Abstract

Issues related to human resources and mechanisms to evaluate such resources have gained importance in new management issues in recent decades as human resources are seen as a part of unlimited resources on one hand and the disregard for them will affect all other resources, on the other hand. In addition, human resources have resulted in raising specific issues in modern accounting. Today, there is no doubt that human resources should be priced and reflected in the balance sheet as a part of a firm’s assets. Furthermore, the depreciation of such resources has to be calculated and taken into account seriously. The aim of the present study is to discuss the significance and the objectives of human resource accounting and to review various definitions of this approach proposed by different scholars in order to represent a comprehensive account of the development of human resource accounting in five stages. Finally, after presenting a review of the literature and the management functions of human resource accounting, a discussion of the costs in human resource accounting and models used to evaluate human resources will be provided.

Keywords: human resource accounting, intellectual capital, human resource management, human resource accounting measurement

1. Introduction

Currently, the "value" of a business unit is measured in the form of the traditional balance sheet such as buildings and products as an adequate reflection of the firm’s assets. However, with the rapid growth of the knowledge of economy, a question that comes in mind is whether human capital makes up an important part of the business unit's total value included in the financial statements. This, in turn, leads to two more important questions (Guru Prasad Puttu, 2009):
- In addition to the tangible assets of the business unit, how the value of human resources is assessed?
- How to improve the human capital development in a given business unit?

2. Significance of the Study

Harbinson (1974) has defined human resource accounting as “energies, skills and knowledge of the ones who are, and potentially can be, or should be, who use these items in production of the goods and services”. Accordingly, human resource is defined as knowledge that people attain during their lifespan and for production of goods, services or ideas used in trading or non-trading conditions (Horbinson, 1973, p. 46). The essence of human resource accounting was initially proposed in the aftermath of the increasing concern for the human resource management in industry. Behavioral science scholars (e.g. Lickert, 1960) were concerned about the management of the company as this is seen a serious obstacle for the effective management (Guru Prasad Puttu, 2009, p. 5).

Consequently, there is a need to establish a comprehensive and accurate accounting system which can provide monetary and nonmonetary information about the human elements for the organization, identification, measurement, recording and reporting of the human resources:
1. Human resource accounting plays a significant role in production units based on the labor such as service centers; science centers and etc. as at these centers, human resources of actual assets have a primary role while physical resources play a secondary role.

2. It will help the researchers of information to understand whether these human resources has enough outcome in comparison to their payments nor and whether such payments are less or more than what was expected.

3. If the value of the information concerning the human resources and changes made in them is apparently included the accounting records, it can provide valuable assistance to improve management for personnel’s needs, lawful organizational behaviors, the control of the performance effectiveness, the reduction of absence, efficacy, and improvement of the human relations. Besides, it can affect employees’ participation in decision-making process. Human resource is a vital portion of the business unit’s investment and its profitability depends mainly on the role of the human resource. Therefore, the accurate assessment of the overall value of a business unit can be done properly when the value of the human resource is properly estimated.

Flamholtz [3] presented a theory with a managerial emphasis on human resource accounting. The theory determines the nature and the determinants of the human values in formal organizations and it follows two main objectives. First, it will identify the variables to be taken into account for the improvement of the human resource values measurements (monetary and non-monetary). Second, the theory may be developed as a new paradigm in the human resource management (Roslender, R., 2009, 145). The primary goal of the human resource accounting is facilitating the management of people as resources of the organization. It can also be termed management of the human resource, indicating the use of accounting for the management of human resources. The objectives of the human resource accounting system are as follow (Katiyar R. C., 1992, pp. 14-15; Guru Prasad Puttu, 2009, P.P.5):

1. Providing information on the cost and value of human resources for management decisions related to attraction, allocation, recovery, and maintenance of the human resources to achieve effective organizational goals.
2. Allowing management personnel to monitor the effective use of human resources, providing an asset which means if the maintained assets are depreciated, maintained, or their values have increased.
3. Facilitating the development of management principles through classification of financial implications.
4. To help stockholders in organization to know whether the human resources of organization provide an output equal to their value or not.
5. Evaluation of the changes in human resources with the help of various departments of the organization. As such, the goal of the human resource accounting is not only identifying the value of all the resources used or controlled by a business unit, but also improving the effective management of human resources.

3. Development of Human Resource Accounting

With the introduction of human resource accounting and providing some insights about its validity and significance in organizations and in the contemporary economic environment, we will provide an overview of the accounting history for human resources. The development of the human resource accounting has taken place in five stages as follows:

Stage I: The main source of human resource accounting concepts

The primary concern in human resource accounting originates from a variety of sources. Some theorists in the field of accounting (e.g. Scott, 1925; Paton, 1962) have supported the idea of treating people as assets and using accounting to measure their value. Originally, organizational psychologists such as Likert showed their interest in the fact that people are the valuable sources of the organization (Likert, 1961; Odiorne, 1963).

