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"CORPORATE FINANCIAL PERFORMANCE AND HUMAN CAPITAL EFFICIENCY OF SERVICE SECTOR IN INDIA: AN ANALYSIS WITH SPECIAL REFERENCE TO IT SECTOR"

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Abstract

This paper attempts to provide insights about corporate financial performance and human capital efficiency for one of the significant service sectors of India, i.e. Information and technology sector. Human capital is an intangible asset which is not listed on a company's balance sheet. It can be classified as the economic value of an employee's experience and skills. Human capital is significant because it is perceived to increase productivity and thus profitability. So the more a company invests in its employees, the more productive and profitable it could be. Corporate financial performance is also necessary to analyse to investigate the performance of companies from various financial aspects such as liquidity, profitability, earnings per share etc. Top five IT companies of India on the basis of market capitalisation, net sales and net profit were taken for this study. Period covered for the study is of five financial years. The data were processed through accounting and statistical measures like, ratios, ANOVA and proxies of human capital taken in the study. Findings showed that TCS was highest among all in case of ROE, ROA& ATO. TCS was also leading as far as human capital efficiency is concerned. Which demonstrates that human capital efficiency accelerates financial performance of the corporate.

Keywords: corporate financial performance, human capital efficiency, ROE, ROA, ATO, Indian IT sector

1.0 Introduction

Financial performance is a way to measure how well a firm can utilise its assets from its prime mode of business and generate revenues. The term is also used as an overall measurement of general financial health of firms over a given period.

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Analysis of financial statements, viz balance-sheet and profit and loss account directed towards analysing the liquidity, profitability, productivity, motion and financial condition of a business concern to measure the efficiency of operations. Analysts and investors use financial performance to compare similar firms across the same industry or to compare industries or sectors in combined.

Human capital is the constituent that emerged from the concept of intellectual capital. Human capital is the most significant asset that exists within a firm. It represents the human factor in an organization where by amalgamation of intelligence, skills, knowledge, aptitudes and expertise that gives the organization its distinctive character which those traits contributing to production and profitability, thus improve organizational performance. Even studies evidenced that the capability of a corporate organization to successfully implement business strategies exclusively depends on efficient use of intangibles asset, particularly human capital. Measuring human capital performance has become an essential issue for companies in today's business world since it may help them to get the right perspective on human capital.

The production of service sector is "intangible" unlike manufacturing sector. Hence, it is majorly dependent on human capital than the commodity sector. Some are well known and already existing viz. government, health, education and some are quite recent viz. communications, information technology, etc. Production of services tends to require relatively less **physical capital** and more **human capital** in comparison to agricultural or industrial goods.

2.0 Industry Overview

An economically progressive nation will have a more industrial contribution to their GDP than the agricultural sector. However, in this era, the development of a country could be measured with its IT infrastructure.

The Indian government has been active in providing incentives for the IT and ITeS sector. In February 2019, it announced a national policy on software products to develop India as a software production destination. It has recognized information technology as one of

