

Study of Evaluation of Human Resources At Infosys Ltd

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Abstract:

The business organizations continue to invest in employees by providing various opportunities, training facilities to them and making business a great place to work. Employees are the true wealth of any business (Sir William Petty 1961). Employees are also called as human capital/human assets/ knowledge capital or intellectual capital. HRA has been defined by American Accounting Association's committee as "the process of identifying & measuring data about human resources & communicating this information to interested parties".

In the era of knowledge and technical know-how, only those business organizations can prosper which have adequate information about value and efficiency of their human resources. The purpose of this study is to evaluate human resources at Infosys Ltd. The secondary data is collected from annual reports, Infosys website and additional information reports provided by Infosys from 2000 to 2019. The analysis found that Infosys Ltd. voluntarily adopted human resource practice and provides details of the same to all its stakeholder in annual reports. But Infosys Ltd. should also provide data related to idle time, loyalty of employees, lock out, training and development cost, group-age wise human resource value, amortization of human resources, group-age human value etc. along with human resource values. The measures should be taken by government and regulatory bodies for inclusion human resource practices in accounting of business for growth and development of country.

Keywords: Human resource, human capital, human resource accounting, knowledge, human resource value.

1. Introduction:

The traditional way of recording human resource cost by treating it as expenses in accounting is a practice of every business organization. The human resource cost was completely ignored while taking business decisions. During the period of 1960 a new accounting method, called human resource accounting was truly begun by Renis Likert to consider value of human resources for growth and success of business organization.

According to American Accounting Association, Human resource accounting is the process of identifying and measuring data about human resources and communicating this information to interested parties.

According to Anupma Chaudhary and Sumit Prasad (2010), Human resource as asset to organization, can increase with time only when provided adequate input. The success of any business organization depends upon its quality of employees. Human resource or human capital or intellectual capital is the important element in the modern knowledge-based society. The distinguished experts were Shultz (1960), William Pyle (1967), Falmholtz, Lev and Schwartz (1971), Jaggi and Lau (1974), N. Dasgupta (1978) and Dr. Rao (1983) etc. developed methodology and procedures for finding out the cost and value of the employees to the organization.

Infosys is a leading provider of consulting, technology, outsourcing and next generation services. Infosys is the first software company in India to value its human resource in financial year 1995-96. Infosys have used Lev and Schwartz model: the present value of future earnings of employees to calculate the value of human resources.

Objectives of the study:

1. To study evaluation of human resource practices at Infosys Ltd.

2. To analyze human resource information provided by Infosys Ltd for stakeholders.
3. To explore the items of human resource details disclosed by Infosys Ltd.

Scope and Limitations of Study:

The study is related to evaluation of human resources practices at Infosys Ltd only. For this study the human resource information has been examined for the year 2000 to 2018-19. The study is based on secondary data collected from annual reports and additional information of Infosys Ltd.

The limitation of this study is there is no total human resource value, value added information in analysis as the respective data is not available in annual reports and additional information of Infosys from 2012-13 onwards. In 2011-12 a new model GIST-HCX adopted by Infosys. The limitation of this study is the lack of adequate human resource information.

Research Methodology:

This study is based on secondary data collected from annual reports, additional reports, website of Infosys for accounting year 2000 to 2019. The data will be analyzed by considering various variables like number of employees, total revenue, total employee cost, human resource value, net profit excluding extraordinary income, value added, discount and attrition rate, total assets etc.

Human Resource Value Concept:

Human resource is the knowledge and skills which individuals create, maintain and use (Armstrong, 2006). The concept of human resource value can be extended to individuals, groups, and the total human organization. Thus, an individual's value to an organization can be defined as the present worth of the set of future services the person is expected to provide during the period he or she is anticipated to remain in the organization. Similarly, a group's value to an organization may be defined as the present value of its expected future services.

Ripoll and Labatut (1994) states two reasons for including human resources in accounting. Firstly, people are a valuable resource to a firm as long as they perform services that can be quantified. Secondly, the value of a person as a resource depends on how he is employed so management style will also influence the human resource value.

