

# Role of Human Capital Management in Economic Value Addition of Large Scale Organizations: A Literature Review

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## Abstract

The concept of human resource is transformed to human capital as an outcome of globalization and corporate sustainability. There have been various studies which relate human assets as an important financial input cost and separate accounting methodology has also been developed. The research topic relates to the Role of Human Capital Management in Economic Value Addition of large scale organizations. Economic Value Addition (EVA) has become an important financial indicator of corporate performance. The corporate organizations have shifted their focus more on market capitalization and economic value addition rather generating operating profit. The researcher feels that human assets could be an important input while generating profits vis-a-vis maximizing organizational wealth. The paper presents a comprehensive literature review of Economic Value Addition which is a very powerful indicator for financial manager who wishes to adopt and implement the concept of EVA. Moreover, an important variable human capital focuses on such diverse issue for value adding performance metric. The aim of literature review is to summarize, analyse, integrate and evaluate the current literature on the role of human capital management in economic value addition of large scale organizations. Large scale organizations can erect entry barriers through EVA vide Human Capital.

**Keywords:** Economic Value Addition, Human Asset, Human Capital, Human Capital Management, Human Resource Accounting, Shareholder value.

**JEL Codes:** M41

## 1. Introduction

### 1.1 Overview

The concept of human resource is very old and is documented even in the prehistoric times in the period of 1000 to 2000 B.C. The evolution of advanced Human Resource functions is also documented in history, few important facts of human resource can be seen such as selecting tribal leaders back in 1115 B.C., the Chinese were known to be the first to use employee screening techniques and Donald Trump started a popular concept of “the apprentice” system. Gradually the concept of human resource gained considerable importance and being recognized in every formal set up whether it is profit or non-profit making.

The cycle started through evolution of “personnel relations” thereafter “industrial relations” which transformed into “employee relations” and finally “human relations” came into existence. Industrial Revolution brought a sea-change in the economy transforming agrarian economy into industrialized economy. This led to fortification of well-organized corporations and business houses requiring large number of people to be hired as an agent to manage such corporations and business houses on the behalf of promoters through Agency theory concept. This concept further led to recruitment and management of individuals. Henceforth, the importance of Human Resource Management was coined.

### 1.2 Importance of Human Resource

Human Resource is an important fixed asset shown as an investment in the balance sheet of an organization. By passage of time the organization realised to give a

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separate status to the human resource by establishing HR Department as one of the important service department. Human Resource Development includes the broader range of activities ranging from developing personnel in the organization, career building, training as well as creating an environment for overall development of the individuals. The wider application of human resource in macro terms was witnessed later on. There has been an increasing awareness that the people of the country should be looked upon as its valuable resource, growth process should be based on the integrated development of the citizen, in order to ensure all-round development. The importance of human resource was accepted nationwide and in pursuance to this idea, a new Ministry was created under a suggestive name, Ministry of Human Resource Development, on 26 September, 1985, through 174<sup>th</sup> Amendment to the Government of India (Allocation of Business) Rules 1961.

Gradually, the importance of human resource gained huge importance and focus shifted from human resource to human asset and then to human capital of an organization.

### 1.3 Human Resource and Globalization

Globalization, an important outcome of the landmark year 1991, raised tremendous competition and made the sustainability of business houses questionable. The transition from closed economy to open economy has made the entire business scenario volatile. Moreover the integration of world financial markets facilitated by improved ability to collect and analyze information posed major challenges in front of corporate world to strive for continual change in order to sustain in the present economic condition. Presently the focus is shifting on how to improve the operating leverage for value addition through innovative products and services. Today's global business climate is marked by extreme geopolitical and economic uncertainties. Global market acceleration is forcing businesses to respond to customers faster than ever with value-added products and services, while they struggle to maintain temporary competitive advantages. The researcher feels that for sustainability the organizations adopt various business drivers for economic value addition. However, these business drivers never focussed on human capital investments against the benefits to the business. The entire cost and benefit analysis is based on complex mathematics of finance which never accounted human capital linkage for enhancing operating

leverage for economic value addition of the organization. Sustainability of corporate house depends more on human assets as compared to other resource of inputs. The researcher feels that human asset plays a significant role in the economic value creation of an organization.

### 1.4 Human Asset and Human Capital

Despite being an important asset for a company, human resource is an asset always ignored by accountants. With regards to assets, there is a fundamental conflict in accounting practices between human and non-human assets. Only non-human assets find a place on a company's balance sheet. Keep in mind that even intangibles like 'goodwill' are accounted for.