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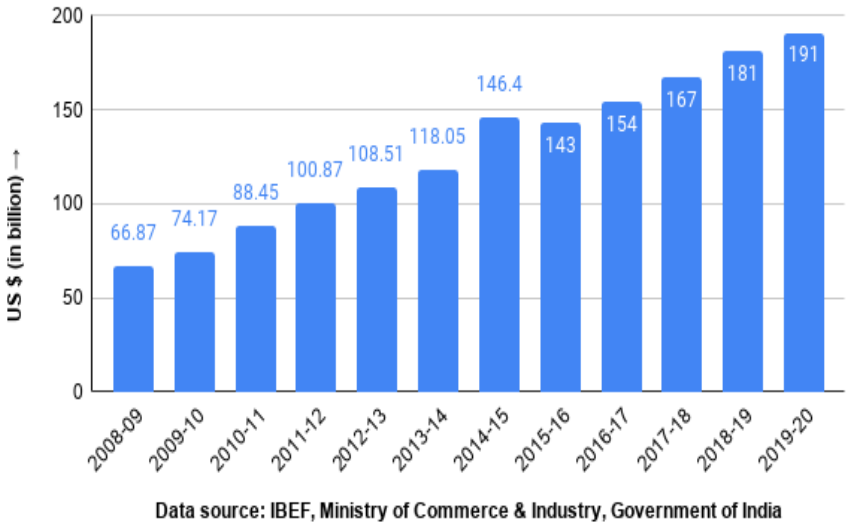
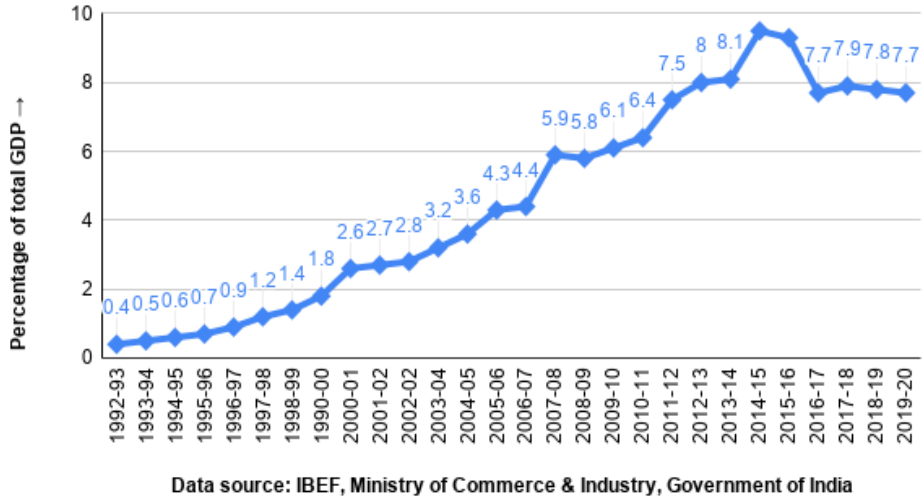
the 12 champion service sectors for which an action plan is in progress. It has also set up a □5,000-crore fund for recognizing the potential of these champion service sectors, according to India Brand Equity Foundation.

Graph 1. Market size of India's IT industry



Data source: IBEF, Ministry of Commerce & Industry, Government of India

Graph 2. IT industry's share in GDP (in %)



Data source: IBEF, Ministry of Commerce & Industry, Government of India

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3.0 Review Of Relevant Literature

(Khan, 2015) A study on "Growth and profitability analysis of selected IT companies" was conducted here. HCL technologies, Wipro and Tech Mahindra- these three IT companies were selected for the study and data of five years period was covered. Three profitability ratios based on sales and three based on investments is included in study. ANOVA test was applied for analysis and interpretation purpose. On a closing remark researchers have stated that performance of HCL technologies in terms of operating profit ratio showed very good performance. But, HCL technologies‟ performance was not satisfactory for return on net worth and return on long term funds. On the contrary, Tech Mahindra was good in that. The performance of Wipro was average during the study period of five years.

(N.Sivakumar, 2015) A study titled "Financial performance of selected BSE/NSE listed hotel industries in India", was conducted. In this study, 10 hotels listed on BSE/NSE were selected and data of 10 years were studied. Various statistical techniques like mean, standard deviation, compound annual growth rate (CAGR) are used for the study purpose. The researchers have found that performance of EIH, HOTL, SPER, EIHA, and MAHH was better than other hotels taken for study. With the proper attention by government, improvement in financial performance of industry is possible which will ultimately strengthen GDP of our nation.

(Danjuma, 2016) Data of industrial goods companies listed on the Nigerian stock market were taken for the period of 2009-2014 to check the impact of Human Capital Efficiency on corporate performance. Human capital efficiency was tested by applying the Human Capital Component of the Value Added Intellectual Co-efficient methodology and corporate performance was assessed by Employee Growth (EG), Earning per share (EPS) and Return on Assets (ROA). The study concluded that there was no positive relationship

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between human capital efficiency (HCE) and employees' growth (EG) but there existed a positive relationship between human capital efficiency (HCE) and earnings per share (EPS) as well as return on assets (ROA).

