Human resource accounting is not a new issue in the arena of business. Economists consider human capital as a production factor, and they explore different ways of measuring its investment in education, health, and other areas. Accountants have recognized the value of human assets for at least 70 years.

HUMAN RESOURCE ACCOUNTING

"HRA is the human resources identification and measuring process and also its communication to the interested parties."
- American Accounting Association

R Parameswaran

K Jothi

Human Resource Accounting is one of the latest concepts adopted by Indian companies in recent times. Most of the enterprises which follow Human Resource Accounting spare a separate section in their annual reports for a detailed account of their human resources. Human asset reporting in India usually includes a profile of human assets, the compensation pattern, training and development, human asset productivity, human asset value, and the total wealth of the organization.

The concept of human resource accounting can be basically examined from two dimensions: (i) the investment in human resources; and (ii) the value of human resources. The expenditure incurred for creating, increasing, and updating the human resource quality is known as investment in human resources. Such investment yields fruitful results like higher productivity and higher income to the organisation. The yield that the investment in human resources generates will be considered as the basis of human resource value. The American Accounting Association defines human resource accounting as "measuring data of human resources and communicating the information to the interested parties". It has rightly pointed out that human resource accounting would measure all the data relating to the people of an organization, and this data when reported to either the shareholders, or managers, or government, or any other agency, will be helpful in making the relevant decisions.

Human resource accounting aims at depicting the human resources potential in money terms while casting the organisation's financial statements. With the emergence of the knowledge economy, recognition of human capital as an important part of the enterprises, total value has gained importance. This has led to two important issues:

- The methods to assess the value of human capital.

*The authors are — *Head, Department of Commerce, and **Research Scholar, Department of Commerce, T.S.A.A.S.T College, Perur, Coimbatore, Tamil Nadu. They can be reached at rparames_564@yahoo.co.in)*

- The methods to improve the development of human capital in enterprises.

Organisations, trying to reflect the ‘value’ of “its people” are using different approaches. The US Financial Accounting Standard Board, in its recent Exposure Draft on Business Combinations and Intangibles refers to human resource as ‘broad—based intangibles—workforce-based assets i.e., intangible assets that relate to the value of the established employees or workforce of a company. They include:

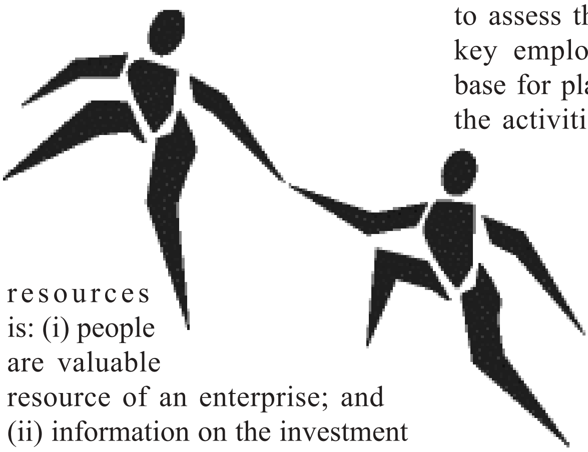
1. Assembled workforce, trained staff
2. Non-union status, strong labor relations, favorable wage rates
3. Superior management or other key employees
4. Technical expertise
5. Ongoing training programs, recruiting programs.

This represents the first formal acknowledgement ever regarding the accounting for human resources by an authoritative body responsible for the promulgation of accounting standards.

Evaluation of Human Resource Accounting:

Research into true human resource accounting began in the 1960s by Rensis Likert. It defends long-term planning by strong pressure on human resources’ qualitative variables, resulting in greater benefits in the long run.

Economists like Gary Becker S, Lester Thurow, Mincer Jacob, and Schultz T.W., have dealt with the concept of the rate of return of investment in human capital, and reported varying observations. The basic premise of Flamholtz G, the theory of accounting for human resources is: (i) people are valuable resource of an enterprise; and (ii) information on the investment and value of human resource is useful for internal and/or external Decision-making.



