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**ABSTRACT**

Over the past four centuries, the concept of measuring and reporting on human resources (HR) has evolved. Accountants have discussed economic theory and human resource accounting (HRA). The most valuable asset for a business is its human capital, yet there are no official guidelines on identifying, assessing, and disclosing it in financial reports. Academic researchers have demonstrated that financial statements do not adequately address human resources. One of the causes of this is that there are several methods for calculating the worth of human resources. Hence, it's crucial to assess the measurement of human resources before determining the appropriate amount of acknowledgement in the financial report. This study critically reviews the various methods/models of Human Resource Accounting. According to the type of measurement, the valuation methods were classified, and each method's advantages and disadvantages were examined. This study used literature in the form of secondary data such as documents, journal articles, and a thesis.

**Key Words: Human Resource Accounting, Human Capital, Human Resource Valuation(HRV), Net Present Value.**

**INTRODUCTION**

The workforce is one of a company's most important resources. Machines cannot replace their skills, creativity and ability. Without human input, no machine will develop a novel concept; thus, companies must learn to cherish and recognize their employees. Human Resource Accounting is a fruitful endeavour to identify an organization's investment in its human resources. It is the procedure of acquiring and disseminating information on human resources to interested parties. The main advantages of such accounting are that it promotes effective managerial decision-making and management quality, eliminates human resource misuse, increases human asset productivity, and enhances morale, job satisfaction, performance appraisal, motivation, creativity, etc. Accounting for people as organizational resources is referred to as human resource accounting. It quantifies the Cost and value of people to organizations. It entails calculating the expenditures expended by private and public sector companies in locating and selecting, hiring, training, and developing employees and estimating their economic value to the business.

The most significant, sensitive, and crucial factor that is used as input for production is human resources (HR). Due to the abundance of excess and disorganized labour and the comparatively low Cost, this aspect was previously disregarded for accounting purposes. However, the value of human resources became apparent during the opening of the Indian economy (in 1991). The importance of human resource accounting (HRA) is now recognized by public sector organizations that have made trailblazing efforts by disclosing human resource values in their published annual reports, even though professional accounting bodies like ICAI, ICSI, and ICMAI have only shown a modest amount of interest in HRA in India. The HR values are similarly disclosed in the financial statements of other private businesses.

### **RATIONAL BEHIND THE STUDY**

Human Resources are regarded as the most precious resources in a business, and the organization's success depends on their proper utilization. Humans are vital resources for sustaining the enterprise, but unfortunately, official and binding rules regarding HR across all sectors in annual financial reporting have not existed. There was no standardized model of Human Resource Accounting that organizations could use. There is only a handful of companies in India that use HRA procedures. Most of them used the Lev and Schwartz approach to determine the worth of human resources. The main objective of this study is to: -

- Critically assess the various valuation methods/models of Human Resource Accounting to unveil their strengths and weaknesses.

