



A STUDY ON PROFITABILITY ANALYSIS OF SELECTED IT COMPANIES IN INDIA



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ABSTRACT

India is one of the biggest hubs for Information technology companies in the world over. With global companies looking to make their way into the Indian IT sector, there are a tremendous number of Indian IT Companies which have impacted the industry in a big way. Information technology in India is an industry consisting of two major components: IT Services and business process outsourcing (BPO). The sector has increased its contribution to India's GDP from 1.2% in to 7.5% According to NASSCOM, the sector aggregated revenues of US\$100 billion in 2014, where export and domestic revenue stood at US\$69.1 billion and US\$31.7 billion respectively, growing by over 9%. Finance is needed for day to day operation. It can be considered as a life blood for business. The profitability level should maintain at increasing level in order to overcome this problem.

KEYWORDS: Information Technology, Profitability, IT Companies, Business, Organization.

1. INTRODUCTION

India is one of the biggest hubs for Information technology companies in the world over. With global companies looking to make their way into the Indian IT sector, there are a tremendous number of Indian IT Companies which have impacted the industry in a big way. Information technology in India is an industry consisting of two major components: IT Services and business process outsourcing (BPO). The sector has increased its contribution to India's GDP from 1.2% in to 7.5% According to NASSCOM, the sector aggregated revenues of US\$100 billion in 2014, where export and domestic revenue stood at US\$69.1 billion and US\$31.7 billion respectively, growing by over 9%. Finance is needed for day to day operation. It can be considered as a life blood for business. The profitability level should maintain at increasing level in order to overcome this problem.

Profitability is the profit earning capacity which is a crucial factor contributing to the survival of the firms. The perpetual existence of the firms depends on the profit earning capacity of the firm, which is also considered to be the main factor in influencing the reputation of the firm. The borrowing capacity of the firm is also determined by Profit. Thus, it is considered as the main factor in determining the capital structure of the firm. Profit consists of two words, profit and ability. Therefore, it is necessary to differentiate between profit and profitability at this juncture. Profit, from the accounting point of view, is arrived at by deducting from the total revenue of an enterprise all amount expended in earning that income whereas profitability can be measured in terms of profit shown as a percentage of sales known as profit margin.



2. STATEMENT OF THE PROBLEM

The primary objective of any business undertaking is to earn profits. Profit earning is considered as essential for the survival of the business. A business needs profits not only for its long existence in the market, but also for expansion and diversification of business, the investors want an adequate return on their investment as well as workers, creditors. And a business enterprise can discharge its obligation to various segments of the society only through earning of profit.

So the proper understanding of the major Drivers of profitability of any business is very important even to analyze whether the firm or organization reflecting true profit or not.

3. OBJECTIVES OF THE STUDY

- ⊕ To ascertain the overall earnings performance of selected information technologies companies in India.
- ⊕ To evaluate the profitability related to sales of selected information technologies companies.
- ⊕ To analyze the profitability related to capital employed of selected information technologies companies.

4. METHODOLOGY

For this Evaluation of Empirical analysis, Data has been collected from the secondary sources viz, moneycontrol.com website and from selected IT company's financial reports The IT Companies which satisfied the following criteria have been short listed for the study.

- Multinational companies
- Top five companies based on revenue
- Indian based companies
- Availability of data for at least for the period of 5 years

COMPANIES THAT MEET THE ABOVE CONDITIONS ARE

- ▲ Tata consultancy services
- ▲ Infosys
- ▲ Wipro
- ▲ Tech Mahindra
- ▲ HCL technologies

SCOPE OF THE STUDY

This study covers profitability analysis of only five Indian IT companies. The data collected for the study is confined to the period of five years i.e 2010 to 2014 and ratio analysis is applied to understand the performance of the selected IT companies

COMPANY PROFILE

TCS (founded in 1968) is headquartered in Mumbai, India and is the leading company in IT services and IT consulting in India. Its founder was the much renowned J.R.D. Tata and is currently led by Mr. Natarajan Chandrasekaran at the CEO position. It has around 300,464 employees spread across 46 countries across the world. This company has also been added to the 'Big 4' most valuable IT services brands worldwide with IBM, HP and Accenture. TCS has been able to maintain its number 1 position in Indian IT industry since a long period of time and has also been ranked amongst the top worldwide. TCS and its 59 subsidiaries provide a range of information technology-related products and services including application development, business process outsourcing, capacity planning, consulting, enterprise software, hardware sizing, payment processing, software management and technology education services. Hence, it has been building on more than 40 years of experience, and strives to add real value to global organizations through its domain expertise and world-class service.

