
UNIT 18 HUMAN RESOURCE ACCOUNTING

Objectives

After going through this unit, the reader should be able to:

- 1 understand and define the concept of Human Resource Accounting, its objectives and its role in Human Resource Management;
- 1 understand the measurements of Human Resource Costs; and
- 1 understand the measurements of Human Resource Value.

Structure

- 18.1 Introduction
- 18.2 What is HRA?
- 18.3 Why HRA?
- 18.4 Historical Development of HRA
- 18.5 Information Management for HRA
- 18.6 Measurement in HRA: Two Approaches
- 18.7 The Cost Approach
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- 18.9 The Non-Monetary Value Based Approaches
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- 18.13 Further Readings

18.1 INTRODUCTION

The past few decades have witnessed a global transition from manufacturing to service based economies. The fundamental difference between the two lies in the very nature of their assets. In the former, the physical assets like plant, machinery, material etc. are of utmost importance. In contrast, in the latter, knowledge and attitudes of the employees assume greater significance. For instance, in the case of an IT firm, the value of its physical assets is negligible when compared with the value of the knowledge and skills of its personnel. Similarly, in hospitals, academic institutions, consulting firms etc., the total worth of the organisation depends mainly on the skills of its employees and the services they render. Hence, the success of these organizations is contingent on the quality of their Human Resource- its knowledge, skills, competence, motivation and understanding of the organisational culture. In knowledge –driven economies therefore, it is imperative that the humans be recognised as an integral part of the total worth of an organisation. However, in order to estimate and project the worth of the human capital, it is necessary that some method of quantifying the worth of the knowledge, motivation, skills, and contribution of the human element as well as that of the organisational processes, like recruitment, selection, training etc., which are used to build and support these human aspects, is developed. Human resource accounting (HRA) denotes just this process of quantification/measurement of the Human Resource.

18.2 WHAT IS HRA?

The American Accounting Association's Committee on Human Resource Accounting (1973) has defined **Human Resource Accounting** as "the process of identifying and measuring data about human resources and communicating this information to interested parties". HRA, 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 organisation.

Flamholtz (1971) too has offered a similar definition for HRA. They define HRA as "the measurement and reporting of the cost and value of people in organizational resources".

As far as the statutory requirements go, the Companies Act, 1956 does not demand furnishing of HRA related information in the financial statements of the companies. The Institute of Chartered Accountants of India too, has not been able to bring any definitive standard or measurement in the reporting of human resources costs. While qualitative pronouncements regarding the importance of Human Resources is often made by the chairmen, in the AGM, quantitative information about their contribution is rarely recorded or communicated. There are a few organizations, however, that do recognize the value of their human resources, and furnish the related information in their annual reports. In India, some of these companies are : Infosys, Bharat Heavy Electricals Ltd (BHEL); the Steel Authority of India Ltd. (SAIL), the Minerals and Metals Trading Corporation of India Ltd. (MMTC), the Southern Petrochemicals Industries Corporation of India (SPIC), the Associated Cement Companies Ltd, Madras Refineries Ltd. , the Hindustan Zinc Ltd. , Engineers India Ltd, the Oil and Natural Gas Commission, Oil India Ltd., the Cement Corporation of India Ltd. etc.

18.3 WHY HRA ?

According to Likert (1971), HRA serves the following purposes in an organisation:

- 1 It furnishes cost/value information for making management decisions about acquiring, allocating, developing, and maintaining human resources in order to attain cost-effectiveness;
- 1 It allows management personnel to monitor effectively the use of human resources;
- 1 It provides a sound and effective basis of human asset control, that is, whether the asset is appreciated, depleted or conserved;
- 1 It helps in the development of management principles by classifying the financial consequences of various practices.

Basically, HRA is a management tool which is designed to assist senior management in understanding the long term cost and benefit implications of their HR decisions so that better business decisions can be taken. If such accounting is not done, then the management runs the risk of taking decisions that may improve profits in the short run but may also have severe repercussions in future. For example, very often organisations hire young people from outside on very high salaries because of an immediate business requirement. Later on, however, they find that the de-motivating impact of this move on the existing experienced staff has caused immense long term harm by reducing their productivity and by creating salary distortions across the organisational structure.