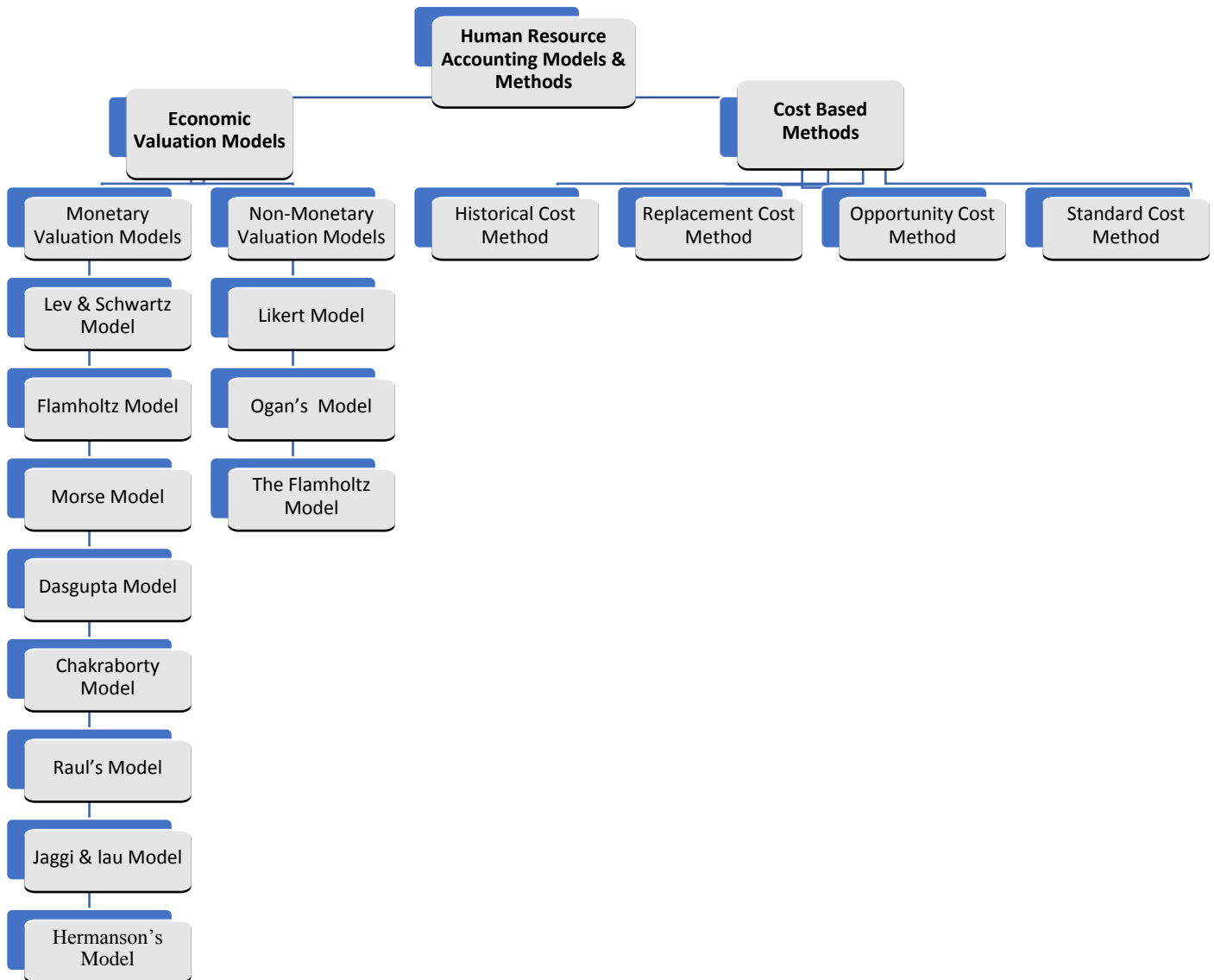
### **OVERVIEW OF LITERATURE**

Human capital is a concept that has been around for a while. Its beginnings can be traced back to the late seventeenth century, when Sir William Petty, an economist, initially attempted to calculate the monetary value of England's population in 1681. He emphasized that labour should be taken into account when estimating the overall national wealth because he saw labour as the father of wealth. Paton deserves respect for realising in 1962 the importance of human resources as an asset. Instead of a stock of goods, he asserted that a company's most important asset might be its well-organized, loyal personnel. The term "human resource," which has now taken the place of "human asset," was first used by social psychologist Likert (1967), of the Institute for Social Research at the University of Michigan. Thus, he created it in the beginning. The value of human resources has been measured using a variety of methods. The original cost model put forth by Brummet et al. (1968) advocated capitalising the business's investment in recruiting, selecting, training, and developing human resources, depreciating such costs over time, and then disclosing the net investment in human resources under the heading of human assets in the balance sheet. The remaining unamortized costs will be written off against profit and loss in the relevant "year" if an employee leaves the company before the anticipated length of service; if the service period exceeds the anticipated time, the cost amortisation is rescheduled. This procedure was employed by the American R.G. Barry Corporation between 1968 and 1974, and the results were made available to the public. The replacement cost method was created by Rensis Likert and Eric G. Flamholtz. Human resources are valued at their present Cost in this approach. According to this methodology, an organisation's human resources should be assessed based on the anticipated cost of replacing the current workforce with new workers who have comparable skills and experience. David