Edward Lawler (1992) described human resources from investment perspective as —to be competitive, organizations in many industries must have highly skilled, knowledgeable workers. They must also have a relatively stable labor force since employee turnover works directly against obtaining the kind of coordination and organizational learning that leads to fast response and high-quality products and services.

Models of Human Resource Valuation:

It was Rensis Likert (1960) who originated research into human resource accounting and in organizations starting with the Milwaukee Braves USA (1963), which was the first organization to experiment with the concept of HRA, by treating its investments in future team development as an asset to be capitalized and repaid over its expected useful life. Eric G Flamholtz states that “Human resource accounting encompasses measuring the cost incurred by businesses and other organizations to select, recruit, hire, train and develop human assets. In brief, it involves accounting for people as organizational resources for managerial as well as financial accounting purposes.”

Many models have been created to value human capital. Some are based on historic costs, replacement cost, opportunity cost while some are based on future earnings but each has its own limitations and one model has proved to be more valid than other. The distinguished experts were Shultz (1960), William Pyle (1967), Flamholtz, Lev and Schwartz (1971), Jaggi and Lau (1974), N. Dasgupta (1978) and Dr. Rao (1983) etc. developed methodology and procedures for finding out the cost and value of the employees to the organization.

Ravindra Tiwari elucidated Human resource accounting (HRA) as an attempt to identify, quantify and report investment made in Human resources of an organization that are not currently accounted for under conventional accounting practice. Businesses which require a considerable creativity or are science-based show a significant difference between market value and net book value. This difference is for intangible assets (including human skills). HRA enabled the Company to understand whether the skill sets of its human

capital was appreciating or not. R. Krishnaswamy, an actuarial accountant, said, "The value can be used internally by an organization to make comparisons from unit to unit, from year to year, as well as within its industry."

In India the financial statements are prepared as per Indian Companies Act 2013. There is no rules and regulations regarding inclusion of human resource accounting in annual reports. As per Indian companies Act 1956 human resource value is treated as expenses and not asset of the business organization. Indian companies act, 1956 does not offer any scope for providing any significant information about human resources in financial statement. Under section 217 of company law only remuneration paid to employees is showing in financial statements. Due to growing trend towards the measurement and reporting of human assets some Indian companies in India voluntarily began to introduce human resource information in its financial statement. The following companies do give information of their human assets by following a particular model of valuation of human resources like BHEL, ONGC, SAIL, NTPC, INFOSYS etc.

Infosys Limited:

Infosys Ltd. is a leading provider of consulting, technology, outsourcing and next generation services. Infosys Ltd. was incorporated in 1981 as Infosys Consultants Private Ltd under Indian companies Act 1956. The company became public limited in 1992, changed its name to Infosys Technologies Limited. In 1993 the company listed in stock exchange in India. Infosys is the first software company in India to value its human resource in financial year 1995-96 by adopting Lev and Schwartz model. The stakeholders get intuitions about companies' performance and efficiency from the human resource valuation reports. The increase and decrease in value of human resources shows skills, ability, knowledge, capability etc. of human resources with the organization are important for taking future decisions. To be successful in highly competitive markets, the Company requires to continuously improve the level of performance of its workforce (Narayan Murthy).

In 2012 the company changed its name from Infosys Technologies Limited to Infosys Limited to mark a shift from being a technology solution provider to a business transformation partner for investors. Along with annual reports Infosys Ltd. provides additional information, sustainability reports and other reports to the shareholders like intangible assets, brand value, economic value, social welfare, cultural and educational programs. value added statement, employee stock option, risk management report. Infosys Ltd. is the first Indian company to be listed on NASDAQ stock exchange. Human Resource Importance of human capital is ascertained through the 200000 plus strength of skilled, highly educated and talented employee in Infosys. In 2019 the overall revenue of Infosys Ltd. is increased by 9% to reach USD 11.8 billion.