HRA also provides the HR professionals and management with information for managing the human resources efficiently and effectively. Such information is

essential for performing the critical HR functions of acquiring, developing, allocating, conserving, utilizing, evaluating and rewarding in a proper way. These functions are the key transformational processes that convert human resources from 'raw' inputs (in the form of individuals, groups and the total human organization) to outputs in the form of goods and services. HRA indicates whether these processes are adding value or enhancing unnecessary costs.

In addition to facilitating internal decision making processes, HRA also enables critical external decision makers, especially the investors in making realistic investment decisions. Investors make investment decisions based on the total worth of the organisation. HRA provides the investors with a more complete and accurate account of the organisations' total worth, and therefore, enables better investment decisions. For example, conventional financial statements treat HR investments as "expenditures. Consequently, their income statement projects expenditures to acquire, place and train human resources as expenses during the current year rather than capitalizing and amortizing them over their expected service life. The balance sheet, thus, becomes distorted as it inaccurately presents the "total Assets" as well as the "net income" and, thereby, the "rate of return" which is the ratio of net income to the total assets. HRA helps in removing this distortion.

Furthermore, in a business environment where corporate social responsibility is rapidly gaining ground, HRA reflects the extent to which organisation contributes to society's human capital by investing in its development.

Finally, in an era where performance is closely linked to rewards and, therefore, the performance of all groups/departments/functions needs to be quantified to the extent possible, HRA helps in measuring the performance of the HR function as such.

18.4 HISTORICAL DEVELOPMENT OF HRA

The traces of a rudimentary HRA can be found in the Medieval European practice of calculating the cost of keeping a prisoner versus the expected future earnings from him. The prisoners in those days were seen to be the general property of the capturing side. Consequently, after the victory a quick decision regarding whether to capture a prisoner or to kill him had to be taken based on the costs involved in keeping him and the benefits accruing from killing him. However, these represented very rough measurements with limited use. The development of HRA as a systematic and detailed academic activity, according to Eric G Falmholtz (1999) began in sixties. He divides the development into five stages. These are :

First stage (1960-66): This marks the beginning of academic interest in the area of HRA. However, the focus was primarily on deriving HRA concepts from other studies like the economic theory of capital, psychological theories of leadership- effectiveness, the emerging concepts of human resource as different from personnel or human relations; as well as the measurement of corporate goodwill.

Second stage (1966-71): The focus here was more on developing and validating different models for HRA. These models covered both costs and the monetary and non-monetary value of HR. The aim was to develop some tools that would help the organisations in assessing and managing their human resource/asset in a more realistic manner. One of the earliest studies here was that of Roger Hermanson, who as part of his Ph.D. studied the problem of measuring the value of human assets as an element of goodwill. Inspired by his work, a number of research projects were undertaken by the researchers to develop the concepts and methods of accounting for human resource.

Third Stage : (1971-76) This period was marked by a widespread interest in the field of HRA leading to a rapid growth of research in the area. The focus in most cases was on the issues of application of HRA in business organisations. R.G. Barry experiments contributed substantially during this stage. (R.G. Barry Corporation:1971)

Fourth Stage (1976-1980): This was a period of decline in the area of HRA primarily because the complex issues that needed to be explored required much deeper empirical research than was needed for the earlier simple models. The organisations, however, were not prepared to sponsor such research. They found the idea of HRA interesting but did not find much use in pumping in large sums or investing lot of time and energy in supporting the research.

Stage Five (1980 onwards) : There was a sudden renewal of interest in the field of HRA partly because most of the developed economies had shifted from manufacturing to service economies and realized the criticality of human asset for their organisations. Since the survival, growth and profits of the organisations were perceived to be dependent more on the intellectual assets of the companies than on the physical assets, the need was felt to have more accurate measures for HR costs, investments and value.