Watson introduced Standard cost method in 1979. For the purpose of adopting the standard cost approach, the organization's whole workforce is separated into several groups according to job positions, and standard costs are fixed for each category of human resources to measure value. According to Opportunity Cost Approach by Hekimian and Jones' (1967), human assets will be valued when they are scarce. Thus, the value of human resources is determined based on the value of an individual employee in alternative use. An adjusted present value model was suggested by Hermanson (1964z) to estimate the worth of human capital in an organisation. He claimed that while human resources are an asset on the balance sheet, the amount of future salaries payable represented a liability. The Present Value of Future Earnings Model by Baruch Lev and Aba Schwartz (1971). The present value of an employee's projected future wages was used to calculate the economic value that underlies this idea. By combining the current value of anticipated future services provided by employees, Flamholtz (1971) created the Stochastic Rewards Valuation model and determined the worth of human assets. This model makes the assumption that a person contributes value to a company by working numerous occupations. An employee's expected conditional value and expected realisable value will be equal if he or she is guaranteed to remain with the company for the entirety of their anticipated service life in the intended positions. The Jaggi and Lau (1974) concept proposes that human resources should be valued as a whole rather than as individuals. According to this paradigm, a "group" is a homogeneous group of employees who may or may not be allocated to the same department. In his net benefit technique, Morse (1973) theorised that the value of human resources is equal to the present value of the gross value of services to be delivered by humans less the present value of future payments to humans. Morse's net benefit model was expanded upon by the "Certainty Equivalent Net Benefit Model," which was put forth by Ogan in 1976. The value of human resources is the assurance that the company will eventually turn a profit. Chakraborty presented the aggregate Payment Approach as a method of valuing human resources in 1976. The value of human resources is calculated by multiplying the average wage by the average tenure of work. Dasgupta (1978) also gives his whole cost theory to value human resources. Likert (1967), Flamholtz (1972), and Myer's and Flowers (1974) all put forth non-monetary methods for estimating the economic value of human resources. These methods, as opposed to utilising dollars or other monetary units, rate and rank the economic value of human resources using various criteria. A number of studies have occasionally been conducted.

### **MODELS FOR VALUATION OF HUMAN RESOURCES**

Numerous models and approaches for valuing human resources have been introduced by various psychologists and academics, but sadly, each one differs conceptually as well as in practise. Researchers have offered both economic value-based models and cost-based methodologies for valuing human resources. However, all human resource professionals agreed that human resources are a valuable resource for an organisation. The many concepts for human resource appraisal methodologies and models are as follows:



**COST BASED METHODS**

**i. Historical Cost Method**

**Brummet, Flamholtz, and Pyle** created the historical cost technique in 1968, which was first applied to accounting for human resources. They held that the total cost of acquiring and developing human resources dictated their value (**Brummet, Flamholtz & Pyle, 1968**). Using this method, hiring, training, and other acquisition costs for personnel are capitalised and deducted over the period of the employees' anticipated useful lives. The remaining unamortized costs will be written off against profit and loss in the relevant "year" if an employee leaves the company before the anticipated length of service; if the service period exceeds the anticipated time, the cost amortisation is rescheduled.

<b>Advantages</b>	<b>Limitations</b>
Using this method, just like with other assets, makes calculating human resource value simple.	This approach doesn't take into account the total cost of the potential human resource services.
It is easily and practically able to estimate the amount spent on human resources.	Finding the amortised worth of human resources can be challenging since it can be difficult to gauge the length of services during which benefits should accrue.
This is the sole technique that is utilised for both the valuation of human resources and the recording and presentation of data in the books of accounts and financial statements.	Predicting an asset's economic service life was equally challenging.

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**ii. Replacement Cost Method**

This method was developed by **Eric G. Flamholtz and Rensis Likert**. According to this model, human resources are valued at their current cost. According to this methodology, an organization's human resources should be evaluated based on the expected cost of finding new employees with comparable skills and experience to replace the current workforce. This method differs from the historical cost method for the reason that it takes into account both the extra expense or sacrifice that a company must make in order to find, hire, train, etc. a new employee to replace an existing employee as well as the exit cost of the departing employee. Because it is more practical than the historical cost approach, this method is more representative and logical.