(Al-Awawdeh, 2016) Study 20 Jordanian industrial company for the period of 2009-2014 was conducted. Results derived showed that human capital efficiency was high in the Jordanian industrial companies compared to structural capital efficiency and capital employed efficiency which were lower. Regression analysis outcome suggested that the intellectual value-added coefficient had a positive impact with statistical significance on the rate of return on Assets and return on equity. Which proved that increase in intellectual capital efficiency improve the performance of the companies. From the regression analysis, it was also analyzed that the human capital efficiency and capital employed efficiency had a positive impact on profitability, while structural capital had not.

(Sumedrea, 2013) A study of the 62 most known and transparent non-financial companies listed on Bucharest Stock Exchange was conducted for the period of 2010-2011 to analyze the existence of a possible link between the intellectual capital and the organizational performances in order to identify whether these companies used their innovative potential to surpass the crisis, the results were acquired by applying regression models and it has been found out that, in crisis period, the development of companies was influenced by the human and the structural capital. While profitability was additionally linked to the financial capital through the value added intellectual capital coefficient.

4.0 Research Methodology

4.1 Objectives

- To measure corporate financial performance of the selected companies during the period of the study.
- To measure human capital efficiency of the selected companies during the period of the study.
- To explore about IT industry as a significant service sector of Indian economy.

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4.2 Periods of the study

- To analyze the corporate financial performance, data of five financial years commencing on 2016 – 2017 to 2020 – 2021 were taken into consideration.
- To analyze the human capital efficiency of the selected companies, period covered was 2015-2016 to 2019-2020 considering availability of data.

4.3 Sampling

Top 5 IT companies were selected considering financial aspect such as its market capitalization and net sales;

1. TATA CONSULTANCY SERVICES (TCS),
2. INFORMATION SYSTEM (INFOSYS),
3. WIPRO LIMITED,
4. HINDUSTAN COMPUTERS LIMITED (HCL TECH),
5. TECH MAHINDRA LIMITED

4.4 Sources of data

The study is based on secondary data. Data required for the study is gathered and compiled from the annual reports of the selected companies, various books, reports and internet sources.

4.5 Framework of analysis

For the purpose of corporate financial performance analysis and to measure human capital efficiency, various accounting tools and techniques such as accounting ratios, mathematical formula and ANOVA have been applied.

4.6 Significance

- The study will throw some light on the growth of the IT industry.
- Since IT industry is one of the remarkable contributor to the GDP of India, it is important to investigate its financial performance.
- IT sector is the knowledge based service sector, hence to investigate its human capital efficiency is also important.

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- The study is useful for IT companies', government, academicians and other relevant parties.

4.7 Limitations

- There are numerous IT companies in the industry but this research work is limited to only five of them and period of the study is limited to five years only.
- As the data is acquired from secondary source of information, which has its own limitations, which apply for this research work.
- Limitations associated with accounting tools and statistical techniques apply for this research work.

5.0 Data Analysis and Interpretation

5.1 Return on Equity Ratio

This ratio measures relationship between net profit after interest and tax and share holders' fund.

Table 5.1.1 Return on Equity Ratio

YEAR	TCS	INFOSYS	WIPRO	HCL TECH	TECH MAHINDRA
2016-2017	30.31	20.78	19.89	21.95	23.75
2017-2018	33.27	20.31	17.47	26.46	18.04
2018-2019	38.1	25.44	18.27	26.7	20.46
2019-2020	44.72	23.44	15.41	26.88	21.21
2020-2021	41.39	24.97	18.68	24.04	20.35

(Source:www.moneycontrol.com)

The table given indicates the return on equity ratio of all the five selected IT companies during the period of study. ROE ratio of TCS was highest (44.72) among all companies and all the years taken for study, in the year 2019-2020. Whereas it was lowest in Wipro (15.41) in the same year among all companies and all the years taken for study. For all