Data Collection and Analysis:

The data is collected from annual reports, additional reports, website of Infosys Ltd. for the year 2000 to 2019. The human resource value analysis is divided into two parts as from 1995 to 2011 the company adopted Lev and Schwartz Model. In 2011-12 company developed new model to calculate human resource value in partnership with GIST Advisory, the model was called Infosys GIST-HCX Model. After 2012 the company does not provide any additional information about Human Resource Value, Valued added.

I. Human Resource Valuation of Infosys Ltd. from 2000 to 2011 (Rs. In Crores):

Infosys have used the Lev & Schwartz model (the present value of future earnings of employees) developed by Baruch Lev and Aba Schwartz to compute the value of human resources. The future earnings of employees are discounted at cost of capital /inflation rate/bank rate. Infosys had always given utmost importance to the role of employees in contributing to the company's progress. Infosys provided the information regarding particular of employees under the provision of section 217(2A) of the Companies Rules 1975 like Income, value added, No of Employee, Age wise Distribution and Category wise Distribution of Employee, Net Worth, EPS, Economic Value Added, Value of Human Resource, Value of Human Resource per Employee and also present the ratio like Value Added/Human Resource Value, Return on Human Resource Value in percentage.

According to this model the human resource of a company is the summation of value of all the Net present value (NPV) of expenditure on employees. The human capital embodied in a person of age 'r' is the present value of his earning from employment.

The evaluation is based on the present value of future earnings of employees and on the following assumptions:

- Employee compensation includes all direct and indirect benefits earned both in India and overseas.
- The incremental earnings based on group / age have been considered
- The future earnings have been discounted at the cost of capital (e.g. 2011- 10.60%).

(Source: Infosys additional information 2011-12)

To calculate the value of its human resources all the employees of Infosys Ltd. were divided into groups, based on their average age. Each group's average compensation was calculated by taking the compensation of each employee at retirement by using an average rate of increment. The increments were based on industry standards, and the employee's performance and productivity. At the end the total compensation of each group was calculated. This value was discounted at the rate percent per annum which was the cost of capital at Infosys to arrive at the total human resources of Infosys.

$$V_r = I(t) / [(1+r)^{(t-r)}]$$

Where, V_r = the value of an Individual r years old (age)

$I(t)$ = the individual's annual earnings up to retirement

t = retirement age

r = a discount rate specific to the cost of capital to the company.

Table 1 shows Human Resource Valuation of Infosys Ltd. from 2000 to 2012 (Rs. In Crores).

