



## **Top Four Indian IT Companies: Financial Investigation**

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### **Abstract**

This case aims to explain to the students about the various methods for the valuation of a company, get a deep understanding of analyzing the company's financial statements, and base their financial /investment decisions on such analysis. The case starts with the detailed background of India's information technology (IT) industry along with that of the Top 4 ITs and information technology-enabled services (ITeS) companies of India by reviewing their history since incorporation, product and services offerings, revenue, margins, assets, borrowings, and market capitalization. Particularly interested in the current financial position, market position, strategies of the companies, and its peer group.

**Keywords:** DuPont analysis, financial performance, ratio analysis, IT companies, efficiency.

While winding up his routine day of work from home during the nationwide lockdown, Tushi Sharma,<sup>1</sup> an investment consultant, got a call from his boss Mr. Anil Deshmukh<sup>2</sup>- the vice president of his mutual fund investment firm. As the weekend was approaching, Anil asked Tushi to perform a little work exercise over the weekend. Anil received requests from various investors to diversify their portfolio and some investment advice in India's information technology (IT) and information technology-enabled services (ITeS) sectors. As the pandemic worldwide has hit hard on the general supply chain in the manufacturing and service industries, people were now looking towards the IT and ITeS sectors to safeguard their money value. Watching this trend amongst the investors' Anil wanted to act proactively and plan for investment in this sector. Therefore, he needed Tushi to analyze the performance of some of the major players in this sector (*see Table 2*) and assess the best investment opportunity. Anil was impressed with the performance of Tushi during the lockdown period and had a secondary motive in mind by assigning him this work. He was appraising his performance for a promotion. So, he asked him to enjoy the weekend and devote some time out of his weekend to the project and apprise him of the progress in an afternoon meeting on Monday.

Tushi was a self-motivated employee who was always looking forward to new projects. Performing routine tasks from the past few days, he was craving for some new tasks to complete. So, rather than relaxing after a day of work, he immediately started to collect the relevant information required for the job to accomplish.

He could narrow down his choice to the top 4 IT companies- Tata Consultancy Services (TCS), HCL Technologies, Wipro, and Infosys based on the size. Tushi was trying to anticipate the valuation of these IT companies (Ross, 1976). Adding these stocks to his portfolios could be a good option for investors and management as they were also listed on the Bombay Stock Exchange (BSE) (*see Table 3*). While exploring different IT companies listed on BSE as the potential places to reinvest the money, Tushi anticipated that given the recent announcement, IT company's share prices would rise rapidly, so he needed to act fast to mitigate value loss for his investors.

Tushi was interested in investing in this sector to maintain the diversification of the portfolio. However, in a brief discussion, Anil had already expressed that he felt that size, income, and revenue of the company might not be the most appropriate criteria to shortlist companies, so he needed a detailed analysis before finalizing any investment decision (Brealey et al., 1999) (Scott et al., 1999). Hence, Tushi started to carefully analyze the IT and ITeS sector and each shortlisted company regarding their background and financial performance and prepared the following database of the industry and the company.

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<sup>1</sup> Names are for illustrative purpose only

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## Industry and Company Background

The IT and ITeS companies revamped their business models to take active control of branding, sourcing, services, distribution, pricing, and promotion, operate closer to customers' homes and offer member-customers a range of services<sup>i</sup>. Consequently, Indian IT & ITeS companies had set up over 1,000 global delivery centers in about 80 countries worldwide<sup>ii</sup>. The information technology and business process management (IT-BPM) sector in India generated US\$177 billion<sup>iii</sup> in 2019, witnessing a growth of 6.1% year on year. It was estimated that the size of the industry would expand to US\$412<sup>iv</sup> by 2025. The IT industry employed 4.1 million people as of FY19. According to At Kearney global service location index-2019, India occupied the topmost position,<sup>v</sup> followed by China and Malaysia since the study's inception in 2004. Centre for Monitoring Indian Economy (CMIE) surveyed 128 software companies' top five companies account for 86.4% of the industry's total sales. Tata consultancy services, the largest company, reported a rise in net sales of about \$3.2 billion in 2019 over the previous year (*see Table 1*).