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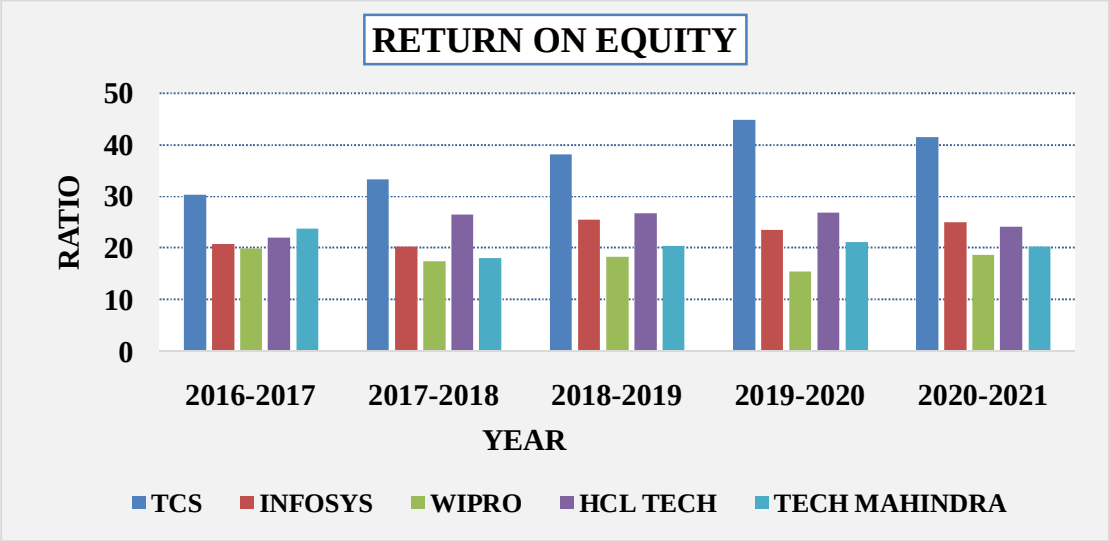
the years TCS was on the top among all the companies and Wipro was at the bottom as far as ROE ratio is concerned.

Graph 5.1.1 Return on Equity Ratio



Hypothesis Testing

Null hypothesis: H0:

There is no significant difference in return on net worth/equity ratio of the selected IT companies of India during the period of study, i.e., 2016-2017 to 2020-2021.

Alternative hypothesis: H1:

There is significant difference in return on net worth/equity ratio of the selected IT companies of India during the period of study, i.e., 2016-2017 to 2020-2021.

5.1.2 ANOVA table

ANOVA					
Source of Variation	***SS***	***df***	***MS***	***F***	***F crit***
Between Groups	1147.41	4	286.8537	27.8726	2.86608
Within Groups	205.832	20	10.29161		
Total	13 53.25	24			

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ANOVA Table shows that the calculated value of "F" is 27.8726 and table value of "F" is 2.86608. Here, calculated value of "F" is higher than the table value of the same. Resultantly, null hypothesis cannot be accepted and alternative hypothesis will be accepted at 5% significance level. Thus, it can be inferred that there is significant difference in return on equity ratio of the selected IT companies of India during the period of study, i.e., 2016-2017 to 2020-2021.

5.2 Return on Assets Ratio

It indicates that how profitably a company is running in comparison of the total assets it possess.

Table 5.2.1: Return on Assets Ratio

YEAR	TCS	INFOSYS	WIPRO	HCL TECH	TECH MAHINDRA
2016-2017	26.35	17.45	13.91	17.74	15.59
2017-2018	27.72	17.29	12.92	21.23	12.84
2018-2019	30.21	21.29	13.16	22.43	14.92
2019-2020	31.68	18.62	11.36	21.85	14.43
2020-2021	28.3	19.17	13.29	16.75	14.95

(Source: www.moneycontrol.com)

The table given indicates the return on assets ratio of all the five selected IT companies during the period of study. ROA ratio of TCS was highest (44.72) among all companies and all the years taken for study, in the year 2019-2020. Whereas it was lowest in Wipro (11.36) in the same year among all companies and all the years taken for study. As far as ROA ratio is concerned, for all the years TCS was on the top among all the companies and Wipro was at the bottom, except the year 2017-2018 where, Tech Mahindra was lowest.