An important outcome of this renewed interest was that unlike the previous decades, when the interests were mainly academic with some practical applications, from mid 90s the focus has been on greater application of HRA to business management. Different types of models to suit the specific requirements of the organisations have been developed incorporating both the tangible and the intangible aspects. Also, larger number of organisations actually began to use HRA as part of their managerial and financial accounting practice.

Today, human and intellectual capital are perceived to be the strategic resources and therefore, clear estimation of their value has gained significant importance. The increased pressures for corporate governance and the corporate code of conduct demanding transparency in accounting have further supported the need for developing methods of measuring human value.

In India, human resource valuation has not yet been institutionalized though, as mentioned above, many public as well as private have adopted HRA.

18.5 INFORMATION MANAGEMENT IN HRA

Like any accounting exercise, the HRA too depends heavily on the availability of relevant and accurate information. HRA is essentially a tool to facilitate better planning and decision making based on the information regarding **actual** HR costs and organisational returns. The kind of data that needs to be managed systematically depends upon the purpose for which the HRA is being used by an organisation.

For example, if the purpose is to *control the personnel costs*, a system of standard costs for personnel recruitment, selection and training has to be developed. It helps in analyzing projected and actual costs of manpower and thereby, in taking remedial action, wherever necessary.

Information on *turnover costs* generates awareness regarding the actual cost of turnover and highlights the need for efforts by the management towards retention of manpower.

Accountability in the management process is often enhanced when information involving an *evaluation of managerial effectiveness* is generated.

Finally, information on the intangibles like intellectual capital/human capital becomes necessary to measure the true worth of the organisation. This information, though unaudited, needs to be communicated to the board and the stockholders.

18.6 MEASUREMENTS IN HRA

The biggest challenge in HRA is that of assigning monetary values to different dimensions of HR costs, investments and the worth of employees. The two main approaches usually employed for this are:

1. The **cost approach** which involves methods based on the costs incurred by the company, with regard to an employee.
2. The **economic value approach** which includes methods based on the economic value of the human resources and their contribution to the company's gains. This approach looks at human resources as assets and tries to identify the stream of benefits flowing from the asset.

18.7 THE COST APPROACH

Cost is a sacrifice incurred to obtain some anticipated benefit or service. All costs have two portions, viz., the expense and the asset portions. The expense portion is that which provides benefits during the current accounting period (usually the current financial year), whereas the asset portion is that which is expected to give rise to benefits in the future. Arriving at a clear distinction between the two, however, remains an accounting problem even today (Flamholtz, 1999).

Two types of costs are of special importance in HRA. These are original or historical cost, and replacement cost. The **historical cost** of human resources is the sacrifice that was made to acquire and develop the resource. These include the costs of recruiting, selection, hiring, placement, orientation, and on the job training. While some of the costs like salaries, for instance, are direct costs, other costs like the time spent by the supervisors during induction and training, are indirect costs.

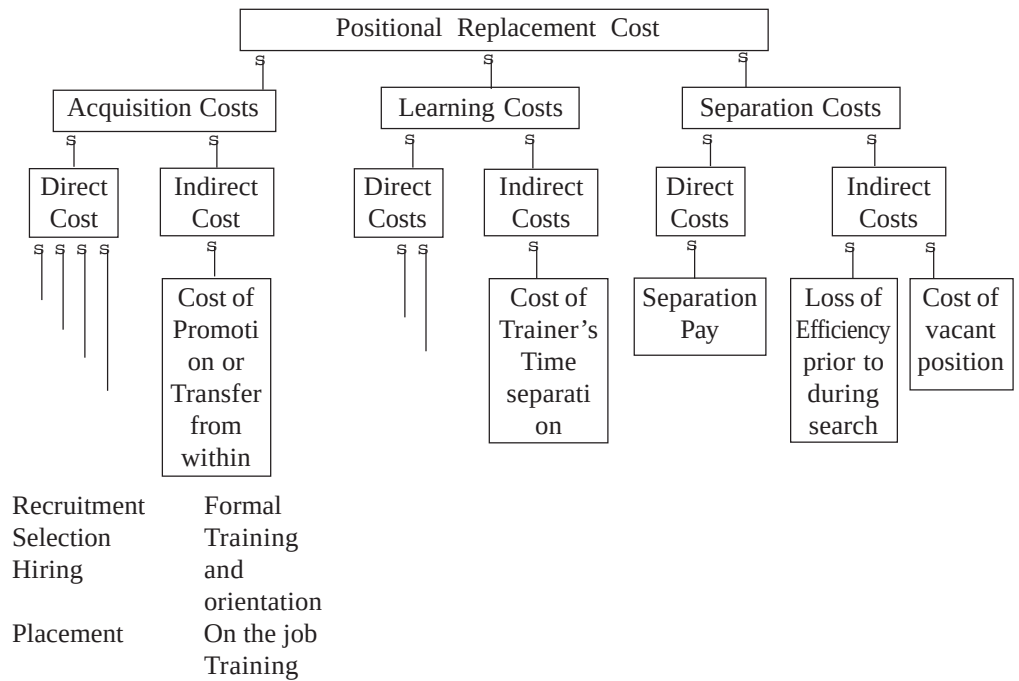
Sometimes, **opportunity cost** method, that is, a calculation of what would have been the returns if the money spent on HR was spent on something else, is also used. However, this method is seen to be not as objective as desired. Hence its use is restricted to internal reporting and not external reporting.