The banking, financial services, and insurance (BFSI) sector account for a significant chunk of overall tech services revenues, and it had been relatively weak for the past few quarters. The tech spends of BFSI clients, particularly in the US and Europe, impacted the software industry's earnings. Moreover, retail segment performance was muted as clients turned cautious because of perceived risks stemming from trade wars and geopolitical tensions. Among the high operating cost, heads, salaries, and wages account for 58% of the computer software industry's total expenses. Expenses on salaries and wages increased by 11.9% in the September 2019 quarter compared to the corresponding quarter last year.

TCS and Infosys, the top two companies in our sample, reported an increase in salaries and wages by 9.42% and 11.75%, respectively. TCS added 14,097 jobs during the September 2019 quarter, marking the highest number of employees that the company has onboarded in a quarter. Also, Wipro's salaries and wages increased by 10.36% in the September 2019 quarter. Moreover, other industry expenses increased by 5.1% in the said quarter on a y-o-y basis. Effectively, the sector's operating costs increased by 8.8% in the September 2019 quarter compared to the corresponding quarter last year.

The decrease in revenue impacted the industry's operating profit; it grew by a mere 1.4% in the September 2019 quarter. The industry's operating margin contracted by 141 basis points to 25.5% in the September 2019 quarter. TCS saw its active margin contract by 140 basis points in the said quarter. This was on account of a wage hike, the strong rupee against the US dollar, high attrition, and visa costs, as per the company. The contraction in margins at the operating level percolated to the net level as well. As mentioned above, the industry's net profit margin contracted 80 basis points to 20.5% in the quarter. This was on account of an increase in the post-operating expenses of the industry. Interest expenses and depreciation rose by 62.8% and 39.6% in the September 2019 quarter on a y-o-y basis. Total tax provisions of the sector declined by 4.6% in the said quarter. The industry noticed a 19% growth of other incomes in the September 2019 quarter. Going ahead, Infosys expects the financial performance of the company to be affected in the next couple of

quarters. According to the company, sluggishness in capital markets and the European banking space will be driven by sluggishness. On the other hand, TCS is optimistic as the company's order book in the September 2019 quarter turned out to be the highest in the last six quarters.

**Table 1: Quarterly financial performance of software companies in India**

quarter	total income	net sales	operating profit	net profit	operating profit margin	net profit margin
Y-o-Y % change						
Mar-18	7.26	7.85	8.56	11.49	24.94	20.05
Jun-18	13.61	14.77	17.11	5.80	25.63	19.93
Sep-18	17.10	17.28	18.74	16.63	26.84	21.29
Dec-18	15.16	16.56	9.68	-2.71	24.88	19.59
Mar-19	17.04	16.58	-1.43	-3.78	21.22	16.71
Jun-19	9.97	8.90	6.42	4.80	25.07	19.27
Sep-19	7.57	6.99	1.39	3.54	25.45	20.50

Source: Center for Monitoring Indian Economy (CMIE) database; industry outlook; assessed on 15-April 2020; Created by the case writers using data from CMIE industry outlook database

### Financial performance

Tushi gathered desirable financial information from secondary sources to conduct appropriate analyses and assist Anil in taking the investment call. He felt all three statements, namely financial statements (*see Exhibit 1*) and income statements (*see Exhibit 2*), and the cash-flow statements (*see Exhibit 3 & 4*), could be beneficial. He had also reviewed the application of traditional DuPont decomposition and alternate DuPont analysis using gathered information. He also applied various valuation ratios and free cash flow to the available set of data. How would the data lead to the final decision, he was wondering?

The alternate DuPont decomposition approach separated a company's return on equity (ROE) into three factors: (1) how profitably a company employed its assets to produce revenue; (2) the margins the company was making relative to sales; and (3) how extensive the firm's asset base was the relation to shareholder's equity in the firm, total assets to its total shareholder's equity including reserves and surplus.

- TCS performs better in return on capital employed (ROCE), return on long-term funds (ROLTF) & dividend per share. Still, HCL has a higher operating profit margin (OPM), profit before interest, and tax (PBIT), gross margin (GM), and net profit margins (NPM).
- Infosys outperformed in terms of liquidity and solvency, followed by HCL, TCS, and Wipro.
- Return on assets (ROA), for TCS 73.72%, HCL's 33.76%, Infosys's 23.73% and Wipro 18.69% respectively.
- Overall, TCS performed well in terms of management efficiency ratios.

