

THE COMPETITIVENESS ITeS AND IT FIRMS OF INDIA

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Abstract

The world today has become one global village due to the widespread use of Information Technology in almost every aspect of our lives. The software and services industry, a trillion dollar industry has contributed tremendously towards the growth of the world economy. It has facilitated the process of transforming India's image from a slow moving bureaucratic economy to a land of innovative entrepreneur's and a global player in providing world class technology solutions and business services. With a strong policy support and reforms, the ITeS & IT firms of India have made their impact in the international, market of software industry. The traditional restricted software firm's policies have been liberalized and this has enabled the firms to contribute not only towards the foreign exchange earnings but has been playing an important role in the process of economic development. But the question arises as to whether all the firms are equally competitive or not. The present research has analysed the competitiveness of the top 20 software firms of India in terms of 17 variables. The study has found that all the firms are not equally competitive and differ widely in terms of their competitiveness at the national level.

Keywords: ITeS, Competitiveness, Software, Efficiency & Employee

1. INTRODUCTION

The world today has become one global village due to the widespread use of Information Technology in almost every aspect of our lives. The software and services industry which is a trillion dollar industry have contributed tremendously towards the growth of the world economy. It is widely believed that the software industry offers developing countries a unique opportunity to break the shackles of economic under- development existing in its different forms.. It has facilitated the process of transforming India's image from a slow moving bureaucratic economy to a land of innovative entrepreneur's and a global player in providing world class technology solutions and business services (Nasscom, 2011 Report).

The share of the IT and ITeS industry has increased from 1.2% in 1998 to 7.5% in GDP in 2012 and is estimated to touch 9.5% in 2015. (Nasscom, Report 2014). The public limited companies accounted for 63.6% of the total software services exports during 2013-14, with an annual growth rate of 14.1%. Whereas the private limited companies accounted for 36% with an annual growth rate of 22.4%. Further in terms of type of software services, the %age share of on-site services decreased from 20.7% in 2010-11 to 17.8% in 2011-12. However it increased to 19.8% in 2013-14. Unlike this, the %age share of off-site services increased from 79.3 in 2010-11 to 80.2% in 2013-14. It should be noted that when the Indian economy was affected by the global slowdown in 2009, the software industry displayed resilience and tenacity in combating the volatile conditions and posted a growth of 16.5% in the year 2009 with an estimated value of USD 26.9 billion. The Indian software industry enjoys a very distinct advantage of a stable political environment, favorable government policies, a large base of English speaking graduates, healthy relationship with existing global clients, telecom infrastructure and different industry lobbies, with the most important being, the NASSCOM - National Association of Software and Services Companies,. Besides this, the Indian software industry also boasts of low cost advantage, variety of service offerings from low-end application development to high-end integrated IT solutions, high quality of service offerings and maturity in processes (India hosts more than 55% of "SEI CMM Level Five" firms and the highest number of ISO certified companies).In 2005-06, among the 401 firms that reported different quality standards, 82 had SEI CMM Level Five , the highest level of quality accreditation across the globe. As many as 123 firms had SEI CMM Level Two certification or above and 330 had ISO 9001(Joseph, 2007). Today, the Indian software industry contributes to more than 8% towards GDP (*statista.com*) with 45% of incremental urban employment (both direct and indirect). Thus the software industry has been hailed as one of the emerging successful industry, with lots of its economies, benefitting the country at a macro level as well as the firms being the subject of the software industry at a micro level.

The composition of the software industry in India however consists of small, medium and large scale firms, all together making its mark in the international market of software services. The Nasscom has adopted the revenue criteria for dividing the firms into small, medium, large and institutional. I.e. Large companies are those with a gross revenue of over ` 200 crores, Medium companies are those with a gross revenue between ` 50 - ` 200 crores and small Companies are defined with a gross revenue of less than ` 50 crores . Further it should be noted that out of the total IT firms registered at Nasscom, 64% were catering to IT services, 22% to BPO, 32% to product development, 10% to engineering and embedded services and 20% others (Nasscom

Annual Report, 2014-15). Further at the global level, the Indian IT firms had 580 delivery centers till 2012 in 75 countries. The top six IT firms (TCS, Wipro, Cognizant, Infosys, HCL tech and Tech Mahindra) accounted for 36% of the total industry revenue.

II. OBJECTIVE OF THE STUDY

To analyse the competitiveness of software firms of India in terms of select parameters such as Revenue, operating expenses, employee cost, ratios, management efficiency, liquidity and solvency etc.