The original cost model of Brummet R.L., et al suggested capitalisation of the firm’s expenditure on recruitment, selection, orientation, training and development of people, and treat them as assets for the purpose of human resource accounting. The amounts so capitalised are to be shown in the balance sheet, under the heading human assets, as distinguished from physical assets. The amortisation and write-off policies of conventional accounting methods shall be applied to human assets as well (Brummet R.L.). The opportunity cost model advocated by Hekimian, Jones gave impetus to assess the opportunity cost of key employees for quantitative base for planning and controlling the activities of human resource function.

From the management accounting point of view, an accurate estimation of the learning factor is essential to obtain a good prediction of the product cost and is also important in the labour force.

Hermanson R.H. proposed an adjusted present value model to quantify the value of human capital of a company. According to him, the amount of future wages payable represent a liability, while human resources (or operational assets) are an asset in the balance-sheet. Lev, Schwartz valued human capital as the present value of the future earnings of the people till retirement.

Likert developed a model to diagnose the changes in human organisation over a period of time. The human variables are divided into three categories:

i) Causal variables;

ii) Intervening variables; and

iii) End-result variables.

The interaction between causal and intervening variables has been shown to affect the job satisfaction, costs, productivity, and earnings.

Flamholtz G developed a model to measure the human resource value to the organisation with the help of stochastic process. He considered the movement of employees from one position to another over a time period. The value of human resource as established by Flamholtz is equal to the present value of the future rewards adjusted with the probability of mobility and separation.

Rao developed a system of human resource accounting, and illustrated its application in a transport equipment manufacturing concern. He has designed the system based on the input/output control mechanism. The output variables of the system are described to be the indicators of human resource development and utilisation. The human resource investments are measured through human resource investment sub-system. To identify the human resource investments, a distinction is made between human resource current costs and human resource investments.

All the human resource costs, whose benefits are expected to effect in future periods, are treated as investments. Then the annual human resource investments are adjusted to the tune of changes due to intake or separation or natural deterioration. The intake of people results in the addition of human resource investments, while separation necessitates writing off of human resource investments. Human resource deterioration is measured and adjusted with the help of amortisation rates in each year under study.

Looking at different proposals (Conner), the resource theory considers human resources in a more explicit way. This theory considers that the competitive position of a firm depends on its specific and not duplicated assets. The most specific (and not duplicated) asset that an enterprise has is its personnel. It takes advantage of their interdependent knowledge. That would explain why some firms are more productive than others. With the same technology, a solid human resource team makes all the difference (Archel).

Development of Human Resource Accounting

The importance of human resources of companies can be illustrated in several ways. The market prices of corporate securities often reflect values substantially different from those indicated by the recorded values of the individual assets. Obviously, some assets, including human resources, remain unrecorded. Other evidence suggests that the replace-

The Companies Act, 1956, does not explicitly provide for disclosure on human assets in the financial statements of the companies. But sensing the benefits derived from valuing and reporting the human assets, many companies have voluntarily disclosed all relevant information in their books.

ment costs of human resources are quite substantial.

In a well-known survey by Likert and Pyle, hundreds of corporate presidents were asked to estimate the cost of replacing their entire work force. Most estimates ranged from three to five times the annual payroll. Furthermore, since payrolls generally exceed earnings by eight to ten-fold and since the human organization can be regarded as worth three to five times the payroll, the human organization could be valued at twenty-five to fifty times a company's annual earnings. A five percent fluctuation in the value of a firm's human resources easily could equal its reported annual earnings.

The growing technical complexity of modern business and the increasing time required for personnel to gain experience are making brainpower a critical resource in our economy. For this reason it is not uncommon to learn of a large corporation purchasing small technologically superior firms – not for their plant and equipment but for their skilled managers, scientists, engineers and informational technological specialists.

Declarations from the Evolution

Evolution of human resource accounting reveals the following:

1.Reasons for Human Resource Accounting:

The analysis of earlier studies reveals the following declarations:

Internal Reasons	Internal and External Reasons	External Reasons
1. To improve human resource management.	1. To overcome problems arising from the valuation of intangible assets.	1. To overcome the difficulties in providing sufficient information to investors in traditional balance sheets.
2. To focus on employees as assets	2. To redistribute social responsibilities between the public and the private sectors.	2. To profile the enterprise and improve its image.
3. To retain qualified labour force.	--------	3. To attract future employees

2.Objectives of Human Resource Accounting:

Internal	Internal and External	External
To improve human resource management: i). Identifying the range of skills, competencies and expertise available within the organisation. ii). Identifying the most appropriate person/s for particular tasks. iii).Assisting in putting together teams of staff for particular projects. iv).Revealing gaps in skills and competence in the organisation. v). Clarifying roles in the organisation, including roles as 'knowledge brokers'. vi).Assisting in planning for career progression, succession, training or development and knowledge management.	1. To indicate human resources as an asset in order: 2. To attract and support investment in the organisation. 3. To convince investors and other staff of the value of human resources. 4. To provide information indicating: i) the links between human resource interventions and financial results. ii) the returns on investments in training and development. 5. To present an image of the company that will attract new staff and increase the retention of existing staff.	1. To provide information to investors and potential investors about the capabilities of the organisation. 2.To present an image of the company as capable and competent: i) To attract targeted and new customers and clients. ii) To attract new business. 3. To keep up with competitors.

Methods of Human Resources Measurement and Accounting

When a firm invests in human resources by acquisition and training, it anticipates a future generation of profits and services that will be produced by these assets. The techniques showing a greater capacity to stimulate efficiency is based on the idea that an employee who is induced to get to know his job better is more productive and quicker on the job.

Training in firms is an activity that develops the worker's capacity to improve efficiency and job quality, therefore, the enterprise increases its profitability. The training concept is generally used to define three different issues, which, in practice, are difficult to distinguish: capacitation, training, and development (Guzman et al.,) Capacitation is the worker's acquisition of knowledge and skills necessary for his job. Training better adapts the worker to the job, and development focuses on promotion to higher job levels.

Even though there are different training classifications, the one proposed by Marques reports several criteria:

1.When does training take place?

It can be at the contracting

moment or any moment during employment.

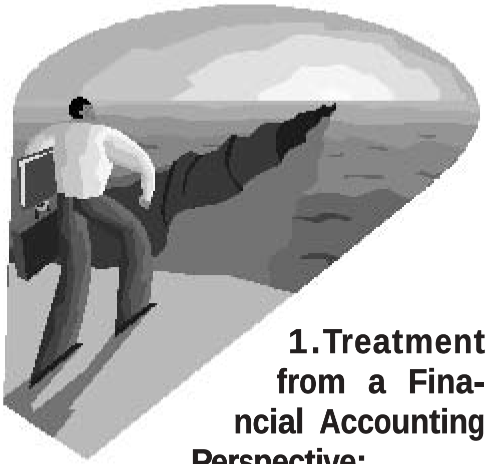
2. How long is the training period?

It can take from one or two days to one or two weeks. In some cases, it can take six months, one year, or more.

3. Does this training relate to the nature of the job by updating an employee's knowledge and teaching new techniques or does it open doors to new skills not related to the worker's professional activity?

4. Is there internal or external training taking place?

Creative training comes from the firm's planning process and makes personnel capable of doing their job. On the contrary, competitive strategic training maintains the firm's competitive level. Inside creative training, three different actions can be distinguished that will incur some expenses. Those training expenses are related to jobs and profession evolution, improvements in global services, and innovation or change in projects. In any case, expenses derived from creative training are considered long-term because they increase the firm's added value. In other words, with creative training, the firm becomes more competitive and increases its income. Expenses derived from competitive strategic training will be considered as current expenses since they appear as a consequence of short-term actions that maintain the firm's competitive level, even though its absence may lead to a decrease in the employee's qualifications. The following are the different methods of human resources measurement and accounting.



1. Treatment from a Financial Accounting Perspective:

Following the definitions already explained, as long as future benefits are expected to come from these training costs, they can be treated as assets. However, this does not hold true in reality. As Cea García states:"There is a clear absence of correspondence between the real assets in the present firms and those recognised 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 services 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."

Human Resource Accounting is a must to improve human resource management, to overcome problems arising from the valuation of intangible assets and to overcome the difficulties in providing sufficient information to investors in traditional balance sheets.

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: Identify the asset's cost and estimate the period in which the asset should be amortized.

