

# VALUATION OF HUMAN CAPITAL

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## The Perspective

The phenomenon of globalization has impacted impressively on the competitive environment of businesses all over the world, and one major fall-out of this trend, is that the drivers for value creation in business have changed from financial and physical capital, to human capital. Nowadays, the organizations are witnessed a new economic era. During this era, the organizations not only produce new goods and services but also they create added value for their survival. In this period, there is an emphasis on one particular form of resources (intellectual capital) which is different from other types of resources such as physical and financial capital. Intellectual capital (human and structural) is considered as capital employed (physical and financial) and strategic resource from resource-based theory view.

Human Resource Valuation is not a new issue in the arena of business. It is true that knowledge is a key determinant of economic and business success, but most companies focus on 'Return on investment (ROI)', with very few concrete steps taken to tract 'Return on Knowledge'. However, what is needed in this concept is a measurement of the abilities of all employees in a company, at any level, to produce value from their knowledge and capability

## What is Human Capital

The term and theory of "Human Capital" gained popularity in the 1960s through studies by Gary

Becker and Theodore Schultz, who considered the economic valuation of intangible human resource capabilities from which the business can benefit. According to Becker, capital investment intangible assets was no different from investment in human resources, which is critical for a competent production process. The term, however, originated in the 1800s in the book "An Inquiry into the Nature and Causes of the Wealth of Nations" by Adam Smith. Smith examined a nation's wealth, knowledge, training, skills, and experiences. He further proposed that increasing human capital through training and education results in a more lucrative company, contributing to society's collective wealth.

An organization is often said to only be as good as its people from the top down, which is why human capital is so important to a company. Human capital refers to the knowledge, skills, abilities, and individual experiences of employees in an organization. Human capital is defined in the individual level as the combination of individual capabilities in organizations to create a commercial value and solve business problems. The company's human capital is at least equal to the sum of related costs of human capital which is spent for them and all these costs are spread in tax statements. Although some human resource-related costs may not provide the economic benefits for the company over a period of time, some of these costs can surely provide benefits over the coming period. A full human resource-related cost analysis helps the companies to recognize the costs that create future benefits over the

coming period and can be converted to investments. It furthermore helps to identify the costs that create periodical benefits for the companies. The key Characteristics of Human Capital are :

- ⊙ Human capital is an intangible asset not listed on a company's balance sheet.
- ⊙ Human capital is said to include qualities like an employee's experience and skills.
- ⊙ Since all labor is not considered equal, employers can improve human capital by investing in the training, education, and benefits of their employees.
- ⊙ Human capital is perceived to have a relationship with economic growth, productivity, and profitability.
- ⊙ Like any other asset, human capital has the ability to depreciate through long periods of unemployment, and the inability to keep up with technology and innovation.

Human resource valuation means the identification and measurement of the value of human resources and then supplying this information to the interesting parties. It is sometimes also defined as a method of assigning value to the employees on the basis of their future economic services to the organization.. The employees of value at the present worth of the services they are expected to render during their stay in the organization or a particular period of time. The current global accounting standards do not allow us to record the human capital as an asset on the balance sheet

even as a linear figure in intangible assets within the global financial reporting system. The study of Human Capital Valuation helps in : providing numerical information about the cost and value of people as organizational resources; serving as an analytical framework to facilitate decision making , motivating decision-makers to adopt a human resource perspective.

An asset is simply something that can generate cash / value in the future. If you go by this definition, human assets should also be accounted for the balance sheet. So why aren't human assets given their due recognition? It is because the formal definition of asset does not recognize people as 'accountable assets' for a company. According to the formal definition, an asset is a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity. Simply stated, assets are economic resources which represent ownership of value that can be converted into cash. Human assets do generate cash for a company, but they are not owned by the company. Hence, they cannot be incorporated into the balance sheet. However, the definition and accounting practices do not make human assets any less. They still command the same value and importance for the company.

### **Determinants of Human Capital**

Various factors can be considered when determining the value of human capital. They can be summarized as (but may not be limited to): Communication skills , Higher education, Working intelligence, Technical and non-technical qualification, Capacity of judgment, Innovation in approach towards work, The brand worth of an individual, e.g., a celebrity who is paid for an endorsement.