III. THEORETICAL BACKGROUND

Significance of different criteria of competitiveness changes with time and context. Theories and frameworks must be flexible enough to integrate the change with key strategic management processes if their utility is sustained in practice. Research efforts towards competitiveness have brought many interesting perspectives and frameworks at the country, industry and firm level. Competitiveness is a multidimensional and relative concept and the significance of the factors of competitiveness change with time and context (Ambastha and Momaya 2004). However, there is more or less a consensus on which measures could be used to assess competitiveness.

Measurement can be made according to two disciplines: i) the neoclassical economics, which focuses on trade success and which measures competitiveness with the real exchange rate, comparative advantage indices, and export or import indices; and ii) the strategic management school places, which places emphasis on the firm's structure and strategy. In the latter, competitiveness is defined as cost leadership and non-price supremacy; with cost competitiveness measured according to various cost indicators, as well as productivity and efficiency.

Competitiveness can be at three levels, at the basic firm level, the industry level and the country level. Some academics believe that country and industry are mere facilitators and it is firm level competitiveness that is important. The sources of competitiveness are the assets and processes within an organisation that provide competitive advantage (Ambastha and Momaya 2004a). Michael Porter's work on competitive positioning is also about firm level competitiveness measured by productivity growth either by cost leadership, differentiated products or focus.

The Indian software firms today, have to compete on two fronts; at the global market – as majority of its revenue comes from exports and at the growing domestic market. The intense level of global competition faced is a huge push factor for enhancing firm-level competitiveness. This has compelled the firms to constantly increase performance standards in many dimensions, including quality, cost, productivity, product introduction time, and smooth flowing operations. At the domestic front, both competition and cooperation are witnessed. As the domestic market grows, the inter-firm competitiveness is getting stiffer but the regulated trade environment leads to many synergetic alliances as well.

IV METHODOLOGY

The present study is with a purpose to know the competitive strengths of the top eleven software firms at the national level, in terms of the various variables that keep the capacity to influence the competitive sustainability of the firms to become leaders in the Software market at the national level.

An analysis has been done with the help of total 17 variables for top 17 firms. In order to bring about the uniformity in the database and to bring about the relative competitiveness of the software firms in the national software market, a new index is created based on three sub-indices, namely, Profitability Index, HR Efficiency Index and Management Efficiency Index. These three sub-indices go to make the National Competitive index for software firms of India. The Profitability Index is, obtained in terms of five crucial variables such as Operating income, sales, return on capital employed etc. (Bi, Bii, Biii.....Bn) whose mean scores on are obtained for top 20 firms. All the values of the given variable at a time are then averaged for the period of thirteen years (2000-13) to get an individual value of the given variable for the firm concerned. Similarly the HR & Efficiency Indexes are prepared with the help of 7 & 9 variables. A New National Competitive Index has been prepared with the help of these 17 variables.

V COMPETITIVENESS

Efforts to understand the problems of slow competitiveness journey in context of the software industry in India identified low clarity about the competitiveness concept and weak integration of competitiveness processes with traditional processes. Competitiveness comes through an integrated effort across different functions and hence has close linkage with strategy process. Firm level competitiveness is of the greatest interest among practitioners and has attracted the maximum attention of researchers among the three levels of competitiveness: country, industry and firm. Many researchers and authors have time and again written about the importance of firm level competitiveness. Nations can compete only if their firms can compete, argues Prof. Christensen of Business Administration at the Harvard Business School. Prof. Porter says 'it is the firms, not nations, which compete in international markets' (Porter, 1998). The firms actually compete in the global arena and face the direct competition.

VI. ANALYSIS

The study has evaluated the competitiveness of the ITeS and IT firms in terms of select variables. The brief analysis has been explained as follows.

Table 1 Profitability Index

P1 - Operating Profit Margin, P-2 - Return On Capital Employed, Mean Revenue/Mean Gross Revenue					
2000-01 - 2012-13	P1	P2	P3	Total	Profitability Index
TCS	27.07	68.10	21.68	116.85	23.37
Infosys	34.18	44.36	15.50	94.04	18.81
HCL	29.07	25.45	8.58	63.10	21.03
Wipro	23.39	29.19	41.77	94.35	31.45
Polaris	16.61	21.93	1.10	39.64	13.21
Cyient	24.95	24.63	0.42	50.00	16.67
Hexaware	19.01	23.95	0.47	43.43	14.48
Mphasiz	24.74	21.99	2.62	49.35	16.45
Tech Mahindra	25.32	45.73	2.67	73.72	24.57
Mindtree	12.69	14.72	0.80	28.21	9.40
Zensar	19.32	26.61	0.30	46.23	15.41
Tata Elix	19.67	45.68	0.30	65.66	21.89
Igate	19.86	16.99	0.58	37.43	12.48
Oracle Fin. Tech	38.25	25.10	1.62	64.97	21.66
KPIT	18.32	18.18	0.34	36.84	12.28
NIIT	16.37	13.87	0.56	30.80	10.27
Geometric	30.39	17	0.17	47.56	15.85
3i Infotech	57.31	7.52	0.34	65.17	21.72
Ramco	8.42	-2.57	0.12	5.97	1.99
Blue Star Info	0.48	31.28	0.09	31.85	10.62