In international accounting, besides clearly recognizing some items as assets (cash, stock, machinery, and so on) there is great debate whether certain other items are considered capitalization. These are known as deferred charges in English accounting literature (Hendrikson). 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 is actually participating in a value-creation process. That is, any economic activity makes the firm incur costs. One traditional classification takes into account 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.

i) Acquisition Costs and Learning Costs: - It represents the original cost of human resources in the conventional accounting sense, and includes such costs as personnel recruitment, training, and development. Under this method, the cost of acquisition i.e. selection, hiring, training costs of employees are capitalised and written off over the expected useful life of the employees. In case the personnel leave the company before the anticipated period of service, then the unamortised portion of costs remaining in the company's books is written off against the profit and loss account in that year. If the period of service exceeds the anticipated time, then amortisation of costs is rescheduled. That is, when referring to training costs, historical costs mean the sacrifice necessary to hire and train people. Determining training costs is difficult when training takes place in-house, considering teachers' and organizers' dedication, occupied rooms, salaries and staff welfare expenses with no remuneration, general expenses, and so on. It is much easier to have external training. On the basis of early research work done in this area, we can divide all these costs into the groups of acquisition costs and learning costs.

Learning Costs: From the management accounting point of view, an accurate estimation of the learning factor is essential to obtain a good prediction of the product cost and is also important in the labour force. On the other hand, the enterprise can make decisions about its human resource investments if it knows which benefits will be reported. In this sense, the learning factor or experience curve provides information for decision making and resolution of problems regarding the rising costs of the labor force where new fabrication processes or specialized jobs are important. In both cases, the cost will decrease as long as employees get to know their jobs better.

ii) Substitution Costs: Likert (Bowers) imagines an extreme situation for the firm's management. "Suppose that tomorrow all the jobs are empty, but you still have available all the rest of the resources: buildings, factories, industrial plants, patents, stocks, money, and so on; except, of course, for the personnel. How much time would it take you to recruit the necessary personnel, train it until they are able to assume all the existing functions at the present competitive level and integrate it in the organisation in the same way they now are?" The mental exercise necessary to rebuild an organization is an excellent way to attract attention to human resources, which is now seen in a new light. Certainly, Professor Likert's fiction includes the implicit posing of human resource valuation under substitution (or replacement) cost criteria.

Even though Likert's proposal is very unlikely, it enables calculating the cost of totally substituting (or replacing) human resources. To calculate substitution cost, figure in the cost of sacrifice to replace a human resource that is already employed. This cost includes exit costs of the leaving employee and recruiting and training of the replacement.

iii) Opportunity Costs: Some authors consider that opportunity costs are not the alternative to historical costs nor substitution costs, but estimates these costs without mistake. Opportunity costs are considered as "an asset value when [they are] the target of an alternative use"(Hekimian and Jones). Cost valuation is based upon the conflict of interest that can take place in a firm's internal, fictitious market where several organizational units (divisions) participate. These units must be profit centers, that is, their objectives must be expressed in terms of profitability.

iv) Replacement Cost: It is a current rupee measure of the expenditure required for a business entity to replace its existing investment in human resources. Under this method, the human resources are valued at their replacement cost i.e.

the monetary implications of replacing existing personnel. Replacement costs could be positional i.e. replacing personnel for particular positions or personnal i.e. replacing specific talent or ability of particular persons.

v) Economic value models: 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.

vi) Standard Cost Method: Under this method, standard costs of recruiting, hiring, training, and developing per grade of employees are determined annually. The total standard cost for all personnel of the company is the value of human resources.

vii) Competitive Bidding Method: This approach suggests competitive bidding for scarce employees in an organisation i.e. opportunity cost of employees linked to scarcity. The approach proposes the capitalising of additional earning potential of each human resource within the company.

viii) Non-monetary Measures: Non-monetary measures of human resources may refer to a simple inventory of skills and capabilities of people within an organization; to a list of professional credentials of key personnel within an organization; or to the application of some non-monetary behavioral measurement technique for assessment of the contributions of various individuals or groups to an entity. The non-monetary behavioral approach appears to have substantial promise for successfully measuring all elements of the employee's total value to an entity. Although reasonable progress has been made in measuring the individual's value to a firm using either the historical or replacement cost technique, neither of these latter methods currently reflects the group and organizational dimensions of an individual's total value.

Need for a Multi-Level Performance Measure:

Given the financial objective of reporting the total economic value of a firm, three levels of the future service potential embodied in humans must be considered:
(1) the individual;
(2) the group; and
(3) the organizational level.