### **Models of Valuation of Human Capital**

The accountants and finance professionals have suggested various models and methods for measuring the value of human resources utilized in an Organization. These methods are based on cost or economic value of human resources. Under these methods human resources of an Organization are translated into a common denominator, i.e., money on which Organizational decisions are taken. Some of the valuation models include:

**Lev and Schwartz Model (1971):** The basic theme of Lev and 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 weight age for efficiency. Moreover, companies adapt this model to their practical requirements by making necessary alterations. For instance, different organizations use different discount rates for ascertaining the present value of future cash flows which aims to determine the value of human capital with a particular age associated with an organization.

Lev & Schwartz advocated the estimation of future earnings during the remaining service life of the employee and then arriving at the present value by discounting the estimated earnings at the cost of capital. The assumptions in this method are realistic and scientific. The method has practical applicability when availability of quantifiable and analyzable data is concerned, But this model is unable to give any method to record the value of human resources in the Books of Accounts.

**Stochastic Model of Eric Flamholtz (1972) :** which takes into account the possibility or

probability of the movement of an employee from one function to another in his career, and also his untimely departure from the company through death, sickness or retirement. 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 persons expected conditional value and expected realizable value. Use of this model necessitates the following information: · The set of mutually exclusive states that an individual may estimate of a persons expected tenure in the organization · The probability that in future, the person will occupy each state for the specified time. · The discount rate to be applied to the future cash flows. The drawback to Stochastic Model of Eric Flamholtz is that it ignores the fact that individuals who operate in a group may have a higher value for the organization, compared to individuals working independently. In the analysis of operational capability, the approach falls short of practical value, to the extent that the odds have to be determined for each individual occupying various states of service, and these probabilities must be determined for all periods and employees on an individual basis.

**Pekin Ogan Model (1996) :** which aims to determine the value of human capital that renders professional services only. Its major limitation is that it only applies to organizations that provide professional services.

### **Methods of Valuation of Human Capital**

Assessing the value of human capital (HC), the most important asset of any organization, has long been easier said than done. Because it is such an intangible asset, assigning a value on a balance sheet is a perennial challenge. There are no generally accepted standards for measuring the value of people, unlike the readily

available tools for quantifying the value of tangible assets such as equipment, office furniture or accounts receivables.

Following are the important methods used for measuring human capital

**Historical Cost Method:** This method is developed by Rensis Likert. Under this method, all actual costs incurred on recruitment, training, familiarization, etc., are capitalized. Then, the capitalized cost is amortized, or say, written off over the period an employee serves in the Organization. In case the employee leaves the Organization before his expected service period, the remaining amount is written off completely in that particular year of his/her leaving the Organization. The advantage of this method is that the value of human asset can be shown on conventional Balance Sheet and Profit and Loss Account. However, its drawback, if at all, is that human resource is equated resulting in undervaluation.

**Replacement Cost Method:** As the title itself indicates, under this method, replacement cost refers to the cost of replacing an existing employee. In other words, replacing cost is the cost that would cost to replace the existing human resources with human resources capable of rendering equivalent services. Here, the underlying costs included in replacement cost are the cost of recruitment, training and development, opportunity cost for the intervening period till the new recruit attains the efficiency level equal to that of the old (to be replaced) employee.

In this way, this method helps the management in the process of human resource planning for the Organization by making the information available on costs to be involved in the acquisition of people in future. In a sense, this method is inconsistent with the 'historical cost method'. That there may not be

similar replacement cost for a certain asset and management may not be willing to replace the present human asset because of its greater value than that of scrap value are some of the drawbacks of this method.

**Opportunity Cost Method:** This method is used to value employees possessing certain skills and, thus, is rare in availability. Managers willing to acquire such scarce employees offer bid prices. One who finally acquires the scarce employees puts the bid price as his investment in such employees. The bid price is arrived at calculating actual or expected rate for capitalisation of the supposed earnings to be earned by such employees. Obviously, if an employee can be hired easily, there will be no opportunity cost for him/her. The main drawback of this method is the absence of a well justified criterion to decide the amount of the bid, or say, offer.