Source : Compiled by Author

P- Operating Profit Margin, P2-Return on Capital employed, P3-Total revenue Avg/Gross Avg

The data has been collected and averaged to get the mean score of each firm over a period of 13 years. Such a process is done for all the three variables, but except in the case of Total revenue whose average is taken in relation to the gross average of all the firms under study.

Human Resource Index Table 2

	H1	H2	H3	H4	H5	Total	HR Index
TCS	44.00	58.40	35.68	27.08	0.10	165.27	33.05
Infosys	50.31	69.56	46.75	17.85	0.17	184.64	36.93
HCL	22.11	54.54	37.94	12.44	0.01	127.04	25.41
Wipro	33.21	43.96	33.98	21.01	0.00	132.16	26.43
Polaris	52.23	62.31	52.87	11.69	1.71	180.81	36.16
Cyient	41.61	58.55	42.78	7.53	3.54	154.00	30.80
Hexaware	37.13	7.98	46.00	30.62	0.22	121.96	24.39
Mphasiz	41.37	56.53	42.52	11.60	0.04	152.06	30.41
Tech Mahindra	40.09	48.17	40.83	6.70	0.00	135.80	27.16
Mindtree	34.29	41.00	34.32	13.02	7.46	130.08	26.02
Zensar	52.65	66.90	55.05	8.60	0.03	183.24	36.65

Tata Eli	47.59	59.37	47.54	14.49	8.20	177.20	35.44
NIIT	22.27	28.77	24.08	17.07	0.03	92.22	18.44
Oracle	39.35	61.94	41.30	21.49	0.02	164.10	32.82
KPIT	17.29	21.59	17.41	12.58	0.119547	69.00	13.80
Geometry	47.32	60.50	51.75	7.56	0.07	167.19	33.44
iGate	68.41	76.39	70.82	12.45	0.02	228.09	45.62
Blue Star	45.51	54.36	46.84	13.17	0.16	160.05	32.01
Ramco	108.80	54.78	52.24	5.60	0.12	221.54	44.31

Source : Compiled by Author

The HR index has been prepared in table 2 for the top IT service providers. The firm Infosys has been found to be at the top with an index of 36.93, followed by Infosys, Zensar, Cyient and TCS. It should be noted that the variations in the HR factors have been basically due to its variations in the employee cost of various software firms.

Table 3 Management Efficiency Index

Firm	M1	M2	M3	M4	M5	M6	M7	M8	M9	Total	Average
TCS	2.30	2.35	0.81	5.85	2.03	2.66	48.89	37.58	58.58	161.05	17.89
Cyient	3.34	3.48	17.37	4.21	0.86	0.92	87.12	12.94	91.13	221.37	24.60
HCL	2.10	2.11	41.52	4.73	0.92	0.92	34.32	60.03	46.24	192.88	21.43
Hexaware	3.32	3.32	18.49	3.81	0.75	0.76	63.23	35.81	70.13	199.63	22.18
Infosys	3.84	3.80	76.03	7.06	1.18	1.35	65.88	34.05	70.11	263.30	29.26
MindTree	2.70	2.88	3.16	5.17	1.85	1.88	94.52	8.82	95.95	216.91	24.10
Mphasis	2.36	2.38	19.60	5.21	0.86	0.93	66.21	32.95	69.82	200.31	22.26
Polaris	2.53	2.59	15.17	5.92	1.43	1.51	65.56	36.30	79.04	210.06	23.34
Tech Mahindra	1.91	2.08	24.14	4.36	1.90	3.25	73.58	28.59	78.34	218.17	24.24
Wipro	1.91	2.09	0.14	1.08	48.09	2.71	79.97	26.55	81.69	244.24	27.14
Zensar	3.18	2.99	8.01	4.19	1.47	1.59	71.10	27.37	77.98	197.89	21.99
Tata Elixi	1.33	1.71	14.97	4.31	3.00	2.82	43.30	58.16	56.86	186.47	20.72
Mphasiz	2.36	2.38	19.60	5.21	0.86	0.93	66.21	32.95	69.82	200.31	22.26
KPIT	1.32	3.55	0.38	4.07	1.74	1.39	88.35	11.22	91.36	203.40	22.60
NIIT	2.55	2.63	19.92	4.70	5.02	1.71	66.14	33.24	72.74	208.66	23.18
Oracle	5.37	5.34	72.03	2.33	0.66	0.75	94.99	2.15	95.81	279.43	31.05
Geometric	2.22	2.78	2.81	5.50	0.85	1.02	115.64	21.88	73.95	226.64	25.18
3i Infotech	2.60	2.66	20.09	4.60	5.31	1.67	70.34	30.50	73.85	211.62	23.51
Ramco	1.18	2.70	0.81	2.04	0.63	0.35	94.66	10.06	35.32	147.74	16.42
Blue Star	2.39	2.39	0.08	3.67	1.45	1.53	56.04	42.70	65.47	175.71	19.52

