1977).
3. Historic cost model: The historic cost method is one of the more popular methods because of its similarities to normal accounting procedures, it calculates an employee 's worth using the total historic costs associated with obtaining an employee. This method requires accruing the cost of the investment in the employee. One of the problems with this method is that decisions must be made about what costs to expense and what costs to capitalize. One way of deciding what to expense or capitalize is to classify human resource costs as either training or educational. With this approach, training cost would include anything associated with the current job, and it would be expensed. Educational costs would be anything associated to the preparation or advancement, and these costs would be capitalized. Another approach that could be used includes all the costs of recruiting, testing,

training, and development. The decision of whether to capitalize or expense is based on how long the cost will benefit the company. If the cost will lead to a benefit for longer than twelve months, then the cost will be capitalized. Ebersberger notes that it is important with this method that the users of the information do not view it incorrectly. Historic costs do not represent the worth of an employee; they are merely an assessment of past costs. Instead, the benefits from historic cost allow rate of return on investments and turnover costs to be computed. There are also other problems with the historic cost method. One problem is that anything that an employee learns outside the job will not be included in the costs. Another limitation is that employees may apply training at different levels. Due to the inability of historic cost to aid in making decisions concerning the present and future, some prefer to use the replacement cost approach (Dawson, 1994).

4. Replacement Cost model: Replacement cost method by Likert suggests that the cost of employee should be valued based on what the organization would have to sacrifice to replace an employee if he/she leaves the organization. This includes the cost attributable to the turnover of a present employee, as well as the costs of acquiring and developing a replacement. It calculates an employee worth using the replacement costs associated with obtaining an employee. Replacement costs can be defined as the costs that would be encountered today to replace current human resources. Replacement costs include three types of costs. Ebersberger added that they include the cost of hiring new employees for existing jobs, the cost of training new employees to the proper level, and the cost of moving employees to new positions or out of the company. One benefit of this model is that it is based on solid fact; the costs of recruiting and training. One problem with replacement cost approach is that does not consider the work ethics of employees. Replacement costs are based on the current value of an employee to a company. This value is the present value of the future services that an employee is expected to provide (Dawson, 1994).
5. Total Organizational model: Dawson suggests that the total organizational model takes the value of the company and divides it between the different inputs to the company, and then it divides the amount associated with labour between the different clusters of employees in the company (Dawson, 1994).
6. A Bidding model: In the bidding model, the managers in an organization determine the value by bidding for the human resources that are in the organization. This approach suggests competitive bidding for scarce employees in an organisation i.e. opportunity cost of employees linked to scarcity. The approach 21 proposes the capitalising of additional earning potential of each human resource within the company (Dawson, 1994).
7. Economic Cost model: The economic cost model comes from the human capital theories. Economic value refers to the appropriately discounted amount of net cash inflows generated by the human resources of a firm over their economic service lives. Some authors refer to the economic value method as the present value measuring technique or use the term in conjunction with the opportunity cost approach (Dawson, 1994).
8. Stochastic Reward Valuation model: The last approach is the most complex. It is the stochastic rewards valuation models. This approach focuses on HRA value rather than HRA cost, it calculates the value of an employee —as the discounted sum of the values of the service states that the individual will occupy during his/her career with the organization. The stochastic rewards valuation model requires five different pieces of information (Dawson, 1994):
 - The mutually exclusive service states that the individual may occupy

within the organizational system; • The value of each of these service states to the organization; • The estimated tenure of the person in the organization; • The probability that the individual will occupy each service state at specified future times; • The discount rate to be applied to future cash flows to determine their present value.

Importance of Developing methods for Human Resources Accounting

A survey research was conducted in utilizing component analysis and two reasons were found why measuring human resources is important (Toulson & Dewe, 2004): a) The first is that measurement reflects the strategic and competitive importance of human resources, and b) The second suggests that to earn credibility, human resources must be expressed in financial terms. If properly implemented, the human capital planning and budgeting process will become a key driver of strategy as strategic human capital planning and budgeting ensures that the best resources are mobilized for each internal process, too often organizations focus 100% on meeting the financial budget first without consideration of the effect the cost slashing will have on strategy, and note that the financial numbers are a lagging indicator of where a firm has been and should not be substituted for leading indicators of where the firm is going. Rather management should focus clearly on causal, leading indicators that drive successful financial measures, and that it is through skills-based budgeting that the fallacy of financial focus can be avoided (McKenzie & Melling, 2001).