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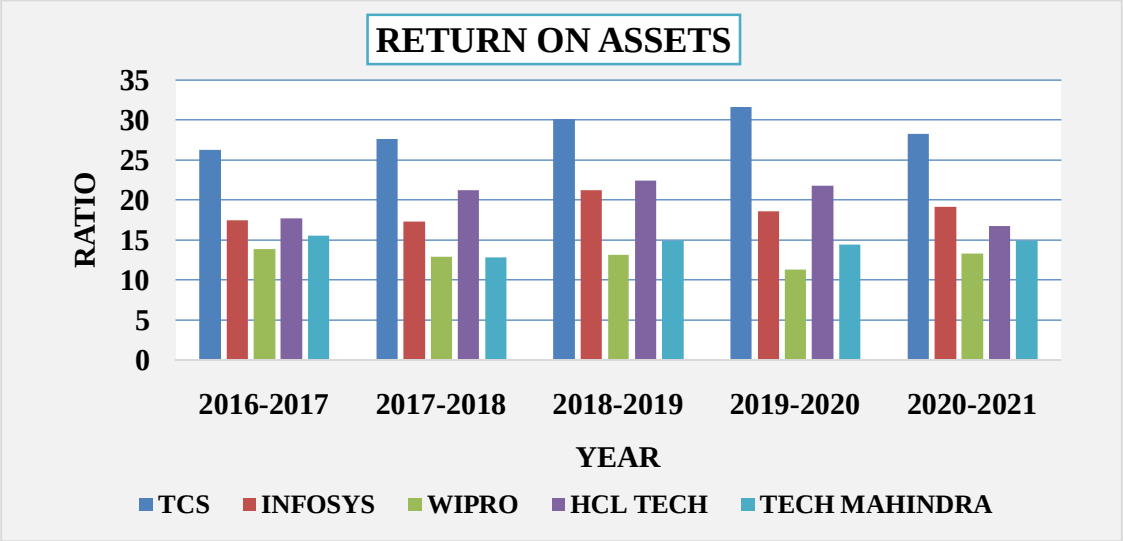
Graph 5.2.1 Return on Assets Ratio



Hypothesis Testing

Null hypothesis: H0:

There is no significant difference in return on assets ratio of the selected IT companies of India during the period of study, i.e., 2016-2017 to 2020-2021.

Alternative hypothesis: H1:

There is significant difference in return on assets ratio of the selected IT companies of India during the period of study, i.e., 2016-2017 to 2020-2021.

5.2.2 ANOVA Table

ANOVA					
Source of Variation	***SS***	***df***	***MS***	***F***	***F crit***
Between Groups	774.116	4	193.5291	61.8416	2.86608
Within Groups	62.5886	20	3.12943		
Total	836.705	24			

ANOVA Table shows that the calculated value of "F" is 61.8416 and table value of "F" is 2.86608. Here, calculated value of "F" is higher than the table value of the same. Resultantly, null hypothesis cannot be accepted and alternative hypothesis will be accepted at 5% significance level. Thus, it can be inferred that there is significant difference in return on

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assets ratio of the selected IT companies of India during the period of study, i.e., 2016-2017 to 2020-2021.

5.3 Assets Turnover Ratio

It is an indicator of the efficiency with which a company is deploying its assets to produce the revenue.