The **replacement cost** of human resources is the cost that would have to be incurred if present employees are to be replaced. For instance, if an employee were to leave today, several costs of recruiting, selection, hiring, placement, orientation, and on the job training would have to be incurred in order to replace him. Such costs have two dimensions- *positional replacement costs* or the costs incurred to replace the services rendered by an employee only to a particular position; and *personal replacement cost* or the cost incurred to replace all the services expected to be rendered by the employee at the various positions that he might have occupied during his work life in the organisation.

Though replacement cost method can be adapted for determining the cost of replacement of groups, this method is used essentially to determine the replacement cost of individuals.

Other cost based methods that may be used are the **standard cost method and the competitive bidding method**. In the *standard cost method*, the standard costs associated with the recruitment, hiring, training and developing per grade of employees are determined annually. The total costs for all the personnel signify the worth of the human resources.

The Cost Approach



18.8 THE ECONOMIC VALUE APPROACH

The value of an object, in economic terms, is the present value of the services that it is expected to render in future. Similarly, the economic value of human resources is the present worth of the services that they are likely to render in future. This may be the value of individuals, groups or the total human organisation. The methods for calculating the economic value of individuals may be classified into monetary and non-monetary methods.

Monetary Measures for assessing Individual Value

a) Flamholtz's model of determinants of Individual Value to Formal Organisations

According to Flamholtz, the **value of an individual** is the present worth of the services that he is likely to render to the organisation in future. As an individual moves from one position to another, at the same level or at different levels, the profile of the services provided by him is likely to change. The present cumulative value of all the possible services that may be rendered by him during his/her association with the organisation, is the value of the individual.

Typically, this value is uncertain and has two dimensions. The first is the **expected conditional value** of the individual. This is the amount that the organisation could potentially realize from the services of an individual during his/her productive service life in the organization. It is composed of three factors:

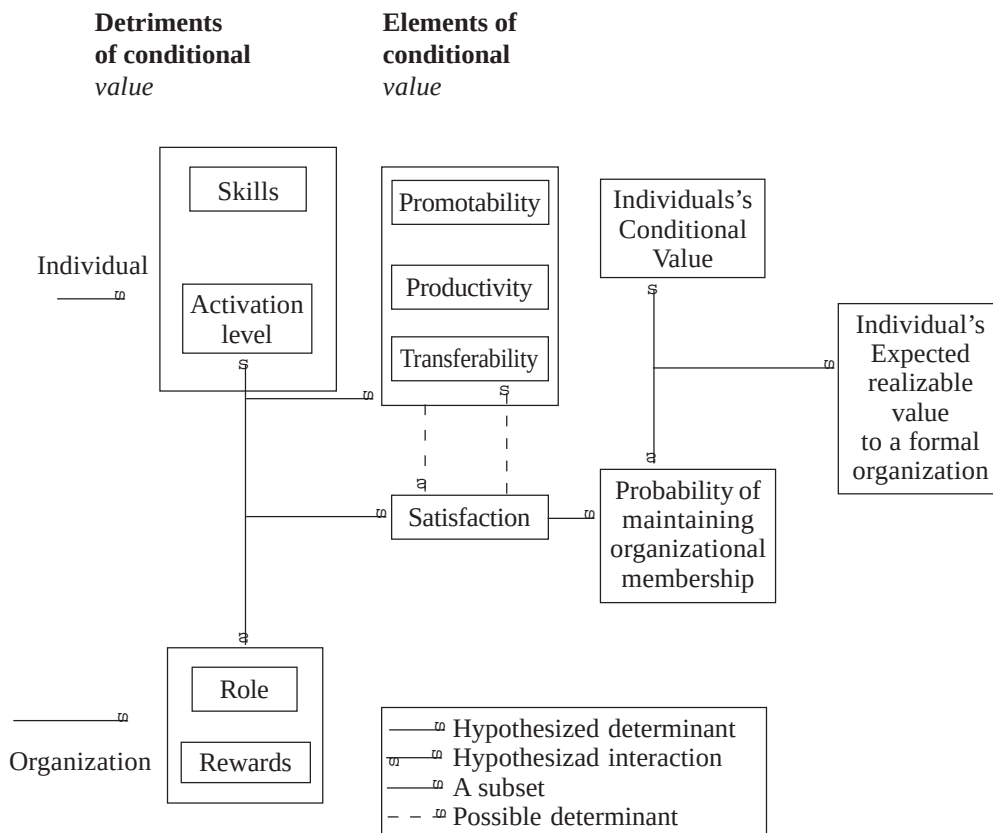
- 1 *productivity* or performance (set of services that an individual is expected to provide in his/her present position);
- 1 *transferability* (set of services that he/she is expected to provide if and when he/she is in different positions at the same level);
- 1 *promotability* (set of services that are expected when the individual is in higher level positions).

These three factors depend, to a great extent, on *individual determinants* like activation level of the individual (his motivation and energy level) and *organizational determinants* like opportunity to use these skills or roles and the reward system.

The second dimension of an individual value is the **expected realizable value**, which is a function of the expected conditional value, and the *probability that the individual will remain* in the organisation for the duration of his/her productive service life. Since individuals are not owned by the organisation and are free to leave, ascertaining the probability of their turnover becomes important.

The interaction between the individual and organizational determinants mentioned above, leads to *job satisfaction*. The higher is the level of job satisfaction, the lower is the probability of employee turnover. Therefore, higher is the expected realizable value.

Flamholtz's Model



b) Flamholtz's Stochastic Rewards Valuation Model

The movement or progress of people through organizational 'states' or roles is called a **stochastic process**. The Stochastic Rewards Model is a direct way of measuring a person's expected conditional value and expected realizable value. It is based on the assumption that an individual generates value as he occupies and moves along organizational roles, and renders service to the organisation. It presupposes that a person will move from one state in the organisation, to another, during a specified period of time. In this model, exit is also considered to be a state. Use of this model necessitates the following information:

1. The set of mutually exclusive states that an individual may occupy in the system during his/her career;
2. The value of each state, to the organisation;
3. Estimates of a person's expected tenure in the organisation
4. The probability that in future, the person will occupy each state for the specified time.
5. The discount rate to be applied to the future cash flows.

A person's expected conditional value and expected realizable value will be equal, if the person is certain to remain in the organisation, in the predetermined set of states, throughout his expected service life.

The main drawback of this model, however, is the extent of information required to make the necessary estimates of the values of the service states, the expected tenure, and the probability that the individual will occupy the state for the specified period of time. However, if this information can be made available, this model emerges as one of the most sophisticated models for determining the value of individuals.

c) The Lev and Schwartz Model

As mentioned earlier, the Lev and Schwartz model is the basic model employed by Indian organisations (see Table 1. and 2). According to 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

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

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

The basic theme of Lev, Schwartz model is to compute the present value of the future direct and indirect *payments* to their employees as a measure of their human resource value. While doing so, the common assumptions set by the Indian companies are *the pattern of employee compensation, normal career growth, and weightage for efficiency*. Moreover, companies adapt this model to their practical requirements by making necessary alterations. For instance, different organisations use different discount rates for ascertaining the present value of future cash flows.