| VARIABLES | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---------|---------|---------|---------|---------|---------|-------|-------|---------|--------|--------|--------|
| NUMBER OF EMPLOYEES | 5389 | 9831 | 10738 | 15356 | 25634 | 36750 | 52715 | 72241 | 91187 | 104850 | 113796 | 130820 |
| HUMAN RESOURCE VALUE (HRV) | 2237.42 | 5123.42 | 9539.15 | 10417 | 21140 | 28334 | 46637 | 52452 | 98821 | 102133 | 113287 | 98147 |
| TOTAL REVENUE | 921.46 | 1959.94 | 2604 | 3623 | 4976 | 7254 | 9660 | 13893 | 1669 | 20264 | 22742 | 27501 |
| SOFTWARE REVENUE | 882.32 | 1900.56 | 2603.59 | 3622.69 | 4853 | 7130 | 9521 | 13893 | 16692 | 21693 | 22742 | 27501 |
| TOTAL EMPLOYEE COST | 334.56 | 717.79 | 1117.87 | 1677.12 | 2450.96 | 3539.11 | 4801 | 7112 | 8878 | 11405 | 12093 | 14856 |
| VALUE ADDED EXCLUDING EXTRAORDINARY INCOME | 723.31 | 1563.18 | 2239.07 | 3043 | 4185 | 6053 | 8027 | 11879 | 14820.0 | 19073 | 20937 | 25031 |
| NET PROFIT EXCLUDING EXTRAORDINARY INCOME | 285.95 | 623.32 | 807.96 | 957.93 | 1243 | 1859 | 2421 | 3777 | 4470 | 5819 | 6219 | 6823 |
| DISCOUNT RATE OR COST OF CAPITAL (%) | 22.29 | 21.08 | 17.17 | 16.99 | 14.09 | 13.63 | 12.96 | 14.97 | 13.32 | 12.18 | 10.6 | 11.21 |
| HUMAN RESOURCE RATIOS | | | | | | | | | | | | |
| TOTAL REVENUE/HUMAN RESOURCE VALUE (RATIO) | 0.41 | 0.38 | 0.28 | 0.35 | 0.23 | 0.25 | 0.20 | 0.24 | 0.17 | 0.21 | 0.20 | 0.28 |
| TOTAL SOFTWARE REVENUE/HUMAN RESOURCE VALUE (RATIO) | 0.39 | 0.37 | 0.27 | 0.35 | 0.23 | 0.25 | 0.20 | 0.26 | 0.17 | 0.21 | 0.20 | 0.28 |
| VALUE ADDED/HUMAN RESOURCE VALUE (RATIO) | 0.32 | 0.31 | 0.23 | 0.29 | 0.2 | 0.21 | 0.17 | 0.21 | 0.15 | 0.19 | 0.18 | 0.25 |
| VALUE OF HUMAN RESOURCE PER EMPLOYEE | 0.42 | 0.52 | 0.89 | 0.69 | 0.82 | 0.77 | 0.88 | 0.8 | 1.08 | 0.97 | 1.00 | 0.75 |
| EMPLOYEE COST/ HUMAN RESOURCE VALUE (%) | 14.95 | 14.01 | 11.72 | 16.1 | 11.59 | 12.49 | 10.29 | 13.56 | 8.98 | 11.17 | 10.67 | 15.14 |
| TOTAL EMPLOYEE COST PER EMPLOYEE | 0.06 | 0.07 | 0.10 | 0.11 | 0.10 | 0.10 | 0.09 | 0.10 | 0.10 | 0.11 | 0.11 | 0.11 |
| NET PROFIT PER EMPLOYEE | 0.05 | 0.06 | 0.08 | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.05 | 0.05 |
| RETURN ON HUMAN RESOURCE VALUE(%) | 12.78 | 12.17 | 8.47 | 9.2 | 5.88 | 6.56 | 5.19 | 7.2 | 4.52 | 5.7 | 5.08 | 6.56 |

(Source: Infosys Ltd. Annual Reports from year 2000 to 2011)

II. Human Resource Valuation of Infosys Ltd. from 2012 to 2019 (Rs. In Crores)

In 2011-12 Infosys Ltd. developed new model named as Infosys GIST-HCX Model. This model is based on present value calculation of the increase in future earnings of employees during their employment at Infosys Ltd. Unlike conventional model it also accounts for the impact of attrition on human capital value of Infosys. It also takes into consideration human value attrition due to retirement or resignation and thus, quantifies value of positive human capital externality (benefits to society when trained and developed employee leaves the company) generated by Infosys. It uses a discount rate consistent with RBI's long run inflation rate expectations. The attrition rate was 4% and Inflation rate was 5% in 2011-12. (source: Annual report and additional report 2011-12)

Table 2 shows Human Resource Valuation of Infosys Ltd. from 2012 to 2019 (Rs. In Crores)

| VARIABLES | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|
| NUMBER OF EMPLOYEES | 149994 | 156688 | 160445 | 176187 | 194044 | 200364 | 204107 | 228123 |
| TOTAL REVENUE | 33734 | 40352 | 50133 | 53319 | 62441 | 68484 | 70522 | 82675 |
| TOTAL EMPLOYEE COST | 18340 | 19932 | 24350 | 25115 | 28207 | 30944 | 32472 | 38296 |
| TOTAL ASSETS | 29778 | 36179 | 42456 | 48098 | 61144 | 68099 | 63710 | 62711 |
| NET PROFIT (EXCLUDING EXTRAORDINARY INCOME) | 8316 | 9421 | 10648 | 12329 | 13491 | 14353 | 16029 | 15410 |
| ATTRITION RATE | 4 | 16.3 | 18.7 | 18.9 | 13.6 | 15 | 16.4 | 20.4 |
| RATIOS | | | | | | | | |
| TOTAL REVENUE PER EMPLOYEE | 0.22 | 0.26 | 0.31 | 0.30 | 0.32 | 0.34 | 0.35 | 0.36 |
| TOTAL ASSET /TOTAL EMPLOYEES (RATIO) | 0.20 | 0.23 | 0.26 | 0.27 | 0.32 | 0.34 | 0.31 | 0.27 |
| EMPLOYEE COST/ TOTAL REVENUE (RATIO) | 0.54 | 0.49 | 0.49 | 0.47 | 0.45 | 0.45 | 0.46 | 0.46 |
| NET PROFIT PER EMPLOYEE | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.07 |
| TOTAL EMPLOYEE COST PER EMPLOYEE | 0.12 | 0.13 | 0.15 | 0.14 | 0.15 | 0.15 | 0.16 | 0.17 |