Revenue: Rs 47779 Cr.

Infosys (founded in 1981) is led by the renowned Mr. Narayan Murthy and is headquartered in Bangalore, India. It has global presence with 73 offices and 94 development centers in the United States, India, China, Australia, Japan, Middle East, and Europe, giving employment to around 160,405 employees worldwide. Infosys provides software development, maintenance and independent validation services to companies in banking, finance, insurance, manufacturing and other domains. From a capital of about US\$ 250, it has grown to become a US\$ 8.25 billion (FY14 revenues) company with a market capitalization of approximately US\$ 31 billion. Apart from its IT service excellence Infosys has been ranked among the 'Top Ten Greenest Brands in India,' according to a consumer survey conducted in 2011 by Cohn & Wolfe. Infosys has been featured in the 'Green Brands' list for the third consecutive year. Hence, for over three decades, Infosys as a company focused on bringing to life great ideas and enterprise solutions that drive progress for clients **Revenue: Rs 32975 Cr.**

Wipro founded in 1945 by Mr. MH Premji (current CEO Mr. TK Kurien), has 146,053 employees spread across 61 countries. Wipro Limited is a global provider of comprehensive IT solutions and services, including Systems Integration, Consulting, Information Systems outsourcing, IT-enabled services, and R&D services. It is also a value added reseller of desktops, servers, notebooks, storage products, networking solutions and packaged software

for international brands. To focus on core IT Business, it demerged its non-IT businesses into a separate company named Wipro Enterprises Limited with effect from 31 March 2013. This company offers services in healthcare, infrastructure etc. and contributed to around 10% of the profit. Wipro is presently ranked among the top 100 Technology companies in the world. It is the first Indian IT Service Provider to be awarded Gold-Level Status in Microsoft’s Windows Embedded Partner Program and the first in the world to use six sigma. **Revenue: Rs 28312 Cr**

Tech Mahindra is part of the \$12.5 billion Mahindra Group, in partnership with British Telecommunications plc (BT), one of the world’s leading communications service providers. It was founded in 1986 and currently has its headquarters in Mumbai, India. The merger with Mahindra Satyam in the year 2013 has helped it climb the ladder from the number 5 to the number 4 as compared to last year’s statistics and hence now the complete entity has 89,500 employees, servicing 540 customers across 49 countries. It has some well known famous personalities linked with its success, Anand Mahindra was its founder and current chairman and CP Gurnani holds the position of the CEO and MD. Its activities spread across a broad spectrum, including Business Support Systems (BSS), Operations Support Systems (OSS), Network Design & Engineering, Next Generation Net-works, Mobility Solutions, and Security consulting and testing. However, The primary segment of the Company is business segment

by category of customers is the Telecom Service Providers (TSP), Telecom Equipment Manufacturer (TEM), BPO and others, which includes non telecom vertical customers and the secondary segment is the geographical segment by location of its customers **Revenue: Rs 11925 Cr.**

HCL Technologies is a \$5.2 billion global company bringing IT and engineering services expertise under one roof to solve complex business problems for customers. It was founded in 1991 and is currently headquartered in Noida, India and serves around 31 countries worldwide. It has a high resource base of around 90,190 employees. Shiv Nadar and Anant Gupta lead the organization the former as the Chairman and the latter as the CEO and President. HCL Technologies has made it on the Forbes Global 2000 list and is one of Asia’s Fab 50 Companies. “Employees first, Customer Second” is its logo which according to the company acts as an energy booster for its employees and hence helps engaging its employees in a way that allows them to deliver business value – whether it involves enterprise application services, IT infrastructure management, custom application services, engineering and R&D services, business services or enterprise transformation services. **Revenue: Rs 11792 Cr**

STATISTICAL TOOLS USED

☒ **MEAN, STANDARD DEVIATION, And COEFFICIENT OF VARIATIONS** Used to find out the average position of accounting ratios related to Profitability analysis.