**Asset Multiplier Method:** This method is based on the assumption that there is no direct relationship between cost incurred on an employee and his value for the Organization. This is because the value of an employee depends on factors like motivation, working conditions and their attitude toward work and Organization. In this method, all employees working in an Organization are broadly classified into four categories; viz., top management, middle management, supervisory management and operative and clerical staff.

The salary bill of each category is multiplied with appropriate multiplier to ascertain the total value of each category for the Organization at a given point of time. Here, multiplier is an instrument that relates the personal worth of employees with the total asset values of the Organization. As per principle, the value of human asset should match with the value of goodwill. Inconsistency in the value of human assets in comparison to goodwill is indicative of inaccuracy

in multiplier that should be adjusted accordingly.

**Economic Value Method:** Under this method, human asset is valued on the basis of the contribution they are likely to make to the Organization till their retirement from the jobs. The payments made to them in the form of pay, allowances, benefits, etc., are estimated and then discounted appropriately to arrive at the present economic value of the individuals. This model can be expressed in the following formula:

$$V_r = T \sum_{t=1}^T \frac{E(t)}{r - r} (I + r)$$

Where,

$V_r$  = the human capital value of an individual  $r$  years old.

$E(t)$  = the individual's annual earnings up-to retirement, represented by the earnings profile.  $r$  = discount rate i.e., cost of capital.

$T$  = retirement age.

The drawback of this method is that the under or over-fixation of salary may affect equating the total earnings to the human capital

**Expected Realizable Value Method:** Under this method, the elements of expected realizable value of employee are measured through behavioral measures. For example, the productivity of an employee can be measured by using objective indices and managerial assessment. Psychometric tests and subjective evaluations can be used to measure the promotability and transferability of employees. Similarly, attitude surveys can be used to measure employee satisfaction, motivation, etc.

**Discounted Net Present Value of Future Earnings:** This method is propounded by Rensis Likert. The method is based on three variables—casual, intermediate and output. According to Likert, the effectiveness of human capital/resources can be

measured by using these three variables. Casual variables such as leadership style and behavior affect intermediate variables such as morale, motivation, commitment to work, etc., which, in turn, affect output variables such as production, sales, profit, etc.

**Adjusted Discounted Future Wages Method :** This method relates the value of human capital with the extra profit the firm earns over and above the industry expectation. In this method the value of human capital is the capitalized value of extra profit earned by firm. The value of human resources determined on the basis of relative efficiency of an organization in the industry. But the limitation is that the discounting factor is subjective in nature.

### Does Human Capital Depreciate?

Like anything else, human capital is not immune to depreciation. This is often measured in wages or the ability to stay in the workforce. The most common ways human capital can depreciate are through unemployment, injury, mental decline, or the inability to keep up with innovation. Consider an employee who has a specialized skill. If they go through a long period of unemployment, they may be unable to keep these levels of specialization. That's because their skills may no longer be in demand when they finally reenter the workforce. An individual's human capital may depreciate if they can't or won't adopt new technology or techniques. Conversely, the human capital of someone who does adopt them will.

### What Is Human Capital Risk ?

Human capital risk refers to the gap between the human capital requirements of a company or organization and the existing human capital of its workforce. This gap can lead a company towards inefficiencies, inability to achieve its goals, a poor reputation, fraud, financial loss, and eventual closure. To reduce and eliminate

human capital risk, an organization should train, foster, and support its workforce.

### Conclusion

People are their organizations' biggest assets. A company's intangible assets, including its human capital and its culture, are estimated to comprise more than half of a company's market value on average. Efforts to introduce robust measures of human capital into financial reporting have accelerated in recent years as there is clear and growing market interest in understanding how companies manage and measure human capital to uphold the principles of stakeholder capitalism.

Just as the field of human resource valuation has grown globally, significant interest in Human Resource Valuation has expanded and crossed over in to fields other than accounting including economics, organizational management and organizational culture and inspired related research. A growing number of studies have attempted to show the link between human resources and performance. We believe that though the case is not watertight, due to a number of methodological reasons, the weight of evidence is beginning to look compelling. One can hope for a day when human capital will receive the same degree of recognition as other assets in accounting practices as well as in the overall management paradigm. A proper reporting of HR in the financial statements of a company will go a long way in giving a fair and complete view of the accounting information, infuse confidence in the people working in the organization, boost their morale and help the management in fulfilling their social responsibilities.

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