This method considers the following cost

- Cost of separation and losses due to the leave the job.
- Cost of recruitment
- Cost of training and development of fresh employees to make same efficiency level.

Flamholtz divided the replacement cost in two parts (Sood, 2016);

- (1) Individual replacement cost
- (2) Positional replacement cost

**INDIVIDUAL REPLACEMENT COST: AT EVERY LEVEL OF THE ORGANISATION, INDIVIDUAL REPLACEMENT COST INVOLVES HIRING A NEW PERSON WITH THE SAME ABILITY, EXPERIENCE, EXPERTISE, EFFICIENCY, ETC. TO REPLACE THE OUTGOING EMPLOYEE.**

Positional Replacement Cost: The cost of transferring current position holders to new positions inside the organisation or outside of it. Positional replacement cost is the price of filling a different position inside an organisation, and this model is entirely individualised.

Advantages	Limitations
The method takes into account the shifting nature of the labour market, the overall rise in price level, as well as the current worth of the human resource for the business.	It's possible that some current assets will not have a comparable replacement.
This technique delivers more accurate value inflationary times by adjusting the human value of price swings in the economy.	Specific information on replacement cost must be collected from sources outside the organisation. Thus, it is anticipated that compilation of financial reports will take longer and cost more money.

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### iii. Standard Cost Method

**David Watson** makes this suggestion (1979). For all Human Resource Costs under this system, there are established standards. To adopt the standard cost approach, the organization's workforce is separated into several groups according to job positions. Standard costs are fixed for each category of human resources to measure value. This approach establishes annual fixed standards for all staff costs, including hiring, choosing, training, and development for each grade. These fixed standard costs are used to determine the worth of human resources and for accounting purposes. The standard costs of each group are compared to the actual costs using this method, which is typically used to regulate human resource expenditures.

Finding the difference between the standard cost and real costs is done using the variance analysis technique. Each group of employees is valued according to a standard cost that is predetermined. Although being simple, this strategy ignores changes in employees who are part of the same group. These adjustments may also be rather important in many instances.

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Advantages	Limitations
In order to compare standard costs of each group to real costs and subsequently control variation, this strategy is typically used for controlling human resource expenses.	Standard costs calculated the worth of employees and compared it to real performance; yet, skill, efficiency, and productivity of an employee's performance cannot be accurately and properly predicted.

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**iv. Opportunities Cost Method**

**Heckiman and Jones** first propounded this approach. Market Value Technique is another name for this. The value of an asset when there are alternative employment options is known as opportunity cost. For workers who are not in demand, this strategy has no opportunity cost. Hence, the value of human resources should only include scarce people. The opportunities cost method is the value of the HR based on computing bidding method prices. This means that the bids (offers) made by other departments for a particular person or group of employees in a department are taken into account when calculating their opportunity cost. Thus, the value of human resources is determined based on the value of an individual employee in alternative use. Only when they are in high demand can human resources have value. In one section, it can be employed, but not in another. For the hard-to-find workers they need to hire, the managers of investment centres will put up bids. These "Scarce" employees are only those who have received a job application from the management of an investment centre and are drawn entirely from within the organisation.

<b>Advantages</b>	<b>Limitations</b>
The opportunity cost method to bidding enables more efficient staff allocation and establishes the mathematical framework for organising, assessing, and growing the company's human resources.	By limiting it to the subsequent best use of personnel inside the same firm, the technique has narrowed down the idea of opportunity cost.
Since management has access to both financial records and personnel records when determining bid prices, the ability of the financial records to serve as a lead indicator is improved. As a result, the bid prices might include a lot more detailed information about output.	The major flaw in this strategy is that it ignores hiring non-scarce workers. Additionally, a person who only has expertise with one type of labour and lacks the knowledge of other sorts of job may not be paid.

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### ECONOMIC VALUE/ PRESENT VALUE METHOD

This approach calculates the economic value of people according to estimates from numerous specialists based on the present value of future services that employees will render. Many HR specialists create a variety of economic models to determine present value.

### MONETARY VALUATION MODELS

This system determines a company's human resource worth in accordance with their current value to the organisation. A variety of evaluation models are developed to determine the current worth.