Stage II: Academic studies and improvement of measurement models

The purpose of academic studies was to improve and evaluate the reliability of the total value and the cost human resources. That period was the period of the designed academic research aiming to codify the current
and potential applications of human resource accounting as a tool in the service of human resource specialists, operational managers, and external users of financial information. Such uses included a number of the actual discovery applications in human resource organization. Research conducted during the initial stages of the development of human resource accounting in University of Michigan suggested the failure to regard personnel as a cost instead of an asset and they concluded that human resource accounting was first used as a managerial instrument. In another study with the title of “Accounting for Human Resources” published by Bramet and his co-authors, the authors evaluated the potential effects of the human resource accounting on management.

Stage III: Rapid Development of Research in Academic Domain

Development of human resource accounting which began in 1971 and ended in 1977 was the period of the growing interest to the human resource accounting. At that time, significant academic studies were conducted all over the Western World, Australia, and Japan. Such research the first endeavor to apply the theories of human resource accounting in commercial organizations. Studies conducted by Elias (1972) determined the decisions of external users for investment in stocks will be different if they consider the human resource accounting. Following Elias’ work, Hendricks (1976) observed that investment decisions made about stocks are mainly affected by the accounting information of the total cost of human resources. Schwan (1976) expanded Elias and Hendricks’ research by testing the impact of total cost of human resource accounting on financial decisions compared to the decisions taken based on financial data contracts. The results suggested that with human resource accounting information, companies are shown better and inclusion of the human resource accounting information will lead to an anticipation of significantly improved net profit. Additionally, Acland (1976) introduced the behavioral indicators for financial analysis and suggested that financial analysts prefer a company with improved operating performance and this may result in to reduction of behavioral indicators. However, this superiority decreases when the human resource indicators are presented.

Stage IV: Decreased Interest in Human Resource Accounting

The fourth stage in evaluation of the human resource accounting (1977 to 1980) shows a loss of interest in human resource accounting. Although, the interest began to decline, the interest in human resource accounting did not disappear forever and some worthwhile activities happened. For example, Ansari and Flamholtz (1978) argued the development of management science facilitates human resource accounting as a management tool. In the same year, Oliver and Flamholtz (1978) conducted an experimental study on the perceived ambiguity of decisions, methods of decision-making, and tolerance of uncertainties. They found that in the financial information of the total cost of replacement of human resource accounting will cause differences in decision making at the end of the service. One of the reasons for decline of the interest in human resource accounting was that most of the early researches were done relatively easy. The remaining researches needed for development of human resource accounting were complex and could only be done by a small number of researchers, aggravated by a need for cooperation of the organizations which were willing to provide sites for applied research. A few studies were done since relatively few people had skills needed to conduct research or had qualifications to achieve company’s partnership. Besides, research included the use of the human resource accounting in organization and the cost of supporting such researches was high, while the benefits gained from these studies were insignificant and the results were too general and did not provide any motivation in companies to support. Consequently, human resource accounting which seemed to be promising idea did not develop beyond this.

Stage V: Renaissance of Human Resource Accounting

The fifth stage, the current stage of human resource accounting, beginning in 1981, was the restart of the growing interest in human resource accounting. Similarly, this stage includes some practical applications, even though it was not much applicable. The first spur of revitalization was seen in 1980 as the number of research studies related to application development of human resource accounting as well as the number of attempts to apply the human resource accounting on a theoretical basis had increased then. The interaction between theory
and practice was significant. During this period as the period of growth of the awareness in which the world’s advanced economics had in gradual transition from the industrial economics of the property, machinery, and equipment of the core evaluations to the industrial economies which were the human’s capital and intellectual property of the core evaluations. Potential success belongs to an organization that already relies on its intellectual capabilities rather than on its potential assets. Therefore, organizations should pay more attention to the development of intellectual capital or amassing of human capital and intellectual assets. While companies like Us Steel and General Motors refused it, new companies such as Microsoft, IntelMgn appeared as an indication of a new start. Accordingly, manufacturing standards and 500 poor indexes meaningfully changed in companies which had manufacturing technologies based on human resource compared to industrial companies.

4. Management Functions of Human Resource Accounting

Although human resource accounting can be used to improve financial reporting, it seems that most important advantage of such accounting is that it will be remembered as a management tool. Management can use the measurements provided by the human resource accounting to make decisions about human resources. If the management pursues the whole process and the human resource information also is available, it will be likely that important management decisions such as staff turnover or termination of service will be taken differently. Flamholtz (1979-1980) stated that a human resource accounting paradigm based on "psycho-technical system" (PTS) can be used for the organizational measurement. In PTS approach, there are two functions for measurement: functions in process of measurement and data functions or numerical data by using numbers or measurements. This means that one of the roles of human resource accounting measurement is to provide the numerical data as input for financial and administrative decisions. But it also plays other roles, perhaps most important of which is division of measurement process from monitoring and reduction of the total cost and value of the people from human resource perspective. From a managerial perspective, measurement process sends this message that people are valuable sources and they must be managed efficiently (Flamholtz Eric G. et al, 2002, p.947).