Why aren't human assets given their due recognition? If human assets can generate cash/value in future, then why aren't they accounted for the balance sheet of conventional accounting?

It is widely accepted that the success of an organization depend largely on the quality performance, calibre and the skill of the people working in the organization. Despite of vast physical resources and the latest technology, an organization finds itself in the midst of financial crises if it does not have the right people to manage and conduct its affairs. In the words of Alfred Marshall, "The most valuable of all capital is that invested in human beings".

The concept of considering human beings as an asset is an old phenomenon. One may recall, in this connection, the importance which Emperor Akbar gave to the nine jewels (courtiers). The history of our freedom movement will not be complete without mentioning the names of Shri Motilal Nehru, Mahatma Gandhi, Sardar Vallabh Bhai Patel and several other distinguished freedom fighters. However, no effort was made to assign any monetary value to such individuals in the balance Sheet of the nation or of organization.

The first attempt to value the human beings in monetary terms was made by Sir William Petty as early as 1661. Further efforts, in this connection, were made by William Far in 1853, Earnest Engel in 1883.

## 2. Human Capital Management

### 2.1 Defining Capital

All the economic resources invested in a business unit to enable it to operate and create economic value are

collectively referred to as capital. For an enterprise to prosper, it must earn a return on its capital investment in excess of the cost of capital.

## 2.2 Defining Human Capital

Schultz Theodore (1961) considers all human abilities to be either innate or acquired. Attributes which are valuable and can be augmented by appropriate investment will be human capital. Schultz Theodore (1993) defined Human Capital as a key element in improving a firm assets and employees in order to increase productive as well as sustain competitive advantage. Human Capital represents the human factor in the organization; the combined intelligence, skills and expertise that gives the organization its distinctive character. The human elements of the organization are those that are capable of learning, changing, innovating and providing the creative thrust which if properly motivated can ensure the long-term survival of the organization is rightly said by Bontis et al. (1999). Human Capital was a kind of value that existed in the body, could act on goods or service to increase their utilities and then shared benefit from it, suggests Zhongmin Dr Li (1999) and expertise of those contributing to an organization's mission is opined by Liebowitz Dr. Jay.

According to Jinying Wang (2001), Human Capital was composed of knowledge, ability, and health and so on. It existed in human bodies, could be factored into goods or service to increase their utilities and then obtained earnings from it. Human Capital is non-standardized, tacit, and dynamic; context dependent and embodied in people is rightly said by Scarborough and Elias (2002). Human capital is recognition that people in organizations and businesses are an important and essential asset who contributes to development and growth, in a similar way as physical assets such as machines and money. According to Sheffin (2003), Human Capital refers to the stock of competences, knowledge and personality attributes embodied in the ability to perform labours so as to produce economic value.

Rylatt (2003) defined Human Capital as a measure of current know-how of people under the organization's control. Human Capital is the collective attitudes, skills and abilities of people contribute to organizational performance and productivity. Any expenditure in training, development, health and support is an investment, not

just an expense. Human Capital is a critical area for finance, and not only from a cost-containment perspective according to Kennedy Michael.

Human Capital is the measure of the output an employee with a certain skill set is able to make. The concept of human capital was developed in the 1960s and is founded on the idea that hard work, education and skill development all lead to more output. Human Capital, in general can be defined as the knowledge that individuals acquire during their lifetimes and use to produce goods, services or ideas in market or non-market circumstances. Human Capital 'goes home every evening' according to Mohanty, Dr. R.P (2006a). Mohanty, Dr. R.P (2006b) had viewed 'Human Capital is the collection of capabilities of the individuals required to provide solutions to customers'. Mohanty, Dr. R.P (2006c) endorsed that "Human Capital is nothing but the knowledge, skills and capabilities of the individuals that have economic value to an organization". As a result, companies are encouraged to invest in human capital through various means such as education and bonuses for exceptionally good work, among others according to Farlex Financial Dictionary @2009 Farlex, Inc.

According to Mrudula, E & Kashyap, VRP, Human Capital is a "way of defining and classifying people's skills and abilities as used in their job or used for the benefit of the economy." Human Capital is an intangible asset, in the same way as brand value; working practices or customer relationships are intangible, but they still add intrinsic value to the organization. The difference is that the value of human capital is both measurable and tangible when it comes to profit and loss.