5. DATA ANALYSIS AND INTERPRETATION

Table 1: Showing Returns from Long Term Funds of Selected It Companies

Company Name	(%)2014	(%)2013	(%)2012	(%)2011	(%)2010	(%)MEAN	STD DEV (%)	CV (%)
T C S	53.39	48.19	53.63	44.45	42.46	48.42	5.08	10.49
INFOSYS	33.26	34.03	37.28	36	33.69	34.85	1.72	4.92
H C L	47.41	42.05	34.47	20.74	21.71	33.28	11.93	35.85
TECH MAHINDRA	37.29	20.66	18.14	18.07	21.57	23.15	8.06	34.80
WIPRO	32.87	31.11	24.56	25.11	30.12	28.75	3.72	12.92

Source: www.moneycontrol.com.

The returns of TCS company has reflected in almost increasing order over the period of study but only in the year 2013 it has decreased which is 48.19% from 53.68% in 2012, The Infosys Company has shown bullish trend in initial 3 years then it has decreased in the year 2013 & 2014 i.e. 34.03 % and 33.26% respectively.

The return of HCL has decreased in 2011 with 1% and remaining 4 years has recorded better performance. Similarly in case of tech Mahindra there is a gradual increase in returns over the period of the study

and has accounted in increasing trend, whereas the WIPRO Company’s return has decreased in the year 2011 & 2012 and remaining year has performed better i.e. 2013 (31.11%) & 2014 (32.87%)

In case of average returns on long term funds TCS company has comparatively accounted more (48.42) than Infosys (34.85), HCL (33.28) WIPRO (28.75) and tech Mahindra (23.15)

In case of standard deviation the HCL has the greater magnitude of the standard deviation (11.93)



varying from their mean (33.28) which is followed by tech Mahindra (8.06) the TCS has standard deviation (5.08) and Wipro (3.72) which are most representative of its mean but in case of Infosys the standard deviation has recorded (1.72) which is high degree of uniformity of observation & homogeneity in comparison to other companies

The companies HCL & TECH MAHINDRA have more variations & less consistent in return on committed

long term funds i.e. (35.85) & (34.80) respectively similarly the Wipro & TCS have accounted co efficient of variation (12.92) & (10.49) respectively have consistency compare to HCL & tech Mahindra however the Infosys have less variation , more consistency & more homogeneity with co efficient of variation of (4.92)

In case of return on long term funds the five companies which have less CV are ranked below

1 Infosys, 2 TCS, 3 Wipro, 4 tech Mahindra, 5 HCL

Table 2: Showing Returns from Capital Employed of Selected IT Companies

Company Name	(%)2014	(%)2013	(%)2012	(%)2011	(%)2010	(%)MEAN	STD DEV (%)	CV (%)
T C S	53.39	48.07	53.63	44.45	42.46	48.4	5.08	10.50
INFOSYS	31.06	27.65	33.56	20.57	29.76	28.5	4.93	17.30
H C L	47.3	41.71	33.64	20.74	20.44	32.8	12.13	37.02
TECH MAHINDRA	32.61	17.51	16.05	16.18	19.97	20.5	6.97	34.06
WIPRO	29.47	26.72	22.04	22.44	23.06	24.7	3.23	13.05

Source: www.moneycontrol.com.

In case of capital Employed returns also The TCS company has reflected in almost bullish trend over the period of five years but only in the year 2013 it has decreased which is 48.07% from 53.63% in 2012, the returns from Infosys is in zigzag manner and not maintained consistency over the period of study but overall if it is compared to 2010 i.e. 29.76% in the year 2014 it has maintained 31.06% which is somewhat better sign of performance,

In case of HCL initially in 2 years it has maintained same % i.e. around 20 % but in the following years it has reflected in Increasing trend and reached to 47.3% in the year 2014, which shows good growth, whereas in case of Tech Mahindra the returns has not satisfactory level because there is very poor performance over the period of study i.e. hardly 1% increase in 2012 & 2013 but in the year 2014 it has increased to 32.61%, and the WIPRO has shown in increasing trend but very slow growth from 2010 to 2012 there hardly 1 % increase and from 2012 to 2014 there is 3 to 4% i.e. 26.72% & 29.47% respectively.