5. Human Resource Accounting Costs

Historical cost of human resources: According to this theory, costs spent for employees directly increase their value. In this method, the cost associated with the selection, recruitment, training, deployment, and development of human resources of an organization is charged in the account of the asset and is depreciated over the useful life of the investment. Total cost of such cases is principally objective and attestable and decisions about whether to consider it in the account of the asset or in the cost (Tallane and Purianasab, 1994, p.53). According to Kaplan et al. the theoretical basis of the total cost is that human resource values can be measured by the accumulation of the total cost of investment (Sue A. Ebersberger, 1981, P.P.38).

6. Human Resource Replacement Costs

In principle, the theory of human resource replacement cost can be developed among groups of individuals as well as among individuals in the organization as a whole. Presently, the personnel managers in practice think about attracting a worthy successor with someone who has already done this responsibility. This approach suggests that there is a dual theory towards the total cost replacement. Positional Replacement Cost refers to costs incurred while replacing a person in an organizational post. In contrast, Personal Replacement Cost refers to the costs incurred while replacing an employed person working in an organization with a competent person providing similar services. Personnel replacement cost is usually greater than position replacement cost (Katiyar .Rakish Chandra, 1992, p.p.51). Total replacement cost refers to costs to be spent for replacing or substituting resources currently owned or used by the entity (Eric, J. and Flamholtz; cited in Hassan Ghorban, p. 60). According to Kara (1973), based on the replacement cost approach, the cost of replacing human resources are measured, including re-hiring, training, and development of human resources to the current staff level. Of course, the replacement cost might be affected by the organization’s personnel policies, suggesting that
employed personnel leaving the organization might be replaced by the best person possible at the best possible time or not.

7.Lost opportunity cost of human resources:

Opportunity cost refers to the maximum amount of money gained by a human resource in a replacement appointment. To determine the opportunity cost, managers are encouraged to invite scarce staff that is a successful invitation on the basis of divisional investment.

8.Conclusion

History of human resource accounting illustrates how intellectual capitals and empirical experiments have been able to meet industrial needs. Nowadays, companies are seeking to implement human resource accounting and this may be developed at increasing rate. Therefore, there is a need for more studies on how human resource accounting technology can be adopted and extended for measuring a variety of human assets (intellectual capital).

In addition, the improvement of internal management decisions, such as turnover, implementation of human resource accounting will result in the development of evaluation techniques and business decisions. In spite of the central role of human resources in the development process, particularly in the discussion of sustainable development as a key challenge for advancing the governments, human resource accounting as a skill of collecting, summarizing, developing, preservation, maintenance, evaluation, and reward of human resources can help managers to take correct decisions about the human resources of organization. However, managers are not well aware of the role of human resource accounting.

Adherents of the human resource accounting believe that managers, at all levels, have to be aware of skills and creativity of the employees who are working under their supervision. Consequently, human resource accounting can determine the unnecessary cost that is lost in job turnover. However, managers in every country believe that the existence of the human resource accounting is irrelevant in this regard. One of the benefits of the human resource accounting is that it can be used in manufacturing decision compared to buying. However, the managers are not aware of this function. Rate of return on investment is an important variable in the investing decisions of investors that will undergo some changes if the human resource accounting is implemented while investors are unaware of this change. They are also unaware of the role of the reporting information of human resource accounting which can provide them with useful information for decision-making concerning the acquisition, preservation, sale, and transfer of shares. Consequently, the operation style of current accounting and reporting is in such a way that investors will not be aware of the actual investment resources of the company on human assets. Therefore, human resource accounting is able to overcome this problem and provide them with complete information but the investors are not aware of the human resource accounting role as well.

Current accounting systems are involved in financial and physical investment structures of the organizations based on economy and cannot provide required information about cost and value of human resources. Nevertheless, colleges and training institutes have not applied any system to coordinate accounting systems with human resource-based economy. Professional accounting communities failed to play an active role in introduction and promotion of human resource accounting systems and its goals. It is hoped that the application proposed suggestions leads to taking effective steps in this regard.

9.Recommendations and Suggestions

To overcome the problems of human resource accounting, the following suggestions are offered: Management and productivity center are recommended to offer courses on the growth and promotion of the human resource accounting for managers of companies listed in stock market. The stock exchange market is also advised to hold a course in relation to the growth and promotion of the human resource accounting for stock brokers (investors). It is also recommended that accounting organizations develop and implement standards under the name of human resource accounting standard and its implementation be reported to the accountants. It is recommended that the Central Bank and the Economic Council provide facilities to the units that intend to implement human
resource accounting. It is recommended that the Department of Accounting and Accounting Management offer courses related to human resources management in undergraduate programs in accounting and management. In addition, given the significant role of human resource in various economic sectors and also reporting utility of human resource accounting and according to Statement No. 5 of the Financial Accounting Standard Board (FASB) that considers the disclosure of the financial statement provides useful information, the existence of human resource accounting system plus the current accounting systems seems essential in Iran.

References