#### (I) Hermanson's Model

This method of Human Resource valuation was developed by **Roger H. Hermanson in 1964** (Hermanson, 1964). He has divided Human Resource Value in to parts one

1. Unpurchased goodwill models
2. Adjusted discounted of future wages models

#### Hermanson's Unpurchased Goodwill Model:

**Roger H. Hermanson** claims that capitalising earnings above the average earnings for the industry or group of companies the firm belongs to allows one to determine the value of a company's human resources. This strategy's application is constrained for the following reasons:

- (i) it is historically based, making it ineffective as a predictor;
- (ii) even if it were based on projected earning rates, it would be no better than the predicted earnings themselves.

#### Adjusted discounted of future wages models

The present value of future earnings and salaries due to employees is calculated or discovered using the adjusted discounted future wages approach. Future salaries and payments must be adjusted at the discount rate while taking the efficiency ratio into account in order to determine the present value. The efficiency ratio is based on the company's historical earnings.

Using this method, the present value of future profits due over the following five years are discounted at the adjusted rate of return to assess the value of the organisation's human resources. The adjusted rate of return, which is the weighted average of the ratio of the specified organisation's return on investment to all other organisations in the economy for a given period—typically five years—i.e., the current year and the four years prior—indicates the average rate of return on owned assets of all organisations in the economy multiplied by the efficiency ratio.

The weight assigned to the current year is the greatest, at 5, while the weights assigned to the previous years are 4, 3, and 2.

The efficiency ratio is calculated as follows:  $[5(RF_0/RE_0) + 4(RF_1/RE_1) + 3(RF_2/RE_2) + 2(RF_3/RE_3) + (RF_4/RE_4)]$  15

Where:

RF<sub>0</sub>= the organisation's current-year accounting income rate on owned assets.

RE<sub>0</sub>= the overall economy's average accounting income-on-owned-assets rate for the current year.

RF<sub>4</sub> = the company's fourth-previous-year accounting income rate on owned assets.

RE<sub>4</sub> = the fourth preceding year's average accounting income on owned assets for all businesses in the economy.

If the ratio is larger than 1, the average rate of return for an organisation will be higher than the



average rate for all organisations in the economy. If the ratio is less than 1, the average rate of return for an organisation will be lower than the average rate for all organisations in the economy.

The steps to determine the worth of the human assets are as follows.

1. Estimate potential earnings and compensation payments for the subsequent five years.
2. Calculate the present value of the projected wage and salary payments using a discount factor equal to the typical rate of return in the economy.
3. Based on the performance of the past five years, calculate the average efficiency ratio.

$$\text{Efficiency Ratio} = \frac{\text{ROI of the Firm (weighted average of previous 5 years)}}{\text{ROI of Industry (weighted average of previous 5 years)}}$$

4. multiply the average efficiency ratio to the present value of the future wage and salary payments. The resulting number is an assessment of the human resources' present value.

The following are some reasons why the approach has drawn criticism:

1. There is subjectivity in the efficiency ratio.
- 2) The ratio's weighting system is completely arbitrary and lacks any theoretical or empirical support.
- 3) The five-year valuation period likewise lacks support.

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## **(II) Lev and Schwartz's Present Value of Future Earnings Model**

In 1971, **Baruch Lev and Aba Schwartz** proposed this concept. This concept is based on economic value, which is computed using the present value of employees' potential future earnings.

They argued that the employees' projected earnings were sufficient for valuing human resources. "The worth of human capital embodied in a person of age T is the present value of his remaining future earnings from employment," claim Lev and Schwartz.

Value of Human Resource is calculating as follows steps:-

- Based on their experience and age, employees should be divided into several groups.
- Calculate the average yearly salaries of the workforce.
- Based on typical earnings, calculate the total compensation of the workforce until retirement.
- Discounted the total earnings and find out the value, this computed value is called value of Human Resources.

According to this model the value of human resource is obtained with the help of following formula:

$$V_r = \sum_{t=T}^T \frac{I(t)}{(I+R)^{t-R}}$$

Where;

$V_r$  = the value of individual  $r$  years old

$I(t)$  = the individuals annual earning up to the retirement

$t$  = retirement age

$r$  = discount rate specific to the cost of capital to the company

This model is prevalent and has been adopted widely by Indian companies like BHEL, SAIL, ONGC, HPCL, KRL, MMTC, OIL etc.