### **Theoretical background**

Lots of research have been done in the area of accounting anomaly, information, and fundamental analysis. Many researchers, graduate students, and independent analysts are currently doing different types of research in the domain of accounting and financial valuations (Anthony et al., 2016). In this study, we are trying to identify companies based on DuPont analysis's fundamental ratios to determine their financial performance. Based on this, we can recommend them further. Early research in the field focused on earnings; the works of (Ball & Brown, 1968) and (Beaver, 1968) were the founders of the research between capital market behavior and financial statements. Both studies report that there is a significant positive relationship between changes in earnings and stock returns. (Frankel & Lee, 1998) inferred that the market's reaction to an earnings announcement is anomalous. (Garrod et al., 2008) examined private companies in Slovenia and found a positive relationship between profitability and the write-off likelihood and magnitude.

This case investigated the extent to which returns on shares listed on the stock markets of Eastern Europe are predictable and attempted to determine what factors have the explanatory ability. Firstly, it has focused on the efficient market hypothesis, factor models, capital structure theory, and the relationship between accounting information and stock market returns. When the methodology of (Stephen H. Penman, 2007) and (Skogsvik, K. Skogsvik, S. & Thorsell, 2011) had applied to stocks listed in the EU nations, they find that the decomposed elements of the book to price ratio perform substantially differently. (Katchova & Enlow, 2013) evaluated DuPont ratios to compare the return on equity components among agri-businesses and all companies. DuPont analysis is based on return on equity, which is quite an essential variable for investors. A high DuPont ratio leads to better investment opportunities.

**Table 2: Top Ten IT and ITs companies in India (Million INR)**

Company	Rank by size	Size	Total income	Sales	Income from financial services
Tata Consultancy Services Ltd	1	1,025,520.0	1,312,550.00	1,231,770.00	79,400.00
Infosys Ltd	2	735,913.33	759,650.00	731,700.00	24,990.00
Wipro Ltd	3	561,135.50	508,016.00	481,238.00	25,686.00
H C L Technologies Ltd	4	288,953.33	268,220.00	260,120.00	7,900.00
Tech Mahindra Ltd	5	268,878.83	281,797.00	272,492.00	8,297.00
Capgemini Technology India Ltd	6	128,611.50	140,171.00	136,089.00	3,700.00
Cisco Systems India Pvt. Ltd	7	82,668.08	79,246.00	75,871.00	2,999.00
Larsen & Toubro Infotech Ltd	8	65,061.83	92,385.00	89,072.00	3,157.00
E I T Services India Pvt. Ltd	9	54,253.90	55,597.00	54,944.70	554.00
Mindtree Ltd	10	48,927.00	71,126.00	70,215.00	834.00

Source: CMIE database; industry outlook; assessed on 15-April 2020; Created by the case writers using data from CMIE Industry Outlook database

**Table 3: Market Share of IT and ITeS Companies Operating in India, 2018-19**

Rank	Company	2018-19 (%)
1	Tata Consultancy Services Ltd	16.72
2	Infosys Ltd	09.93
3	Wipro Ltd	06.36
4	Cognizant Technology Solutions India Pvt. Ltd	03.75
5	Tech Mahindra Ltd	03.70
6	H C L Technologies Ltd	03.51
7	Capgemini Technology Services India Ltd	01.84
8	Larsen & Toubro Infotech Ltd	01.21
9	Oracle India Pvt. Ltd	01.02
10	J P Morgan Services India Pvt. Ltd	01.02

Source: CMIE database; industry outlook; assessed on 15-April 2020; Created by the case writers using data from CMIE Industry Outlook database

### Conclusion

Tushi was a self-motivated employee who was always looking forward to new projects. Performing routine tasks from the past few days, he was craving for some new tasks to complete. Rather than relaxing after work, he immediately started to collect the relevant information required for the job to accomplish. Top management of the investment company had several meetings with key members of the team. The team carried out multiple discussions and deliberations to explore all possibilities of financial valuation.

High investment ratio, profitability ratio, and high DuPont ratio lead to a better investment opportunity, and can we use these parameters to evaluate a company's financial performance?

**Suggested Questions**

1. Calculate the financial ratios, namely, operating, leverage profitability, and market-based ratio using income statements and financial statements.
2. Calculate net working capital and net long-term assets for all four companies.
3. Based on DuPont decomposition, which company would you prefer and why?