In case of average return on capital employed TCS company has comparatively accounted more (48.4) than HCL (32.8), Infosys (28.5), Wipro (24.7) tech Mahindra (20.05)

In case of standard deviation HCL has the greater magnitude of the deviation (12.13) varying from its mean (32.8) which is followed by tech Mahindra (6.97) the TCS (5.08), Infosys (4.93) & Wipro (3.23) which are the most representative of its mean

The companies HCL & tech Mahindra have more variation and are less consistent in return on committed capital employed i.e. (37.02), (34.06) respectively

Similarly Infosys and Wipro have accounted CV of (17.30) & (13.05) respectively & are consistent compared to HCL & tech Mahindra however TCS have less variation, more consistent in generating return on capital employed with CV of (10.50)

In case of return on capital employed the companies which have less CV have ranked below

- 1 TCS
- 2 Wipro
- 3 Infosys
- 4 TECH MAHINDRA
- 5 HCL

Table 3: Showing Operating Profit Ratios of Selected IT Companies

Company Name	(%)2014	(%)2013	(%)2012	(%)2011	(%)2010	(%)MEAN	STD DEV (%)	C V (%)
T C S	33.29	29.54	29.3	29.93	28.93	30.20	1.77	5.85
INFOSYS	22.07	21.73	22.5	24.07	25.76	23.23	1.68	7.22
H C L	44.31	36.67	28.18	22.31	27.83	31.86	8.65	27.14
TECH MAHINDRA	21.85	19.63	16.52	19.14	24.38	20.30	2.96	14.60
WIPRO	23.5	20.86	19.07	21.9	24	21.87	2.00	9.16

Source: www.moneycontrol.com.

The TCS Company has maintained consistency without continuous increase in the 3 years i.e. from 2011 to 2013 around 29% from 28% in 2010 and in 2014 it reached 33.29% which shows regular returns but not at satisfactory level, whereas INFOSYS has accounted decreasing trend and has shown 22% in 2014 which was 25% in 2014, which is sign of poor performance,

In case of HCL the overall performance is good because there is increasing trend, i.e. 27.83% in 2010 and increased to 44.31% in 2014, but the returns of TECH MAHINDRA has reflected in zigzag manner and compare to 2010 there is decrease in 2014 i.e. 21.85 % from 24.38%, which shows poor performance, similarly WIPRO reflected very low returns from operating and almost in decreasing trend i.e. 23% in 2014 from 24 in 2010 which is not satisfactory level.

In case of average operating profit HCL has comparatively accounted more (31.86), than TCS (30.20), Infosys (23.23), wipro (21.87) tech Mahindra (24.38)

In case of standard deviation also HCL has greater magnitude of deviation (8.64) varying from its mean (31.86) then tech Mahindra has standard deviation of (2.96) followed by Wipro (2.00) TCS (1.77) and Infosys (1.68) which are the most representative of its mean

HCL & TECH MAHINDRA have more variation & are less consistent in case of operating profit with CV of (27.14) & (14.59) respectively , then Wipro and Infosys have shown CV (9.16) & (7.21) respectively which are consistent in compare to HCL & TECH MAHINDRA but TCS has less VARIATION more consistent & more homogeneity in comparison to rest of the companies with CV of (5.85)

The below ranking has been given to the companies according to the less CV

- 1 TCS
- 2 infosys
- 3 wipro
- 4 Tech Mahindra
- 5 HCL

Table 4: Showing Net Profit Ratios of Selected IT Companies

Company Name	(%)2014	(%)2013	(%)2012	(%)2011	(%)2010	(%)MEAN	STD DEV (%)	C V (%)
T C S	27.25	25.24	26.42	25.42	24.13	25.69	1.19	4.64
INFOSYS	21.72	23.38	25.6	24.28	26.36	24.27	1.83	7.55
H C L	34.88	28.72	21.18	17.21	20.18	24.43	7.22	29.54
TECH MAHINDRA	16.4	11.04	8.75	13.95	16.43	13.31	3.38	25.37
WIPRO	18.29	16.35	14.23	17.95	20.97	17.56	2.49	14.20

Source: www.moneycontrol.com.