(Source: Infosys Ltd. Annual Reports from year 2012 to 2019)

Findings: From the analysis of table 1 & 2 it is found that:

1. The data is analyzed and found that Infosys Ltd. had disclosed in annual reports the variables like number of employees, total revenue, total employee cost, human resource value, net profit excluding extraordinary income, value added, discount and attrition rate, total assets etc.
2. Infosys had adopted Lev and Schwartz model for valuation of human resources. The Employee or human resources are continuously increasing in Infosys Ltd. The total number of employees were increased to 228123 in 2011 from 5389 in the year 2000. There is increase of 4133% employee numbers during last 20 years. The number of employees and human resource values have been recorded as per category and not as per age-wise in Infosys Ltd.
3. The human resource value is increased from Rs.2237.42 crores to Rs.98147 crores from 2000 to 2011. The value of human resource shows continuous increase in value. But the reason behind this increase due to

decrease in discount rate used for valuation under Lev and Schwartz model. Infosys stopped providing human resource value and value added after 2012 in annual and additional reports.

4. There is also increase in Total revenue from 921.46 in 2000 to 82675 in 2019. i.e.an increase by 8872% during last 20 years. The software revenue is also increased by Rs.26619 crores during the year 2000 to 2019.
5. The Employee cost has showing increase trend. In the year 2000 it was Rs.335 crores and it is increased to Rs. 38296 crores. This reflect an impartial payment policy of Infosys Ltd. The Cost per employee showing decrease trend.
6. The value of human resource per employee has appreciated from Rs.0.42 to Rs.0.75 crores i.e.78.57% during last 12 years from 2000 to 2011. This increase shows efficiency of human resources. From 2012 onwards the value of human resources is not provided by Infosys Ltd. in annual reports.
7. Total revenue to human resource value ratio has decreased from 0.41to 0.28 during the year 2000 to 2011. The software revenue ratio is also decreased to 0.28 from 0.39 during last 12 years starting from year 2000. Return on Human Resource Value is decreased from 12.78% to 6.56 during same period.
8. Net profit per employee is increased from 0.05 to 0.07 during the year 2000 to 2019. There is 40% increase in Net profit per employee last 20 years. Total assets to total employees are also showing increasing trend.
9. It is observed from the study that the overall performance and efficiency of Infosys Ltd. has enhanced through a system of human resource accounting. Effective human resource practice also helped Infosys in identifying and retaining valuable employees.
10. Infosys has not disclosed the training, recruitment and development cost of employees. The Company should provide data related to idle time, loyalty of employees, lock out, etc.
11. From analysis it is found that Infosys Ltd. discloses human resource values in annual and additional reports. Also, Infosys records human resource value as intangible assets. However, the human resource data is not audited by auditor.

Conclusion:

There is no legal framework and standard rules and regulations regarding human resource practices as per Indian Companies Act 1956, Indian Companies act 2013 and ASB of ICAI. Infosys Ltd. is the first software company to adopt human resource practices voluntarily and disclose human resource information in its annual and additional reports. For the development of profit, performance and growth of any company human resource accounting is important. The government and accounting bodies should take remedial measures for bright future of companies in India by taking necessary steps for development of human resources practices policies and regulations.

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