**Exhibit 1: Financial Statements for HCL, TCS, Infosys, and Wipro from 2017-2019, (All numbers in millions INR)**

	HCL			TCS			Infosys			Wipro		
	30/3/19	30/3/18	30/3/17	30/3/19	30/3/18	30/3/17	30/3/19	30/3/18	30/3/17	30/3/19	30/3/18	30/3/17
Assets & current assets												
Cash and cash equivalents	59290	16940	13168	126520	69390	40270	2829	3041	3489	158529	44925	52710
Other short-term invest	41530	23570	88654	292870	357420	416760	958	982	1538	230099	252258	292030
<b>Total cash</b>	100820	40510	101822	41939	426810	457030	3787	4023	5027	388628	297183	344740
Net receivables	117060	96390	83012	273460	249430	226840	2144	2016	1900	100489	100990	94846
Inventory	910	1720	2755	100	260	210	0.0	0.0	0.0	3951	3370	3915
Other current assets	0.0	0.0	0.0	1360	970	630	32	14	6.0	6820	2555	5167
<b>Total current assets</b>	297220	245580	264697	921310	812240	805260	7644	7673	8282	571906	506156	538898
Non-current assets												
Gross property, plant and equipment	105610	90940	82130	254850	239980	224320	3603	3418	3140	163779	148081	165493
Accumulated depreciation	-50330	-42140	-37667	-141110	-125040	-108340	-1663	-1545	-1324	-93178	-83638	-95699
<b>Net property &amp; plant</b>	55280	48800	44462	113740	114940	115980	1940	1873	1816	70601	64443	69794
Equity & other investment	0.0	0.0	0.0	0.0	0.0	0.0	670	883	995	8151	8874	7103
Goodwill	90610	67990	65043	17000	17450	15970	512	339	563	116980	117584	125796
Intangible assets	85340	73940	47333	1790	120	470	91	28	111	13762	18113	15922
Other long-term assets	40	0.0	0.0	300	210	310	0.0	332	0.0	9549	3938	428
<b>Total non-current assets</b>	288530	234650	192996	228120	250720	227260	4608	4582	4572	261265	254484	254618
<b>Total assets</b>	585750	480230	457694	1149430	1062960	1032520	12252	12255	12854	833171	760640	793516
Liabilities current liabilities												
Current debt	11200	1760	1892	0.0	1810	2000	0.0	0.0	0.0	71099	92991	122801
Accounts payable	16230	13960	16368	62920	50940	62790	255	127	57	28527	24406	23452
Taxes payable	0.0	0.0	0.0	0.0	0.0	0.0	442	504	788	0.0	0.0	0.0
Accrued liabilities	0.0	0.0	0.0	0.0	0.0	0.0	480	376	399	59777	45632	42034
Deferred revenues	0.0	0.0	0.0	0.0	0.0	0.0	410	358	279	26129	19040	18544



Other current liabilities	31100	31520	29357	740	480	400	408	117	76	8574	12688	7429
<b>Total current liabilities</b>	122990	101070	113416	220840	178280	145120	2693	2164	2161	214350	213507	229543
Non-current liabilities												
Long-term debt	28740	2630	3549	0.0	540	0.0	0.0	0.0	0.0	28368	45268	19611
Deferred tax liabilities	2260	340	0.0	10420	11700	9190	98	82	32	3417	3059	6614
Deferred revenues	2130	1790	1756	8440	5030	0.0	10	12	13	0.0	0.0	0.0
Other long-term liabilities	480	1060	399	0.0	0.0	450	13	2.0	6.0	3175	2439	1265
<b>Total non-current liabilities</b>	48090	15300	13054	29600	29380	21600	159	131	56	48068	61787	41278
<b>Total liabilities</b>	171080	116370	126470	250440	207660	166720	2852	2295	2217	262418	275294	270821
Stockholders' equity												
Common stock	2710	2780	2853	3750	1910	1970	339	190	199	12068	9048	4861
Retained earnings	389640	316340	252417	855200	797550	710710	11248	11587	12190	534700	453265	490930
Accumulated other comprehensive income	0.0	0.0	0.0	0.0	0.0	0.0	397	253	6.0	0.0	0.0	0.0
<b>Total stockholders' equity</b>	413640	363860	329498	894460	851280	862140	9391	9960	10637	568116	482936	520304
<b>Total liabilities and stockholders' equity</b>	585750	480230	457694	1149430	1062960	1032520	12252	12255	12854	833171	760640	793516

Source: CMIE database; industry outlook; assessed on 15-April 2020; Created by the case writers using data from CMIE Industry Outlook database