Advantages	Limitations
A new set of ratios can be created using the derivations of an organization's human capital value. The ratio of human capital value to non-human capital value reveals how labour-intensive a system is. Yet, a ratio of human to non-human assets will not be very significant because in accounting, the reported value of non-human assets is not based on the earning profile of those assets	This model makes no recommendations for recording the value of human resources in books of accounts.
Information regarding changes in the composition of the labour force is provided by the model. One can tell if an organization is ageing or if a company with a younger workforce based on the rate of growth in human capital.	This model bases the value of human resources on wages and salaries, but the worth of those resources is not constrained to the amount of money spent on them.
The approach is an improvement over Hermanson's arbitrary selection of a 5-year valuation period.	It disregards the likelihood that individuals may change roles throughout their careers. For instance, an assistant manager won't hold the same role throughout the duration of his anticipated employment with a company.

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**iii. Flamholtz Valuation Model**

**Eric J. Flamholtz** proposed a reward valuation model in 1971. Individuals Expected Realize Value and Stochastic Rewards Valuation Models are some names for this approach. A person's progression through organizational jobs throughout their career is referred to as a stochastic process. The conditional value and anticipated realizable value of an individual are directly measured by this model. This model makes the assumption that a person adds value to an organization as he performs various jobs. If an employee is assured to stay with the organization for the duration of his anticipated service life in the planned roles, his expected conditional value and expected realizable value will be similar.

For this, the model recommends a five-step process.

- a) Deciding how long a person will be expected to work for the business.
- b) The identification of potential service states (i.e., positions or roles) that the employee might hold throughout his or her service career, which may include the prospect of the person quitting the company.
- c) Evaluation of the expected duration for which a person will hold each future position or job within the business.
- d) Evaluation of the value added to the company by a person holding a specific role.
- e) The company assesses the total value of the services rendered to it by distinct individuals or groups of employees. The worth of human resources is discounted at a predetermined rate to ascertain their present value.

According to theory, the Flamholtz model is the most scientific model since it offers a human resource-focused economic value. However, its practical application is particularly challenging since it is difficult to get accurate information on the worth of a service state, a person's anticipated tenure, and the likelihood that different service states would be occupied at particular periods. This model contends that the most accurate measure of a person's organisational worth is their expected realisable value. The foundation of expected realisable value is the notion that there is no direct relationship between a person's cost to the business and his value at a certain point in time. It is possible to estimate a person's value to an organisation by calculating the present value of a set of projected future services they will provide while still employed there.

<b>Advantages</b>	<b>Limitations</b>
This model outperforms the Lev and Schwartz model because it accounts for the likelihood that an individual may change careers and leave the company before retiring or passing away.	When Flamholtz's model is put through its paces, it is shown to lack practical relevance because probabilities must be established for each employee for each of the "n" times they work, as well as for each individual occupying each of the different service states.
This model focuses on determining how valuable a person is to a particular business.	Using this model to take future compensation that Human Resources will receive in each state of service and adjust it for their likelihood of movement is quite challenging.
It is a composite model including variables that are both monetary and non-monetary.	This paradigm disregards the possibility that group members have greater value to the organisation than do individuals who depend on one another when working.

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**iv. Net Benefits Model**

This model is also known as the Morse model because it was proposed by **Morse** in 1997. According to Morse, an organisation's value for its human resources is equal to the present value of all potential future services given by its people. (Morse, 1997).

Formulas can be used to determine the worth of human resources (Shah, 2010).

- Calculated gross value of services to be rendered by personnel, both singly and in teams.
- The value of upcoming payments to human resources is calculated.
- Calculate the difference between the value of upcoming services and the cost of such services.
- Discounted the human resource's gross value to determine its value.

**Net Present Value = Gross Value\* × Discounted Rate \*Gross Present Value = Future Services of an employee in the future – Future Payment**

**v. Jaggi and Lau Model**

According to this model, human resources should be valued collectively rather than individually. In this paradigm, the term "group" refers to a homogeneous collection of workers who might not all be assigned to the same department. Although it may be challenging to estimate an individual's future time of service and possibilities of promotion, it is simpler to determine these factors on a group level and identify individuals who are most likely to quit the company during each upcoming period. In addition, this model makes the assumption that the movement pattern will probably not change over time and that the probabilities calculated for one period can be extrapolated to subsequent periods.