The TCS Company has shown increasing trend over the period of five years except in the year 2013 i.e. it has decreased from 26.42% in 2012 to 25.24% in 2013. whereas Infosys has shown decreasing trend over the period of the study except in the year 2012 i.e. it has increased to 25.6% from 24.28% in 2011

The performance of HCL is satisfactory as it has continuously increased over the period of 5 years except in 2011 i.e. There is 3% decline but compare to 2010 in the year 2014 it has increased to 34.88 which is sign of better performance, In case of TECHMAHINDRA the overall performance is not acceptable because there is poor increase in the return over the period and compare to

2010 and 2014 the ratio remains the same, similarly WIPRO has not recorded much better performance but from 2012 to 2014 there is a gradual increase in returns with 2%.

In case of average returns from net profit of TCS company recorded more when compare to other companies i.e. (25.69), then followed by HCL (24.43), Infosys (24.27), Wipro (17.56), but tech Mahindra has shown low average returns among the five companies from net profit i.e. (13.31)

HCL has shown greater magnitude of the deviation varying from its mean with STANDARD DEVIATION (7.22), where as tech Mahindra , Wipro, Infosys, & TCS , has shown less deviation i.e. (3.38), (2.49), (1.83), (1.19), respectively which are the most

representative of its mean

HCL & tech Mahindra has shown greater CV which reflects both have more variation & are less consistent in case of net profit with (29.54) & (25.37) respectively where as wipro is consistent when compare to HCL & tech Mahindra but however infosys & TCS have less variation more consistent & more homogeneity with CV of (7.55)& (4.64) respectively

The below companies has been ranked which are with less CV in case of net profit

- 1 TCS
- 2 INFOSYS
- 3 WIPRO
- 4 TECH MAHINDRA
- 5 HCL

Table 5: Showing Gross Profit Ratio of Selected IT Companies

Company Name	(%)2014	(%)2013	(%)2012	(%)2011	(%)2010	(%)MEAN	STD DEV (%)	CV (%)
T C S	31.62	27.88	27.52	28.09	26.89	28.40	1.86	6.54
INFOSYS	24.07	25.62	26.53	27.07	29.59	26.58	2.03	7.65
H C L	41.34	33.14	24.21	18.02	22.43	27.83	9.34	33.58
TECH MAHINDRA	19.23	17.01	13.65	16.36	21.49	17.55	2.97	16.92
WIPRO	21.6	18.75	16.71	19.62	21.47	19.63	2.04	10.37

Source: www.moneycontrol.com.

Here also in case of gross profit the TCS shown that there is a slow increase in the returns over the period but in 2012 and 2013 there is less than 1% increase so it is not sign of high performance, but INFOSYS has shown decreasing trend i.e. every year there is 2 to 1% decline which is very poor performance as far as returns from gross profit ratio is concerned, the overall performance of HCL has recorded increasing trend except in the year 2011 there is 4% decrease compare to 2010,

The returns from TECH MAHINDRA reflected in zigzag manner but compare to 2010 the returns in 2014 has decreased i.e. 19.23% from 21.47%, similarly WIPRO represents same trend but compare to 2010 in 2014 it has maintained its return which was same i.e. around 21%.

TCS company has shown more average returns in case of gross profit i.e., (28.40) which is followed by other companies i.e. HCL (27.83), INFOSYS (26.58), but tech Mahindra & WIPRO has shown low average returns with (19.63)& (17.55) respectively in case of gross profit

In case of standard deviation the HCL has the greater magnitude of the deviation (9.34) from its mean (27.83) whereas other four companies has recorded the standard deviation of (2.97),tech Mahindra, (2.04) wipro, (2.03) Infosys, (1.86) TCS, which is high degree of uniformity of observation & homogeneity in compare to HCL company

Here in case of gross profit HCL has more variation & are less consistent with the CV of (33.58) similarly the tech Mahindra & Wipro have accounted CV of (16.92)&(10.37) respectively & have consistency compare to HCL, but Infosys & TCS are less variant & are more consistent & more homogeneity with CV OF (7.65) & (6.54)

The companies are ranked which have less CV in case of gross profit

- 1 TCS
- 2 Infosys
- 3 Wipro
- 4 tech Mahindra
- 5 HCL

FINDINGS OF THE STUDY

- ☐ The overall performance of TCS as per profitability ratios are in increasing trend in the span of 5 years the maximum is around 10% which is in case of returns from long term funds, & capital employed funds and the minimum is around 5% in case of other ratios, & it has been ranked no 1 on the basis of less variation and more consistent in overall returns.
- ☐ The Infosys has not performed well only in case of returns from capital employed there was a slight increase in the span of 5 years i.e. around 1% but in case of other profitability ratios there is a decrease over the period of study i.e. around 3 to 5%.
- ☐ The analysis revealed that HCL Company has performed well with rapid increase in the profitability ratios around 15 to 20% in the span of five years.& it has been ranked last i.e. no 5 on the basis of more variation and less consistent in overall returns.
- ☐ As per The analysis the overall performance of Tech Mahindra are in bullish trend in the span of 5 years the maximum is around 10% to 15% which is in case of returns from long term funds, & capital employed funds and the minimum is around 2% to 3% in case of other ratios.