**Exhibit 2: Income Statements for HCL, TCS, Infosys, and Wipro from 2017-2019, (All numbers in millions except shares and EPS)**

Particulars	HCL			TCS			Infosys			Wipro		
	3/30/19	3/30/18	3/30/17	3/30/19	3/30/18	3/30/17	3/30/19	3/30/18	3/30/17	3/30/19	3/30/18	3/30/17
Total revenue, INR	604270	505690	475675	1464630	1231040	1179660	11799	10939	10208	585845	544871	550402
Cost of revenue, INR	314880	264070	239977	805160	690960	644290	7687	7001	6446	413033	385575	391544
Gross profit INR	289390	241620	235698	659470	540080	535370	4112	3938	3762	172812	159296	158858
Operating expenses, INR												
Selling general and administrative, INR	8520	7320	8614	126510	100540	99210	1220	1116	1020	75749	71981	64179
<b>Total operating expenses INR</b>	170860	142990	140076	284970	233000	230880	1381	1268	1187	76117	76490	68756
<b>Operating income or loss INR</b>	118530	98630	95622	374500	307080	304490	2731	2670	2575	96695	82806	90102
Interest expense INR	1550	530	718	1980	520	320	-21	107	19	5616	3451	1916
Income before tax INR	126220	110240	105427	415630	340920	345130	3003	3143	2974	115415	102474	110356
Income tax expense INR	25020	23020	19362	100010	82120	81560	803	657	834	25242	22390	25213
<b>Net income INR</b>	101200	87210	86064	314720	258260	262890	2199	2486	2140	90031	80081	84895
Net income available to common shareholders, INR	101200	87210	86064	314720	258260	262890	2199	2486	2140	90031	80081	84895
Basic EPS, INR	36.79	31.11	30.16	83.05	67.09	66.7	0.51	0.55	0.47	14.99	12.65	13.11
Diluted EPS, INR	36.77	31.09	30.14	83.05	67.09	66.7	0.51	0.55	0.47	14.95	12.62	13.07
Basic average number of shares	2750	2802	2852	3789	3849	3940	4347	4510	4571	6007	6333	6476
Diluted average number of shares	2751	2804	2855	3789	3849	3940	4353	4515	4572	6022	6344	6495
EBITDA, INR	148500	124600	114427	438170	361580	365320	3018	2959	2829	140505	127049	135379

Source: CMIE database; industry outlook; assessed on 15-April 2020; Created by the case writers using data from CMIE Industry Outlook database

**Exhibit 3: Cash-flow Statements for HCL and TCS from 2017-2019, (all numbers in millions, INR)**

	HCL			TCS		
	3/30/19	3/30/18	3/30/17	3/30/19	3/30/18	3/30/17
Cash flows from operating activities						
Net income	101200	87210	86064	-39220	258260	262890
Depreciation & amortization	20730	13830	8281	20560	20140	19870
Change in working capital	-24660	-12340	3207	-21690	-2090	-6310
Inventory	1080	1170	-202	160	0.0	0.0
Other working capital	55060	29840	50731	263620	232050	232330
Other non-cash items	-4960	-3900	-6465	-25640	-23930	-22310
<b>Net cash provided by operating activities</b>	<b>89710</b>	<b>83280</b>	<b>89951</b>	<b>285930</b>	<b>250670</b>	<b>252230</b>
Cash flows from investing activities						
Investments in property	0.0	-34650	-53440	0.0	0.0	0.0
Acquisitions, net	-28280	-2510	-5017	-500	0.0	0.0
Purchases of investments	-276340	-260010	-219568	-1162080	-1064450	-1237240
Sales/maturities of investments	305160	289450	218543	1173050	1085980	1067560
Other investing activities	-2040	-1550	-2717	440	-950	4000
<b>Net cash used for investing activities</b>	<b>-30730</b>	<b>-22830</b>	<b>-38165</b>	<b>15960</b>	<b>28860</b>	<b>-167320</b>
Net change in cash	44360	3310	6454	22920	10680	-25350
Cash at beginning of period	16990	13210	7329	48830	35970	62950
Cash at end of period	59340	16990	13211	72240	48830	35970
Free cash flow						
Operating cash flow	89710	83280	89951	285930	250670	252230
Capital expenditure	-34650	-53440	-39220	-22310	-18620	-19900
<b>Free cash flow</b>	<b>55060</b>	<b>29840</b>	<b>50731</b>	<b>263620</b>	<b>232050</b>	<b>232330</b>