**An organisation's human resources are calculated as follows:**

$$TV = (N) r^n (T)^n (V)$$

Where, TV is the current value of every employee across every rank.

N is the number of workers in each rank

n denotes the duration,

The discount rate is r. T is a probability symbol.

V stands for an employee's economic value.

By using a group of employees as the foundation, this approach seeks to simplify the measurement of the value of human resources.

<b>Advantages</b>	<b>Limitations</b>
By using a homogeneous group of employees working in several departments rather than an individual basis to determine the value of human resources, Jaggi & Lau's model resolves the flaw in the Flamholtz stochastic model.	The Flamholtz model is meant to be used in partly for decision-making regarding individuals. The model created by Jaggi & Lau loses this characteristic.
The model's dependability is increased by the usage of homogeneous groups.	The degree of reliability that is likely to be attained is limited by the usage of transition matrices under the premise of internal and external stability.
An acceptable level of objectivity is ensured by creating the transition matrix using past personnel information.	The model is more complicated because it is a mathematical model. Calculation is difficult in practice, and it is also quite expensive.

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#### vi. Dasgupta Model

Professor N. Dasgupta proposed this method in 1978. The total Cost Concept is another name for this model (Dasgupta, 1978). He claimed that both working and unemployed individuals should be valued as human resources. The method should be such that it displays the human resource not only for a firm but also for the entire country when we produce the balance sheet of the country. According to Dasgupta, HRV should be displayed on both sides of the balance sheet's asset and liability columns according to the model. The worth of people should be shown first, followed by the value of the firm's investments, and then human assets should be shown after fixed assets. It should appear on the liabilities side following the capital as Human Assets Capital by the sum displayed on the asset side against the "worth of the individual" (Poudiuni, 2014).

#### vii. Raul's Model

Raul's concept for valuing human resources is more up-to-date and scientific. He has only briefly discussed every aspect of human resources. The use of this strategy is not given much weight by human resource professionals or businesses.

#### viii. Chakraborty Model

The first Indian to create a model for an enterprise's human resources was **Prof. S.K. Chakraborty**, who devised this strategy in 1976. The steps listed below are included in this method's assessment of human resource value:

1. The workforce should be split into managerial and non-managerial categories.
2. Using the employee's prior experience, determine their average tenure.
3. Regardless of the group members' positions, the current average wage must be determined.
4. You must multiply the average income by the average tenure.
5. The aforementioned must be discounted at the estimated typical after-tax return on capital employed.

The Cost of each employee's recruiting, hiring, selection, development, and training should be considered a deferred revenue expense, It might be written off over the employee's estimated average tenure with the organization, according to Prof. Chakraborty. However, the balance should be listed separately in the balance sheet under the heading of investments, not the amount that was written off.

#### NON-MONETARY MODEL

The economic worth of human resources is also measured, although not in monetary terms, using a non-monetary methodology. Instead, they rely on a variety of ratings, rankings, and indices. These techniques may aid financial valuation models and may have predictive usefulness. These methods offer a straightforward inventory of the knowledge, abilities, and

experience of individuals within an organization or make use of various tools for measuring behaviour in order to obtain access to the advantages of employing people.

### **(i) The Flamholz Model**

In order to improve upon past models, Flamholtz creates a model for the valuation of human resources (Flamholtz, 1971). The goal of the enhancement was to lessen the limitations of the **Jaggi, Lav, and Schwartz** models. This methodology aids in determining the worth of each person, group, and individually connected to the organization. This paradigm values human resources as a whole and is more subjective in character. This valuation model took into account both stochastic processes, such as the probability of monetary employees in an upward positioning services state, as well as rewards, such as benefits received by the organization as a whole. The steps listed below can be used to determine HR value (Shah, 2010):

Find sets of service states that are mutually exclusive and determine the average salary and other costs for a group of employees.

Establishes each service state's value

Estimates the duration of each person's employment with the organisation.