This method of accounting is basically oriented towards measuring changes in the employees' value rather than employers' gains from the employees. Unless the employees' payments are directly linked to employee productivity or the company performance, the changes in the value of employees will not reflect the changes in the employees' contribution. As pointed out by Prabhakara Rao (1993) under the Lev, Schwartz model, the value of human resources will be more or less increasing, even if the organisations continuously incur losses/decrease in profitability. The attitude and morale of the employees, the contribution of the employees to the organisation, and such other factors are out of the purview of the Lev, Schwartz model.

Table 1: Lev and Schwartz Model

	SAIL		BHEL		MMTC	
Years	Number	Value	Number	Value	Number	Value
1984-85	74464	1216	206414	9581	3638	96
1985-86	75915	1358	206198	9589	3760	121
1986-87	74918	1588	203292	10828	3830	140
1987-88	74813	1827	197296	12013	3862	158
1988-89	75116	2183	194872	12725	3825	174
1989-90	74436	2673	193223	15790	3825	196

Note : Adapted from Prabhakar Rao (1993)

Table 2: NTPC's Human Resource Value,'94-95 (discount factor of 0.12)

<i>Category</i>	<i>No. of employees</i>	<i>Per Capita (Rs. lakhs)</i>	<i>Total Value (Rs Crores)</i>
executives	6841	17.76	1215
supervisors	3010	15.11	455
workmen	12445	13.71	1705
Total	22296	15.14	3375

Source: Annual Report.

d) Hekimian and Jones Competitive Bidding Model

In this method, an internal market for labour is developed and the value of the employees is determined by the managers. Managers bid against each other for human resources already available within the organisation. The highest bidder 'wins' the resource. There is no criteria on which the bids are based. Rather, the managers rely only on their judgement.

18.9 NON-MONETARY METHODS FOR DETERMINING VALUE

The non-monetary methods for assessing the economic value of human resources also measure the Human Resource but not in dollar or money terms. Rather they rely on various indices or ratings and rankings. These methods may be used as surrogates of monetary methods and also have a predictive value. The non-monetary methods may refer to a simple inventory of skills and capabilities of people within an organization or to the application of some behavioral measurement technique to assess the benefits gained from the Human resource of an organisation.

1. The *skills or capability inventory* is a simple listing of the education, knowledge, experience and skills of the firm's human resources.
2. *Performance evaluation* measures used in HRA include ratings, and rankings. *Ratings* reflect a person's performance in relation to a set of scales. They are scores assigned to characteristics possessed by the individual. These characteristics include skills, judgment, knowledge, interpersonal skills, intelligence etc. *Ranking* is an ordinal form of rating in which the superiors rank their subordinates on one or more dimensions, mentioned above.
3. *Assessment of potential* determines a person's capacity for promotion and development. It usually employs a *trait approach* in which the traits essential for a position are identified. The extent to which the person possesses these traits is then assessed.
4. *Attitude measurements* are used to assess employees' attitudes towards their job, pay, working conditions, etc., in order to determine their job satisfaction and dissatisfaction.

18.10 MEASUREMENTS OF GROUP VALUE

a) The Likert and Bowers Model:

Causal, intervening and end-result variables. Likert and Bowers propose causal, intervening, and end-result variables, which determine the group's value to an organization. Causal variables are those which can be controlled by the organization. These variables include managerial behaviour and organisational structure.

Intervening variables reflect organizational capabilities and involve group processes, peer leadership, organization climate, and the subordinates' satisfaction. Both, the causal and the intervening variables determine the end result variables of the

organization. Figure 1 illustrates the elements used to measure human organisational causal and intervening variables.

The end-result, dependent variables reflect the achievements of the organization or the total productive efficiency in terms of sales, costs, earnings, market performance, etc. They are dependent on the causal and the intervening variables.