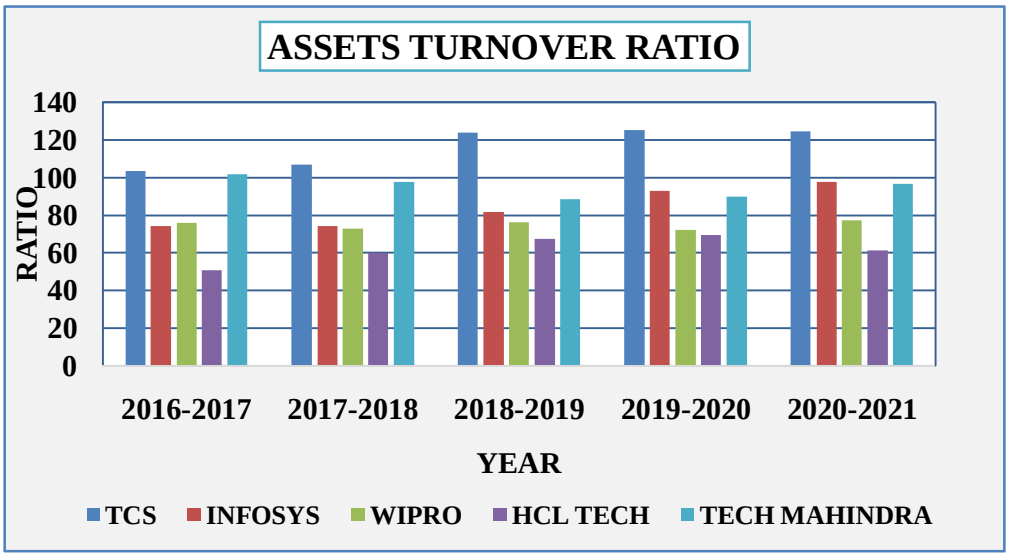
Table 5.3.1 Assets Turnover Ratio

YEAR	TCS	INFOSYS	WIPRO	HCL TECH	TECH MAHINDRA
2016-2017	103.26	74.22	75.82	50.52	101.54
2017-2018	106.91	74.21	72.91	59.67	97.6
2018-2019	123.78	81.63	76.2	67.25	88.29
2019-2020	125.08	92.62	71.82	69.44	89.71
2020-2021	124.3	97.53	77.18	60.92	96.38

(Source: www.moneycontrol.com)

The table given indicates the assets turnover ratio of all the five selected IT companies during the period of study. ATO ratio of TCS was highest (125.08) among all companies and all the years taken for study, in the year 2019-2020. Whereas it was lowest in HCL Tech (50.52) in the year 2016-2017 among all companies and all the years taken for study. As far as ATO ratio is concerned, for all the years TCS was on the top among all the companies and HCL Tech was at the bottom.

Graph 5.3.1 Assets Turnover Ratio



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Hypothesis Testing

Null hypothesis: H0:

There is no significant difference in assets turnover ratio of the selected IT companies of India during the period of study, i.e., 2016-2017 to 2020-2021.

Alternative hypothesis: H1:

There is significant difference in assets turnover ratio of the selected IT companies of India during the period of study, i.e., 2016-2017 to 2020-2021.

5.3.2 ANOVA Table

ANOVA					
Source of Variation	***SS***	***df***	***MS***	***F***	***F crit***
Between Groups	8712.231	4	2178.0578	34.17889	2.866081
Within Groups	1274.505	20	63.725242		
Total	9986.736	24			

ANOVA Table shows that the calculated value of "F" is 34.17889 and table value of "F" is 2.86608. Here, calculated value of "F" is higher than the table value of the same. Resultantly, null hypothesis cannot be accepted and alternative hypothesis will be accepted at 5% significance level. Thus, it can be inferred that there is significant difference in assets turnover ratio of the selected IT companies of India during the period of study, i.e., 2016-2017 to 2020-2021.

5.4 Human Capital Efficiency of Selected Indian IT Companies during the Period of 2015-2016 to 2019-2020

With the rise in the share of human capital in gross domestic product, the concept of knowledge economy came into limelight. Different types of capital have been considered as inputs, which enter the process of producing goods and services, though, human capital is not considered as a simple input, since it plays a more dynamic role in the process of producing goods or providing services especially. Hence, it is useful to check the efficiency of human capital invested in service sectors.

HCE shows value added by human capital of the company. Whatever expenditure companies are incurring on its human resource, is fruitful only when it creates desired value. Expenses include salaries, incentives and allowances, bonus, compensation, employee benefit

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expenses, staff welfare expenses, pension fund, provident funds and other funds. In return of all these expenditure they add value to the company. Value added in the company is found by adding employee cost, depreciation and amortization to total earning from its core business functions, excluding interest and taxes. Human capital efficiency is parameter showing how much value has been added to the company compared to total cost incurred on its human force.

