

Business Analysis Assignment: IT Services Industry in India
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PART A: Industry Structure and Impact of Supply Side Challenges on Margins

For a sector that was 'born' much after Indian Independence, the IT-ITeS sector has come a long way to become one of the pillars of modern India. Indian IT industry's size stood at \$190 bn with \$147 bn exports in FY20. It's expected to grow to \$350 bn by 2025.

Over the years, the industry has become fragmented and people suggest many reasons as to why the industry has matured after all these years. The current supply side challenges have also opened a debate on margins and how the industry will suffer in the near term. On this note, **this paper analytically assesses these hypotheses by first looking at the industry structure through porters 5 forces and then describing what the impact of the supply side challenges could be in the near term. Part B of this report illustrates a unit-economic analysis of this industry, through the lens of revenue, costs and profitability.**

Porters five forces analysis performed below show that in the IT services industry in India traditionally: *Competitive rivalry has been high, bargaining power of suppliers is low and that of buyers is high. The barriers to entry are low, which reiterates why the industry has become fragmented.*

Supply	High. Traditionally, there has been abundant supply of low cost talent, particularly in the lower end (maintenance) segment of IT services.
Demand	High. IT services have seen a remarkable shift in demand in the last few years, with an ever-increasing share of digital, cloud, cyber security offerings and application services as companies in the west are moving to digital.
Power of Suppliers	This has traditionally been low since low cost talent is available in abundance and no supplier of either hardware or software has significant power. Additionally, engineers (suppliers of software) have also been abundant.
Power of Buyers	Power of Buyers – Medium to High . Perhaps the switching costs for customers in IT service is not that high unless it is very sophisticated technology due to lack of differentiation and buyers being more concentrates than sellers.
Barriers to Entry	Low , as setup cost is almost negligible. However, it is high in value-added services like IT / business consulting / R and D where in-domain expertise can create a barrier. The size of a particular company and brand-image also creates barriers to entry
Competition	Competitive Rivalry is high for conventional IT services due to less product differentiation and multiple firms offering same services in the same market. However, for Niche IT services like big data, Mobility, Internet of Things etc. which offers product differentiation, the competitive rivalry is low

Top Players in the IT Services Industry

Name	Revenue Market Share (as of 2021)	Market Capitalization (INR Lakh Crores)
TCS	11.8%	13.11
Infosys	6.7%	7.21
Wipro	4.6%	3.11
HCL	5.1%	3.09

Despite being a fragmented industry, why have the margins remained high for major players like TCS, Infosys and Wipro historically? The answer to that is suggested by 2 points, which are exclusive to this industry and more specifically to India:

- **Supply Side Economies of Scale:** Traditionally, IT services in India is cost a fraction (about 20%) of what they cost in the United States, which makes India a preferred destination for IT sourcing. This has allowed the big players to enjoy cost advantages by hiring huge numbers of engineers and training them to work on mega projects, since employee costs make up around 50% of the total costs.
- **Software firms produce "Intellectual Property":** There is little to no physical resource refinement, manufacturing, packaging etc. to handle. This makes the marginal cost of producing an extra unit relatively lower compared to other industries.

Recent Supply Side Challenges and Impact on Margins

After assessing the industry structure, this section elaborates some of the supply side challenges the IT industry faces right now and how these factors are likely to adversely impact the margins of the industry as a whole. Employee costs make more than 50% of the expenses in some IT services firms, so these very become important to analyse.