Archer, David (2010) had viewed Human Capital as a key competitive edge in securing a strong market position while extending sustainability and financial growth. Human Capital is a major factor in determining the value of a firm's stock and investment decisions. Human Capital is defined as the unique capabilities and expertise of individuals according to Harvey Campbell R. (2011).

Human capital is often one of the most important assets within a commercial organization and Human Capital Management (HCM) is the way you manage that asset. Wilhelm. Joe, VP Finance, Unilever have rightly said that, "building people capabilities enhances the value of our business". Peter Drucker once said "You take away the entire company infrastructure such as equipments,

machineries, land, etc., leave me and my men, we shall create another one". Success of achieving the goals largely depends on the people in the Organization.

### 2.3 Defining Human Capital Management

Human Capital Management is the process of recruiting, managing, assessing, developing and maintaining an organizations most important resource i.e. "Its People". Human Capital Management is concerned with obtaining, analyzing and reporting on data which informs the direction of value-adding people management strategic, investment and operational decisions at corporate level and at the level of front-line management have endorsed by Baron and Armstrong (2007). It is, as Paul Kearns (2005) emphasized, ultimately about **value**.

### 2.4 Human Capital Management Perspective

The term Human Capital Management (HCM) is entering our lexicon of change. Most use the term interchangeably with HR, but HCM can and should be more than HR with a new name. HCM is a C-suite business discipline that develops human capital strategies and ensures the human capital portfolio is effectively managed. In HCM, the Chief Financial Officer (CFO) is a full senior partner in identifying and solving business issues from a human capital perspective. As C-suite members, the CFO and Chief Human Capital Officer (CHCO) are accountable for overall enterprise performance.

Human capital is a new discipline not only for human resource department but also to the financial and investment analysts as well as to the accountants. It was not a buzzword but a future demand.

**Human Capital Management** is a system approach to people management. HCM is aligned with the corporate strategic plans and manages internal and external customers. HCM is an investment and increases employee satisfaction level to a great extent develops full potential of people and attaches the financial value to the HR practices, stresses on the measurement of the human capital. The skill set of delivering HCM is not present in the market while one has to create it.

Today's HR concentrates on employees and not enough on the broader workforce and issues that impact the enterprise's success. HCM increases the scope to include all of the sources of human capital, wherever they reside in the human capital value chain.

### 2.5 Human-Financial Interfaces

There are 5M's considered to be primary input for management of an Organization referred as man, material, machine, money and methods. Under these 5M's **Man** is of utmost importance for proper utilization of other inputs. There are two aspects to relate human with finance. One in Accounting concept where there is Personal Account i.e., Debit the receiver and credit the giver. When we are talking about Personal it is Natural person and artificial person (banks, FIs, company) who do delay in service. It is the Natural Person who is being recognized in Human Resource Accounting as a valuable asset is the second aspect. William Petty, a behavioural scientist has taken first step to value human resources in terms of money. He states employees were the father of wealth and it must be taken into consideration while estimating the wealth. HRA is an information system which informs the management about the cost and value of the human factor to the organization and the changes that are occurring in the business overtime.

The main reason for not treating the human resources as capital is due to the fact that, human resources are not owned by the organization as other assets. Due to the contractual obligation, the organization pays only wages and salaries to the people which are revenue in nature and are treated as current costs. It was never thought that investment in human resources as capital. Slowly, organization started realizing that human resources as capital is important for its success and started gaining momentum in the areas of recruitment, training, employment etc. And this made the companies to look at their employees as resources. But still there was no method suggested to show the human resources within the framework of conventional accounting. The paper focussed on financial approach towards Human Capital Management and has done a thorough literature survey which will help the organization in the long run to value human capital in generating huge profits. After undergoing a thorough literature survey, the paper identified some models in HRA which were developed long back in 1970's and are of little relevance, the tremors of global financial arises through reverberated the globalizing economies from far east to west. Therefore competition can be redefined in present environment as sustainability. Sustainability can be achieved when corporate learn how to create entry barriers for others. For example, people still use to say XEROX for photocopy, Cadbury for chocolate, Maggi for