Table 3 indicates the relative positioning of different software firms under study. The management Efficiency Index has been prepared in terms of nine variables which are said to influence the stakeholders, usually that of shareholders interest. Variables such as liquidity, solvency, efficiency and flow of cash have been taken to construct a sub index. Thus in Table 3, it can be seen Oracle has been the frontrunner, followed by Infosys, Wipro, cyient, MindTree etc.

VI. National Competitive Index for Software Firms: A number of parameters have been studied to analyse the competitive abilities of the firm across India as well as that across the globe. Different research studies have taken mostly the HR component of the organizations to influence the competitive strength of the firms. However the study has undertaken new variables for HR index in terms of liquidity, solvency, profitability, efficiency have etc. The National competitive Index is an attempt to measure the competitiveness of the software firms across India. This index has taken all the 17 variables in terms of three indices namely Profitability Index, Human Resource Index and Management Efficiency Index. The Index has been constructed in terms of the average of the aggregates of all the three indices divided by seventeen.

Table 4 National Competitive Index

National Competitive Index					
	Profitability Index	HR Index	Management	NCI	Ranking
TCS	9.02	33.05	17.89	3.53	15
Infosys	9.11	36.93	29.26	4.43	4
HCL	21.03	25.41	21.43	3.99	10
Wipro	31.45	26.43	27.14	5.00	2
Polaris	13.21	36.16	23.34	4.28	7
Cyient	16.67	30.80	24.60	4.24	9
Hexaware	14.48	24.39	22.16	3.59	13
Tech Mahindra	24.57	27.16	24.24	4.47	4
Mindtree	9.40	26.02	24.10	3.50	14
Zensar	15.41	36.65	22.02	4.36	6
Tata Elixir	21.89	35.44	20.72	4.59	3
Mphasis	16.45	30.42	22.26	4.07	8
KPIT	12.28	13.80	22.60	2.86	17
NIIT	10.27	18.44	23.18	3.05	16
Oracle	21.66	32.82	31.05	5.03	1
Geometric	15.85	33.44	25.18	4.38	5
Ramco	1.99	44.31	16.42	3.69	11
Blue Star	10.62	32.01	19.52	3.66	12

VII FINDINGS OF THE STUDY

- In terms of Profitability Variable of operating Profit Margin, Infosys Company has been found to be highly efficient, closely followed by TCS with an average of 32.18 and 28.67 of the latter over a period of 13 years.
- In terms of Return on Capital employed, TCS leads with 51% followed by Infosys and Tech Mahindra with 37%. In terms of Revenue Earning Capacity, TCS leads followed by Wipro.
- The Revenue per Employee has been on an average of 15%, with Hexaware at the top followed by TCS and others.
- As far as Payroll to Sales Ratio, Mindtree has been at the top, followed by Cyient, with no competitors nearby.
- In terms of HR index, Infosys is at the top, followed by Zensar, TCS.
- In managing the assets, liabilities, cash etc, Wipro has been leading from the front, followed by Cyient, Infosys, and Mindtree etc.

VIII CONCLUSION

The software firms have made its impact in the international market. Many of the firms are competing among themselves. Some firms have done much better in terms of revenue, rate of return etc. There has been no uniformity in the relative performances of all the seventeen firms at different parameters. Some of the firms which have been in existence since for a long period of time have no doubt dominated, but in terms of the overall National competitive Index, Oracle Financial Technology, Wipro, Tata Elixir, Infosys has been at the top five of all as the leading software firms. Thus the concept of being competitive differs from being at the forefront in revenue earnings and the market shares. The firms which have been very dynamic in terms of their strategies and policies have found themselves at the lead in the race of being competitive.

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