Figure 1: Elements used to measure human resource organisational causal and intervening variables.

MANAGERIAL AND PEER LEADERSHIP	
Support	Friendly; pays attention to what you are saying;
Team Building	Listens to subordinates' problems; encourages subordinates to work as a team' encourages exchange of opinions and ideas
Goal Emphasis	Encourages best efforts; maintains high standards.
Help with work	Shows ways to do a better job; helps subordinates plan, organize and schedule; offers new ideas, and solutions
ORGANISATIONAL CLIMATE	
Communication flow	Communication flow is amicable
Decision making practices	Subordinates know what is going on; superiors are receptive.
Concern for persons	Subordinates are involved in setting goals; decisions are made at levels of accurate information; persons affected by decisions are asked for their ideas; know-how of people of all levels is used.
Influence on department	The organization is interested in individual's welfare; tries to improve working conditions; organizes work activities sensibly.
Technological adequacy	From lower level supervisors, employees who have no subordinates.
Motivation	Improved methods are quickly adopted; equipment and resources are well managed. Differences and disagreements are accepted and worked through; people in organization work hard for money, promotions, job satisfaction and to meet high money, promotion, job satisfaction and to meet high expectations from others and are encouraged to do so by policies, working conditions, and people.
GROUP PROCESS	
1	Planning together, coordinating efforts.
1	Making good decision's solving problems
1	Knowing jobs and how to do them well
1	Sharing information
1	Wanting to meet objectives
1	Having confidence and trust in other members
1	Ability to meet unusual work demands.
SATISFACTION	
With fellow workers; superiors; jobs; this organization compared with others; pay; progress in the organization upto now; chances for getting ahead in the future.	

Source: Rensis Likert and David G. Bowers, "Improving the Accuracy of P/L Reports by Estimating the Change in Dollar Value of the Human Organization", Michigan Business Review, March 1973.

b) Brummet, Flamholtz, and Pyle's economic value model

The Brummet, Flamholtz, and Pyle model follows the principle that a resource's value is equal to the present worth of the *future services* it can be expected to provide, and therefore it can provide a basis of measuring the value of a group of people.

According to this method, groups of human resources should be valued by estimating their contribution to the total economic value of the firm. Thus a firm's forecasted future earnings are discounted to determine the firm's present value, and a portion of these earnings is allocated to human resources according to their contribution.

c) Hermanson's unpurchased goodwill model

According to Hermanson, the unpurchased goodwill notion is based on the premise that 'the best available evidence of the present existence of un-owned resources is the fact that a given firm earned a higher than normal rate of income for the most recent year. Here Hermanson is proposing that supernormal earnings are an indication of resources not shown on the balance sheet, such as human assets. Even though his method of valuing human resources is explicitly intended for use in a company's published financial statements rather than for internal consumption, this would necessarily involve forecasting future earnings and allocating any excess above normal expected earnings to human resources of the organization. However, the assumptions would be subject to the uncertainties involved in any forecast of future events.

This method suffers from several limitations: Firstly, since the method limits recognition of human resources to the amount of earnings in excess of normal, the human resource base that is required to carry out normal operations is totally ignored. As a result, the value of human assets will be an underestimation. Secondly, the method only uses the actual earnings of the most recent year as the basis for calculating human assets, thereby, ignoring the forecasts of future earnings that are equally relevant for managerial decision making.

d) Human organizational dimensions method

Based on the Likert-Bowers model of group's value to an organization, discussed earlier, this method is based on the relationship among causal, intervening and end-result variables. The causal variables influence the intervening variables, which, in turn, determine the organization's end result variables. Hence changes in the key dimensions of organisation can be used as dependable indicators for forecasting future changes in productivity and financial performance. Monetary estimations of changes in human value of organisations.