5.4.1 Table Showing Human Capital Efficiency of Selected IT Companies during the Period of 2015-2016 To 2019-2020

YEAR	TCS	INFOSYS	WIPRO	HCL TECH	TECH MAHINDRA
2015-2016	1.8	1.5	1.46	1.47	1.35
2016-2017	1.58	1.5	1.44	1.36	1.32
2017-2018	1.53	1.5	1.39	1.4	1.28
2018-2019	1.55	1.46	1.4	1.36	1.36
2019-2020	1.54	1.44	1.39	1.38	1.3

(Data collected, compiled and calculated from annual reports)

The table given depicts human capital efficiency of each company for years covered in the study. It can be observed from the table that TCS has highest human capital efficiency among all the companies during all the years and tech Mahindra has lowest. High human capital efficiency evidences high employee skill that would add more value compared to that of low human capital efficiency. Thus, it can be concluded that TCS Company is leading in effective utilization of its human capital in creating value added. Tech Mahindra company needs to work upon this.

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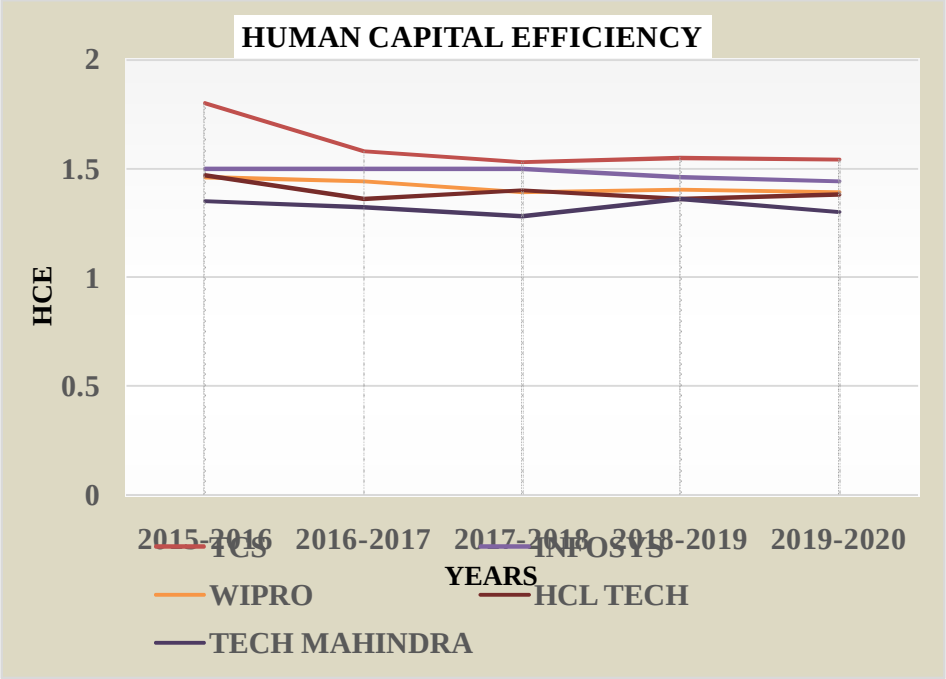
Line Chart 5.4.1: Human Capital Efficiency of Selected IT Companies During her Period Of 2015-2016 To 2019-2020



5.0 Conclusion

Corporate financial performance is influenced by a variety of factors, but in practice we can take into account only few of them, selecting the most important factors that are linked with corporate profitability has always been a point of interest in the scientific literature. Understanding the elements that influence Performance Company is a main concern for the company's management, in order to remove those factors that influence it negatively and to strengthen those who have a beneficial impact on business. The results of the study undertaken in this paper come to support empirical studies conducted in this area. Human resources can support the company with having competitive advantage and value added and operating comprehensive quality plans.

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