1) Employee Attrition

- According to a report by TeamLease, an HR solutions firm, the average attrition rate in the IT industry was 8.67% in the September quarter. However, with the demand for IT talent rise, Wipro, Infosys and Tata Consultancy Services recorded a much higher attrition rate in the same quarter with 20.5%, 20.1% and 11.9% respectively.
- Besides increasing opportunities in the job market for techies with specialised skills—such as cloud, cybersecurity, artificial intelligence, machine learning and others—a shift in employee perspective and work dynamics have been some of the key factors for the rise in attrition. There is a lot of demand for futuristic skills and, in India, the availability of such skill sets has been limited. Hence, that has led to a crunch in talent in the Indian IT industry. So, those who are in the job market currently have multiple job offers.
- *This situation is likely to have a negative impact on the margins of IT companies in the short term (in the form of increased hiring, training and retention costs) until the talent crunch issue gets resolved.*

2) Demand-Supply Mismatch for Talented Pool

- According to IT industry body NASSCOM, India's demand for digital talent jobs is eight times larger than the size of its fresh talent pool. By 2024, this demand is expected to become 20 times the available fresh talent pool.
- Established software firms are also losing employees to the new-age startups which are in their hyperscaling phase. Flush with funds, startups are drawing software engineers by offering above-market salaries, flexible work arrangements and generous employee stock options (ESOPs). How are companies tackling this? They

are rushing to campuses and hiring students for exorbitant amounts of money by raising their hiring targets!!

3) Wage Inflation

- Due to shortage of skilled talent and high attrition, there has been a steep rise in the wages of software engineers. Part of the reason for the rise in tech salaries is that Indian engineers no longer do just application maintenance. Hardcore software product development, including R&D, is happening here and the country has transformed from being a low-cost software services centre to a “cost-effective, idea-to-implementation technology hub.
- However, **this directly affects the key competitive advantage that India developed over the last 2 decades** – which is that they were able to hire people at dearth cheap cost. If this advantage vanishes in the next decade, it remains a question whether India will stay at the top.

Conclusion – Considering all the points above, a valid conclusion would be that the margins of IT companies are likely to take a dent in the near term. The customer switching costs in this industry are low so it makes it very difficult to pass on rising costs to end customers. With Covid lockdown situation easing across the globe, travel expenses are also likely to reach pre-pandemic levels at some point of time.

Also, with the nature of tech changing at such a rapid pace with the introduction of new technologies and things become complex, it remains to be seen whether India's IT services continues to grow at the same pace by exploiting the advantage of cheap labour. The impacts are also likely to be more severe on smaller companies than large ones and it won't be easy for all IT services firms to continue growing their margins at the same rate, even in the long run if automation changes the very structure of the industry.

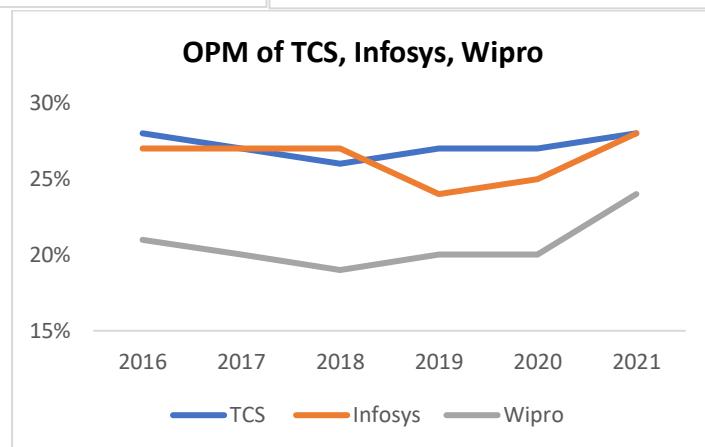
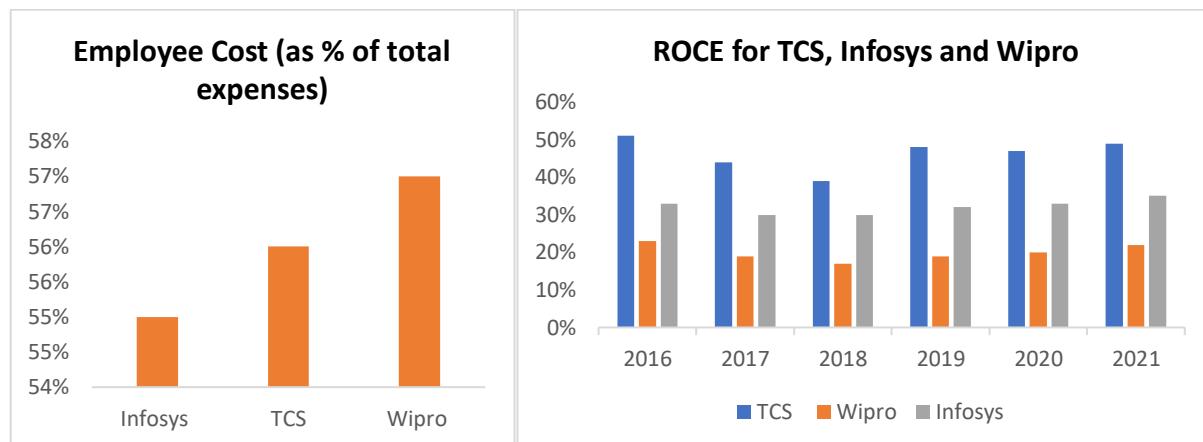
PART B: Unit Economic Analysis of the IT Services Industry in a Consulting Interview