Noodles and SAIL for Steel. Such situation arises only through brand establishment and economic value addition. One of the assumptions underlying HRA is – People are valuable resources of an organization who are capable of providing present and future services and these future services have economic value to the organization which can be measured in monetary terms. The sentiments of the people should be taken utmost care. There is sensitivity index i.e., SENSEX Why? Because the SENSEX depends upon the performance of the company which are highly sensitive from investor point of view. Human Capital can also be an important variable in measurement of the sensitivity of the project success. The problem of excess manpower increasing overheads is due to lack of proper planning. While capital budgeting techniques select the best alternative for capital investment, it can also select the optimum and best human resources which can eradicate the downsizing phenomenon in case of poor performance of the organization due to organization inefficiency. When a company hire or recruit an individual for a particular job, it requires huge budget to place a most suitable and appropriate individual in the organization. Not only this but also the organization spend huge capital in induction and orientation programme and also provide adequate training and development programmes so as to upgrade their skills and knowledge and increases the expertise in their specialised field, thereafter the motivation and loyalty of the employee increases manifolds. The human capital exerts more efforts and contributions to achieve the organization objectives. After huge investment on human capital, the organization looks after Return on Investment.

## 2.6 Valuing Human Capital

Identifying and measuring the value of human capital can be a process worth investing.

Human capital valuation has remained an academic exercise and largely ignored even in industries where the expertise of employees is the key differentiating factor. The process of valuation is complex and challenging. But unless we adequately assess the value of human resources, we will not be able to respond to future needs.

Like all other resources of the company, the employees possess value because of providing future services. “Human resource valuation means identifying and measuring value of human resources and communicating

the information to the interested parties” (American Accounting Society Committee).

## 2.7 Valuation Methodologies

In attempting to put a value to human capital for the purpose of recording them as assets in financial reports, earlier studies focused on the value of individual employees to the firm. The various methods for HR valuation:

1. **Historical Cost Approach:** This approach was developed by Brummet, Flamholtz, and Pyle. According to this approach, the actual cost incurred on recruiting, selecting, hiring, training and developing the human resources of the organization are capitalized and written off over the expected useful life of the human resources.
2. **Replacement Cost Approach:** This method involves assessment of replacement cost of individuals and rebuilding cost of the organization to reflect HR asset value of both the individuals and the organization. However, the replacement cost may not reflect either the actual costs or the contribution associated with HR.
3. **Opportunity Cost Approach:** This approach was suggested by Hekimian and Jones. According to this model, computation of monetary value and allocation of people to the most promising activity and thereby to access the opportunity cost of key employees through competitive bidding among investment centres.
4. **Present Value Approach:** According to this approach, the value of human resources of an organization is determined according to their present value to the organization. For determination of the present value, a number of valuation models have been developed. Some of the important models are as follows:
  - (a) **Present Value of Future Earnings Model** was developed by Lev and Schwartz (1971). This model advocates the estimation of future earnings during the remaining life of the employee and then arriving at the present value by discounting the estimated earnings at the employee’s cost of capital. In this model, the probability of the person dying before the retirement age is considered.

- (b) **Reward Valuation Model** was suggested by Flamholtz in 1971. This is an improvement of the previous model since it takes into consideration the possibility or probability of an employee's movement from one role to another in his career and/or of his leaving the firm earlier than his death or retirement.
- (c) **Net Benefit Model** was suggested by Morse in 1973. According to this approach, the value of human resources is equivalent to the present value of net benefits derived by the organization from the service of its employees.
- (d) **Certainty Equivalent Net Benefit Model** was developed by Pekin Ogan in 1976. It is an extension of net benefit model where the value of human resource is determined by taking into consideration the certainty with which the net benefits in future will accrue to the organization.
- (e) **Aggregate Payment Approach** was suggested by Prof. S.K.Chakraborty in 1976. As a matter of fact, he is the first Indian to suggest a model for valuation of human resources of an organization. According to this model, the human resources are to be valued as a group and not on individual basis.
- (f) **Total Cost Concept** was suggested by Prof. N Dasgupta in 1978. According to him the various approaches suggested in the previous pages take into account only those persons who are employed and ignore those who are unemployed. In case the value of human resources of the nation is to be determined, it should be done in a manner that it brings in its purview both employed and unemployed persons. The system should be such that it fits in preparation of a balance sheet showing the human resources not only of a firm but also of the whole nation.

One of the pioneers who developed a model to measure human capital was Roger Hermanson, through his monograph, "Accounting for Human Assets" (1984, 1986) which provided inspiration for managers to assess the validity in valuing and costing human capital.