In conjunction with the need to develop a model that adequately measures the entire service potential for humans, is the need to create a model that meets certain accounting measurement standards.

Unfortunately, no HRA model currently exists to adequately measure all three human capital elements. Some models attempt measurement of the individual's contribution to the entity (micro models), while other HRA models are designed to measure only the total value of an entity's human resources (macro models). What is needed, however, is a valid and reliable measurement technique to reflect both the micro and macro dimensions of the human capital component for a business enterprise.

Human Resource Accounting—Compliance With Current Accounting Standards:

In conjunction with the need to develop a model that adequately measures the entire service potential for humans is the need to create a model that meets certain accounting measurement standards. Specifically the informational content of the model must be:

1. relevant for decision-making purposes;
2. verifiable by independent sources;
3. free from subjective bias; and
4. quantifiable in meaningful accounting terms.

Consequently, not only must an adequate human asset measurement technique consider all elements of the human's individual, group, and organizational value to a firm, the particular model also must comply with certain accounting standards.

As for the accounting standards (relevancy, verifiability, freedom from bias, and quantifiability), the historical cost approach to human asset valuation at first glance appears most promising. Unfortunately, this particular valuation technique is not relevant for decision-making purposes. Given the financial objective of reporting the true economic value of the total assets of a firm, including human resources, aggregation of the historical acquisition costs of assets purchased at different points in time fails to reflect the current value of an entity. Consequently, adoption of the historical cost valuation alternative for human resources merely would serve to further muddy unclear waters.

On the other hand, the economic value approach certainly complies with the financial objective of reporting the total economic value of a firm, and is therefore relevant by definition. However, the valuation method also has serious pragmatic limitations. No known way currently exists to objectively identify the true cost of capital for properly discounting the net cash flows associated with the assets of a business enterprise. Hence, the use of such a valuation technique for the accounting of human resources could prove to be a highly invalid and unreliable means to both measuring and verifying the economic value of an organization's employees. Therefore, based on the foregoing evaluation relative to existing accounting standards, both the replacement cost valuation method and the non-monetary behavioral approach appear to offer the most promise for continued research and development.

Conclusion

Human resource accounting provides quantitative information about the value of human assets, which helps the top management to take decisions regarding the adequacy of human resources. Based on these insights, further steps for recruitment and selection of personnel are taken. Outside the organisation, quantitative data on the most valuable asset has an impact on the decisions of the investors, clients, and potential staff of the company. When proper valuation and accounting of the human resources is not done then the management may not be able to recognise the negative effects of certain programmes, which are aimed at improving profits in the short run. If not recognised on time, these programmes could lead to a fall in productivity levels, high turnover rate and low morale of existing employees.

The Companies Act, 1956 does not explicitly provide for disclosure on human assets in the financial statements of the companies. But sensing the benefits derived from valuing and reporting the human assets, many companies have voluntarily disclosed all relevant information in their books. The training costs can be treated in a similar way as any other capitalised expense. ■

Help us in taking Action against persons falsely claiming to be members of the Institute

The Institute has come across a number of cases where a person who is not the member of the Institute but falsely represented himself as a member of the Institute and used the designation 'Chartered Accountant'. Action has been taken against such persons under Section 24 of the Chartered Accountants Act, 1949 and the applicable provisions of the Indian Penal Code, 1860. Members are requested to bring instances of the persons falsely claiming themselves to be members of the Institute, etc. to the notice of the Joint Secretary (Legal), The Institute of Chartered Accountants of India, I.P. Marg, New Delhi- 110002 (email:npsingh@icai.org) along with relevant documents/papers/information available with them so as to facilitate action against such persons at the Institute level. In cases, where a person not being a member of the Institute uses the name and seal of any Chartered Accountant and forges his signature on documents, the Chartered Accountant who is thus harmed may file an FIR with the police authorities or take action for filing criminal complaint in Court being aggrieved party and also bring the same to the notice of the Institute for necessary action.

ANNOUNCEMENT

Members and students who seek placement in industry may register themselves on the Online Placement Portal of the Institute. Registration is also opened for senior members who would like to take up new assignments. For information, it is stated that as of date, 186 companies are registered on the Placement Portal.