Determine the likelihood that a person will be in each potential state at a given future time.

Determined the value in the future

**HRV = Gross services value – Cost of the individuals**

### **(ii) Pekin Ogan's Model**

**Pekin Ogan** created this model in 1976. It is an elaboration of Mores' recommended Net Benefits Approach. He created a few variables that were multiplied by the net benefits of workers to determine the value of human resources. Thus, this way of valuing human resources is also known as certainty human resource value (Ogan, 1976). The following calculations are necessary when using this method to calculate the value of human resources (Shah, 2010)

- As stated under the "Net Benefits Approach," determine each employee's net benefits.

Which factors have an impact on human resource value are determined by certainty.

- The calculated net benefits from all employees multiplied by their respective certainty factors, which result in certainty equivalent net benefits, are referred to as HRV.

### **(iii). Likert Approach**

This approach was suggested by **Renis Likert** in 1976. This method is a Human Organisation score based on variables like motivation, leadership, Goals, and performance, which is known as the Human Organisation score approach (Likert, 1976). These above variables help to predict the Value of Human Resources. Measurement of the Human Organisation score is based on social psychological factors in two time periods and then finds Human Resource Value based on the score gained by Individuals of the Organisation.

## **CONCLUDING COMMENT**

HRA shows an organization's commitment to its sustainability and responsibility. In India, a country with a large labour pool, HR value, efficiency, and productivity disclosures are not taken seriously and are not reported because there are no defined reporting procedures, which negatively affects reliability and, as a result, reduces their significance. Future attempts, trials, and support from working managers, accountants, academicians, professional organizations, and governments will determine how HRA is applied and beneficial. There are many methods and models introduced by different psychologists and scholars for the valuation of Human

Resources but unfortunately, all methods are different not only methods but also in concept. Some researchers give cost-based methods for the valuation of Human Resource and others give economic value-based models. The original cost model put forth by **Brummet et al. (1968)** advocated capitalising the business's investment in recruiting, selecting, training, and developing human resources, depreciating such costs over time, and then disclosing the net investment in human resources under the heading of human assets in the balance sheet. **Hekimian and Jones' (1967)** Opportunity Cost Approach, predicts that human assets would increase in value as they become more scarce. The value of an asset when there are alternative employment options is known as opportunity cost.

An adjusted present value model was suggested by Hermanson (1964) to estimate the worth of human capital in an organisation. He claimed that while human resources are an asset on the balance sheet, the amount of future salaries payable represented a liability. The Present Value of Future Earnings Model by Baruch Lev and Aba Schwartz (1971). The present value of an employee's projected future wages was used to calculate the economic value that underlies this idea. By combining the current value of anticipated future services provided by employees, Flamholtz (1971) created the Stochastic Rewards Valuation model and determined the worth of human assets. This model makes the assumption that a person contributes value to a company by working numerous occupations. An employee's expected conditional value and expected realisable value will be equal if he or she is guaranteed to remain with the company for the entirety of their anticipated service life in the intended positions. Even though the various models discussed above provide an account of the valuation of human resources. These models don't address the methods for receiving and disclosing accounting information on human resources in a company's books of accounts or financial statements. According to models currently in development, it is not yet viable to value human capital without taking into account the regular pay rate. So, any model used to calculate human value will allow for the possibility of falsely classifying people with average skill levels as highly skilled by paying them a greater regular compensation package. Each measurement approach has drawbacks and advantages, but one is most frequently used in India: The Lev and Schwartz model, which uses discounted future salaries. This model is very popular and has been adopted widely by Indian companies like BHEL, SAIL, ONGC, HPCL, KRL, MMT, OIL etc.

### **Suggestions for modification in models**

- No one model can meet all the requirements of a model aiding in the development of human resources, hence there is a need for extensive study that may be useful in the development of human resource processes.
- The model needs to specify the factors affecting the value of human resources. Finding the different drivers and motivations for enhancing the value of human resources is necessary.
- Models should produce data that could assist management in making crucial judgements about advancing human resources.
- The value of human resources should be calculated with sufficient accuracy. Quite frequently, a model is fictitiously complete, but its applicability will suffer if crucial data is unavailable.
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