Researches from the mid 60s to 70s were to formulate the present and potential uses of Human Capital Accounting

as a tool for human resource professionals; human capital accounting was then seen mainly as managerial tool (Flamholtz, Bullen & Hua. 2002). Human Capital Accounting relates to the quantification in monetary terms (e.g. by calculating a capital value) of human resources employed by an organization. According to Fajana (2002), a well-developed system of human resource accounting could contribute significantly to internal decisions by management and external decisions by investors. Rao (2005) opined that human capital accounting helps potential investors judge a company better on the strength of human assets utilized. Thus, if two companies offer the same rate of return on capital employed, information on human resources can help investors decide which company to choose for investment.

### 1.8 The Concept of Economic Value Addition (EVA)

Adam Smith had emphasized on the concept of "Maximization of wealth of owners". EVA was developed by a New York Consulting firm, Stern Stewart & Co in 1982 to promote value maximizing behavior in corporate managers. In 1989, it pioneered the concept of EVA, a solitary value-based measure of its kind. The famous statement by Stern and Stewart Co (Stewart, 1999): "Making managers into owners" immediately indicates their tendency in thinking towards collaboration. EVA is not only viewed as a measurement instrument but is also an appropriate instrument to align the interests of managers and stakeholders and to encourage everyone to work together to realize the objectives of the shareholders. Constant positive EVA over the time increases company values, while negative EVA decreases the same. EVA is a financial performance measure that divulges the absolute amount of shareholder value created. EVA is regarded as excess return made on an investment and the capital invested, it is also considered as an investment decision tool. EVA is gain or loss that remains after assessing a charge for the cost of all types of capital employed and also it is helpful in formulation of strategy so as to make a return greater than the cost of capital of the firm and hence it is useful tool for the management in decision making. EVA is also a motivating measure to create shareholder value as well as to compute management compensation.

### 3. Literature Review

Harbison & Nylers (1964) and Jhingan (1985) refer to Human Capital Development as the process of acquiring

and increasing the number of people who have skills, education and experience which are critical for the economic and the political development of a country.

Marshall (1961) had said that the most valuable of capital is that invested in human beings.

Nelson and Winter (1982) said that Human capital is the profit lever of the knowledge economy. An organization's members possess individual tacit knowledge (i.e., inarticulable skills necessary to perform their functions).

With the emergence of the knowledge-based economy, the traditional valuation has been called to question, due to the recognition that human capital is an increasingly important part of an enterprise total value (Bhargava, 1991). Drucker, (1992a) had opined, "We know now that the source of wealth is something specifically human: knowledge. If we apply knowledge to tasks we already know how to do, we call it 'productivity'. If we apply knowledge to tasks that are new and different we call it 'innovation'. Only knowledge allows us to achieve these two goals." As per Drucker (1992b) "In knowledge and service work they [capital and technology] are tools of production. Whether they help productivity or harm it depends on what people do with the, on the purpose to which they are being put, for instance, or on the skill of the user." Peter & Watermann, (1992) had opined that "the way in which the organizations manage its peoples can influence its performance". Lyles and Schwenk (1992) suggest that the cognitive maps of top management members closely represent core aspects of all organizational members. Leaders such as "boundary spanners" (Michael, 1973) and "technological gatekeepers" (Allen, 1977) have an important role in facilitating value alignment in support of an organization's innovative capability. Managerial leadership acts as a catalyst to fuel learning in firms. Organizational learning requires a champion; it also needs subordinates and followers according to Pedler et al., 1996. Organization must emphasize that leaders will have "learning paths" and "not jobs" as per Wilson et al., 1994. As per Drucker, (1993), "Knowledge workers still need the tools of production. In fact, capital investment in the tools of the knowledge employee may already be higher than the capital investment in the tools of the manufacturing worker ever was. (And the social investment, for example, the investment in a knowledge worker's education, is many times the investment in the manual worker's education.) But this capital investment is unproductive unless the knowledge worker brings to

bear on it the knowledge that he or she owns and that cannot be taken away. Machine operators in the factory did as they were told. The machine decided not only what to do but how to do it. The knowledge employee may well need a machine, whether it is a computer, an ultrasound analyzer, or a telescope. But the machine will not tell the knowledge worker what to do, let alone how to do it. And without this knowledge, which belongs to the employee, the machine is unproductive". According to Hudson (1993) Human capital has also been defined on an individual level as the combination of these four factors: i) your genetic inheritance; ii) your education; iii) your experience; and iv) your attitude about life and business. According to Storey (1995), human capital can embody intangible assets such as unique configurations of complementary skills and tacit knowledge, painstakingly accumulated, of customer wants and internal processes.