- ☞ The performance of WIPRO is not much satisfied as there is only a increase of 6% in returns from capital employed and 2 % in long term and net profit in the span of 5 years.
- ☞ The TCS has maximum average of 48% in case of returns from long term funds & capital employed and lowest of 25% in case of net profit ratio.
- ☞ The average of Infosys has maximum of 34% from long term returns and minimum of 23% from operating profit.
- ☞ HCL has more average returns from long term funds i.e. 33% and fewer returns from net profit i.e. 24%.
- ☞ TECH MAAHINDRA has highest average returns from long term funds i.e. 23% and lowest returns from net profit i.e. 13%.
- ☞ WIPRO shown maximum average returns of 28% from long term funds and minimum of 17% in case returns from net profit ratios.
- ☞ All 5 companies has more average returns from long term funds compared to other ratios.
- ☞ In case of net profit ratios all 4 companies except Infosys showed lowest returns than rest of the ratios.

SUGGESTIONS

- The TCS should pay more attention towards operating profit , net profit, and gross profit where it has low returns by reducing the direct and indirect expenses Because effective and efficiency performance of company can be measured in terms of profitability. Expenses are the major direct impact on the profitability of every Enterprise.
- The Infosys should be more vigilant about its profitability ratios because it has failed to make more earnings compared to TCS so they should give concentration to cut off expenses like direct and indirect expenses.
- The HCL has achieved fastest growth rate in past five years, while compared to other companies they should also give importance to enhance the earning power with help of growth rate.
- The Tech Mahindra may sustain with its growth rate where overall ratios are in increasing trend so they should more conscious about competitors and pay attention to its growth rate to maintain sustainability with reference to net, gross, and operating profit.

- WIPRO has low % in gross and operating profit ratios compared with HCL however it can earn more profit or achieve high profit volume and have better performance if they concentrate on relevant factors like expenses and utilization resources.

CONCLUSION

India is the world's largest sourcing destination for the information technology (IT) industry, accounting for approximately 52 per cent of the US\$ 124-130 billion market. The industry employs about 10 million Indians and continues to contribute significantly to the social and economic transformation in the country.

The IT industry has not only transformed India's image on the global platform, but has also fuelled economic growth by energizing the higher education sector especially in engineering and computer science. India's cost competitiveness in providing IT services, which is approximately 3-4 times cheaper than the US, continues to be its unique selling proposition (USP) in the global sourcing market.

After the analysis of various data, related to IT companies in India Found in theoretical statement, it is clear that profitability more or less depends upon the better Utilization of resources, cutoff expenses and quality of management function in the products, Customer services and to manpower and goodwill and market share. It is worthwhile to increase production capacity and use advance technology to cut down cost of production and wage cost in order to increase profitability, not only against the investment, but also for investor's return point of view. These programs are helpful to increase profitability of selected IT companies in India in future prospects.

REFERENCES

1. Dr. S.K. khartik Titto Varghese, *Profitability Analysis of Public Sector Undertaking: A Case Study of Hindustan Newsprint Limited (HNL), The Management Accountant, November 2011. Vol.46. No.11, pp.1067-1073.*
2. Myers S.C., (1984), *The Capital Structure Puzzle, Journal of Finance, 34(3), pp.575-592. OECD, (2000), the OECD Small and Medium Enterprises Outlook, 2000 edition, pairs, OECD.*
3. Abdul Raheman, „*Working Capital Management and Profitability -Case of Pakistan Firms, International Review of Business Research, vol.3, No.2, March (2007), pp. 275-296.*

Websites:-

1. www.tataconsultancyservices.com.
2. www.moneycontrol.com.
3. www.infosys.com.
4. www.hcl.com.
5. www.techmahindra.com.
6. www.wipro.com.