Source: CMIE database; industry outlook; assessed on 15-April 2020; Created by the case writers using data from CMIE Industry Outlook database

**Exhibit 4: Cash-flow Statements for Infosys and Wipro from 2017-2019, (all numbers in millions, INR)**

Particulars	Infosys			Wipro		
	3/30/19	3/30/18	3/30/17	3/30/19	3/30/18	3/30/17
Cash flows from operating activities						
Net income	2199	2486	2140	90031	80081	84895
Depreciation & amortization	287	289	254	19474	21124	23107
Deferred income taxes	803	657	834	25242	22390	25213
Stock-based compensation	29	13	0.0	1938	1347	1742
Change in working capital	-85	-17	-290	27165	-936	4541
Accounts receivable	-411	-237	-260	1392	-9735	3346
Accounts payable	131	51	-3.0	0.0	0.0	0.0
Inventory	0.0	0.0	0.0	-566	545	1475
Other working capital	1913	1947	1688	93535	62363	71920
Other non-cash items	-106	-131	29	0.0	4405	-1732
<b>Net cash provided by operating activities</b>	<b>2262</b>	<b>2257</b>	<b>2099</b>	<b>116316</b>	<b>84233</b>	<b>92773</b>
Cash flows from investing activities						
Investments in property, plant and equipment	-349	-310	-411	-22781	-21870	-20853
Acquisitions, net	-110	-9.0	-5.0	0.0	-6652	-33608
Purchases of investments	-11747	-9697	-8735	-930614	-782475	-813439
Sales/maturities of investments	11940	10447	6625	954954	830448	729755
Other investing activities	-38	-16	-21	0.0	0.0	-1097
<b>Net cash used for investing activities</b>	<b>-225</b>	<b>482</b>	<b>-2547</b>	<b>50126</b>	<b>35578</b>	<b>-116283</b>
Cash flows from financing activities						
Common stock repurchased	-118	-2042	-	0.0	-110312	-25000
Dividends paid	-1956	-1156	-1032	-5434	-5420	-8734
Common stock issued	0.0	0.0	0.0	4.0	24	0.0
Debt repayment	0.0	0.0	0.0	-104039	-155254	-112803
Other financing activities	0.0	0.0	0.0	-265	-164	-138
<b>Net cash used provided by (used for) financing activities</b>	<b>-2073</b>	<b>-3197</b>	<b>-1032</b>	<b>-49369</b>	<b>-129978</b>	<b>-22752</b>
Net change in cash	-36	-458	-1480	117073	-10167	-46262
Cash at beginning of period	3049	3489	4935	40926	50718	98392
Cash at end of period	2829	3049	3489	158525	40926	50718
Free cash flow						
Operating cash flow	2262	2257	2099	116316	84233	92773
Capital expenditure	-349	-310	-411	-22781	-21870	-20853
<b>Free cash flow</b>	<b>1913</b>	<b>1947</b>	<b>1688</b>	<b>93535</b>	<b>62363</b>	<b>71920</b>

Source: CMIE database; industry outlook; assessed on 15-April 2020; Created by the case writers using data from CMIE Industry Outlook database

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## EndNote

<https://www.futureretail.in/about-us/overview-retail.html>

<sup>1</sup><https://www.ibef.org/industry/information-technology-india.aspx> accessed on 26 April 2020

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<sup>1</sup><https://www.msde.gov.in/assets/images/industry%20reports/IT-and-ITeS.pdf> accessed on 26 April 2020.

<sup>1</sup><https://www.prnewswire.com/news-releases/at-kearneys-2019-global-services-location-index-gsli-resonates-with-digital-change-300867002.html> accessed on 26 April 2020.

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<sup>i</sup><https://www.futureretail.in/about-us/overview-retail.html>

<sup>ii</sup><https://www.ibef.org/industry/information-technology-india.aspx> accessed on 26 April 2020

<sup>iii</sup><https://www.ibef.org/industry/information-technology-india.aspx> accessed on 26 April 2020

<sup>iv</sup><https://www.msde.gov.in/assets/images/industry%20reports/IT-and-ITeS.pdf> accessed on 26 April 2020.

<sup>v</sup><https://www.pnewswire.com/news-releases/at-kearneys-2019-global-services-location-index-gsli-resonates-with-digital-change-300867002.html> accessed on 26 April 2020.