Grant (1996) discussed "the human element has grown in importance because knowledge has become a critical ingredient to gain a competitive advantage, particularly in the new economy landscape." According to Drucker (1999a) "The most valuable asset of a 21st-century institution, whether business or non-business, will be its knowledge workers and their productivity." According to Drucker, (1999b) "The most important contribution management needs to make in the 21st Century is to increase the productivity of KNOWLEDGE WORK and the KNOWLEDGE WORKER".

As per Dzikowski (2000), Human capital refers to know-how, capabilities, skills and expertise of the members of an organization. According to Ostroff & Bowen (2000), the collective interaction of employees skills, attitudes and behaviours determine the performance of an organization. According to Dess & Picken (2000), Human capital is generally understood to consist of the individual's capabilities, knowledge, skills and experience of the company's employees and managers, as they are relevant to the task at hand, as well as the capacity to add to this reservoir of knowledge, skills and experience through individual learning.

Richard W. (2001) opined that "The strategic human resource management or the human capital is meant of gaining competitive advantage through one of the most important asset: its people". Hitt et al. (2001) opined that "Human capital has long been argued as a critical resource in most companies and recent research suggest that human capital attributes like education, experience and skills and the effect of leadership affect the firm's performance."

Rylatt (2003a) endorsed that, in 1995, IBM bought Lotus for US \$3.5 billion- 14 times its book value, signalling that marketplaces put important value on intangibles assets, such as human capital, when estimating the likely success of a business. Rylatt (2003b) has opined that, in today's knowledge economy, the people that make up an organization are seen as wealth and capability generators who can profoundly affect market appeal, reputation and performance. Rylatt (2003c) also depict that high levels of enthusiasm and commitment in the workplace are indicative that the human capital is working in the favour of an organization. According to Leslie A. Weatherly, (2003), if we believe that "people are our greatest asset, and then we must also believe that organizations compete for business through the people they employ. Dr. Jay Liebowitz, (2004), had concluded in the paper that "in the near future, organizations will be in a tenuous position if they don't take knowledge management and human capital seriously. Knowledge management needs to be closely linked with the human capital strategy in order to achieve organizational success. Rao (2005) opines that human capital accounting helps potential investors judge a company better on the strength of human assets utilized. In a speech at Harvard University in 1943 Winston Churchill observed that "the empires of the future will be empires of the mind" (The Battle for Brainpower, 2006). Eric. D. Brown, (2007) had opined that "the competitors of the firm always try to employ better peoples for the job, so firms should constantly evaluate the human factor. He also concluded that the ability to create unique team is the most cost effective ways to create sustainable advantage". As per Jim Pinto, (2007), Peter Drucker advised "In order to value people, companies must move beyond the concept of human resources and toward the notion of human capital. The term "resource" implies an available supply that can be drawn upon when needed. The term "capital," however, refers to something that gains or losses value depending on how much is invested in it, and how that investment is made. Yazdani (2008) had opined that "the crucial differentiating factor between companies can be how human capital are developed and nurtured in particular organization".

#### 4. Conclusion

The human capital literature has moved beyond the individual to embrace the idea that knowledge can be shared among groups and institutionalised within

organizational processes and routines (Wright et al 2001). The primary objective of a company is to have operating profit thereby growth prospects in the industry with wealth maximization through market capitalization. However, generation of huge profits can be achieved through EVA and human capital can act as an important variable for achieving corporate sustainability. Human Capital was the most pivotal element in any organization. They are the lifeblood of each business enterprise. One cannot compare people with buildings and raw-materials. There should be a reliable way to quantify the contribution of human capital to corporate profit. There are many financial models to value human assets. Infosys used the Lev & Schwartz model to calculate the value of their human resources. In the past, companies such as Bharat Heavy Electricals Ltd (BHEL), Steel Authority of India Ltd (SAIL), Minerals and Metals Trading Corporation of India Ltd (MMTC Ltd), Oil and Natural Gas Corporation Limited (ONGC) and National Thermal Power Corporation Ltd (NTPC) have also used the same model. The model uses several factors such as age, annual earnings up to retirement, retirement age of the employees & cost of capital to value the human assets of the company. However, the model ignores productivity of employees, attrition rate and training expenses in its calculation. While making internal decisions related to human resource management, a company should consider human asset valuation. The company should look at the parameters such as return on human resource value, ratio of total income to human asset value. All these parameters give a clear picture of efficiency of human resources employed by the company. There is a proper pathway to reach financial gains by operational improvement in human resource. Hence, one should give a fresh look towards this source.

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