The value of human capital should be more fully considered when making decisions about the acquisition and disposal of people—and notes that the accounting practices currently employed by companies can have an undue influence in driving the strategic decisions of these companies. Moore notes that there are parallels between the process of acquiring an employee (a human capital asset) and that of acquiring a fixed capital asset. (Bullen, 2007, p.85-103).

Criticism on HRA methods

Of all these methods, no single approach satisfies all organizational and professional interests. Firms engaging in the production of goods are different from those providing services and it may not be feasible to use the same Human Capital Accounting methods for them. For example, in an auditing firm a member of staff may be measured by the number of bills he/she generates in a month, while in a manufacturing industry, an employee cannot be directly associated with finished product, because such products pass through several hands and units. There is also the fear that Human Capital Accounting may be used by management to manipulate financial statements. With the collapse of Enron, WorldCom and many others, due to the so-called creative accounting, many are of the view that Human Capital Accounting will give avenue to management to manipulate financial statements. Assigning value to employees could become very low motivator for some employees that thinks highly of their jobs than the value assigned by management.

Some also criticize strongly the documentation of people as book assets. Their argument is that it presents employees as property of an organization. Evaluation in Human Resource Accounting requires a lot of estimations of data which is susceptible to manipulation. Management could manipulate figures to suit its interest. Different countries have different requirements and that creates barrier for uniform method (Gebauer, 2003). For instance, United States Generally Accepted Accounting Policies {GAAP} stipulates financial reporting guidelines which are different from those of Indians and to some extent Nigerians. All these

challenges and criticisms hinder the progress of Human Resource Accounting (Okpala & Chidi, 2010, p.71). So management needs to be fully focused when applying HRA, and to consult HRA specialist to coordinate the whole process and design the suitable model for HRA measurement in the organization, also a follow up staff should continue the process and provide a proper auditing to avoid manipulation.

The Impact of Human Resources Accounting on Decision Making and Reporting

Managers are more likely to make decisions that treat the company's employees as long-term investments of the company when they go through the process of HRA measurement treating human resources as capital assets. Flamholtz et al (2002) describes the HRA paradigm in terms of the psycho-technical systems (PTS) approach to organizational measurement.

According to the PTS approach, there are two functions of measurement: a) Process functions in the process of measurement and; b) Numerical information from the numbers themselves. Whereas one role of HRA is to provide numerical measures, an even more important role is the measurement process itself. The HRA measurement process as a dual function attempts to increase recognition that human capital is paramount to the organization 's short and long-term productivity and growth. When managers go through the process of measuring human resources, they are more likely to focus on the human side of the organization and are more likely to consider human resources as valuable organizational resources who should be managed as such|| (Bullen, 2007). For example, management is better likely to see the hidden costs to the company's human resources and the long-term implications to the human assets, when dealing with potential layoff decision with the use of HRA measures in addition to traditional accounting measures. This is because HRA views human resources as assets or investments which must be maintained for long-run productivity. Layoffs may affect future long-term flows profits from lost productivity, costs of rehiring and retraining when business returns, and costs of lower morale of existing workforce. If management quantified the costs of layoffs, management might be less inclined to use layoffs as a way to cut costs and boost short-term profits at the expense of long-run productivity and profits (Bullen and Eyler, 2010, p.5). The best use of HRA as mentioned earlier may be as a managerial tool to aid in making decisions that will benefit the long-run strategic goals and profitability of the 26 company. As opposed to external financial reporting, managerial reporting does not require adherence to a strict set of GAAP in specific financial statements in acceptable format reported to the public. However even if human assets are not reported on the face of external financial statements, HRA can play a crucial role in internal managerial decision-making, and HRA measures can be used to show that investments in a company's human resources may result in long-term profit for the company. In the early 1980s, the U.S. Office of Naval Research (ONR) sponsored a research project dealing with the feasibility of the application of HRA to naval human resource management issues.

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