For computing a monetary estimate of the expected change in the value of human organization, the following steps are suggested:

1. Measure the key dimensions of human organization, using a Likert scale at specified time periods. These are in non-monetary measurements.
2. The scaled responses to questionnaire items called 'scores' are then standardized by statistical methods to take into account the degree of variability of the set of responses. This is done for responses in each time period.
3. The difference between two standardized scores from one period to the next is then calculated. This difference (called delta) represents the change in an index of specified dimensions of the human organization.
4. From present changes in dimensions of the human organization, the expected future change in end result variables is estimated. Specifically, for a given variable the delta is multiplied by coefficient or correlation between that variable

and the end result variable. This provides an estimate in standard scores of the anticipated change in the end result variable attributable to a change in the human organisational dimension believed to cause that change.

5. Lastly, the standard scores are converted into the measuring monetary units for the end result variables.

Likert points out that changes in the productive capability of a firm's human organization cannot be assessed correctly unless periodic measurements of causal and intervening dimensions of that organization are taken regularly. Current profit and loss reports often encourage us to believe that changes are occurring. When profits increase, it is often assumed that the human organization has become more productive, but steps taken to maintain earnings or prevent losses may actually result in a decrease in the productive capability of the human organization.

There is some controversy about the validity and reliability of this method. According to Flamholtz, future research on this method is necessary because its validity and feasibility have not yet been established. Likert, however, maintains that the method is feasible where reliable and valid measurements of the coefficients are available.

e) Methods for valuation of expense centre groups

Flamholtz proposes three methods for valuation of expense centre groups. In all these measures, the surrogate value is used for estimation. The three methods are:

1. Capitalization of Compensation
2. Replacement Cost Valuation, and
3. Original Cost Valuation

Capitalization

The capitalisation method involves capitalizing a person's salary and using it as a surrogate measure of human value. This value may be ascertained for groups as well as individuals. The value of the group is essentially the aggregate value of the individuals comprising the group.

Capitalization of compensation method is not considered an ideal method of group valuation because it ignores the possible effects of synergy. However, this method may be used to arrive at an approximation of a group's value to the firm.

Replacement cost valuation

The replacement cost of a group is defined as the sacrifice that would have to be incurred today to recruit, select, hire, train and develop a substitute group capable of providing a set of services equivalent to that of a group presently employed.

This method involves considerable subjective estimates, which reduce its validity and replicability.

Original cost valuation

The original cost valuation method involves estimation of the original cost of recruiting, selecting, hiring, training, and developing a firm's existing human organization. The need for using original costs to value groups arises out of the necessity of estimating the cost of developing an effectively functioning team. Teamwork is essential for effective communication, decision-making, coordination and several other critical organisational processes. Yet, when the original costs are used to make an estimation of the value of the expense centre, the costs of generating this teamwork are largely ignored.

Activity A

Identify an actual organisation for which human resource accounting may be appropriate:

- a) How would you determine if human resource accounting is appropriate for this organisation?

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- b) What kind of information is this organisation likely to require about its human resources?

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- c) Outline how you would plan to obtain the information.

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Activity B

Identify an organisation and make an attempt to work out the human resource costs of.

- a) Recruitment and selection
- b) Training for a period of one year.

Compare the cost figures worked out by you independently with the accounting figures maintained by the organisation. Analyse the differences and comment.

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18.11 SUMMARY

During the past decade, the concept of HRA has been tuned to the requirements of a knowledge economy by focusing on such intangible assets as intellectual capital, relationship capital, etc. Various tools for this purpose have been developed, some of them being Skandia Navigator, HR Balance Score Card, Knowledge Capital Earnings, Economic Value Added, Intellectual Asset Valuation, Knowledge Audit Cycle etc. (For a comprehensive summary see Karl-Erik Sveiby, 2004).

Whatever the tool or approach to HRA, much of the potential for developing human resource accounting capability and gaining its advantage depends upon the availability of and accessibility to the required data. In those organisations, where the data is not readily available or routinely maintained, the first step towards HRA will have to be HRIS.

18.12 SELF-ASSESSMENT QUESTIONS

1. What is human resource accounting? Discuss with reference to a few definitions of human resource accounting.
2. What is human resource cost? Discuss the measurement of human resource cost.
- 3) What are the major components of the original cost of human resources?

18.13 FURTHER READINGS

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