To understand the IT & ITeS industry, we can start by looking at the value chain analysis. The industry is sub-divided into 5 major value centers – operations setup, customer acquisition, customer relationship management, service delivery and after-sales service.

1. Ops Setup	2. Customer Acquisition	3. CRM	4. Service Delivery	5. After Sales Service
<ul style="list-style-type: none"> • Infrastructure Setup • Talent Acquisition • Employee Training • Talent Retention 	<ul style="list-style-type: none"> • Pitching and acquiring new clients • Cross selling products on existing clients 	<ul style="list-style-type: none"> • Understanding client requirements • Communicating it to software team • Conflict resolution 	<ul style="list-style-type: none"> • Product Development • Live testing at client's end • Bug Fixes • Full deployment 	<ul style="list-style-type: none"> • Provide Software update and IT support • Maintain relationship for repeat business

Profitability Analysis: Key Revenue and Cost Drivers in the Industry

Revenue Drivers	Cost Drivers	CAPEX Drivers
<ul style="list-style-type: none"> • Contract/Service Fee • Software Sales/ SaaS • Hardware Leasing/Cloud Infrastructure 	<ul style="list-style-type: none"> • Employee Salaries • Admin Costs • Other Expenses 	<ul style="list-style-type: none"> • Office Space (Lease/Owned) • Computer Systems • Office Utilities and Assets



Through the example of TCS, Infosys and Wipro, we can conclude that employee salaries constitute the major element of costs and any significant inflation in the salary or attrition may dent the margins of the

companies in the near term. The ROCE and Operating Profit Margins of this industry (particularly the big players) have been significantly good, as shown above.

Return of capital of the industry is in high 20's or 30's for major players

S.No.	Name	CMP Rs.	P/E	Mar Cap Rs.Cr.	ROCE %
1.	TCS	3544.40	34.84	1311757.60	48.90
2.	Infosys	1720.85	33.68	723650.59	35.25
3.	Wipro	569.55	25.77	312145.79	22.10
4.	HCL Technologies	1139.70	28.07	308999.42	25.70
5.	Tech Mahindra	1426.65	26.96	138644.94	23.01
6.	L & T Infotech	6016.50	49.51	105370.40	37.94
7.	Mindtree	3955.30	43.57	65235.52	36.10

Supply Side Analysis:

- There is an increasing focus on building capabilities specific to a few verticals and delivering differentiated products for these verticals. These vertical specific solutions are expected to gain high demand in the future.
- Movement to a distributed delivery architecture from a centralized architecture, with a fall in spending on real estate and physical offices and higher spending on collaboration and productivity tools.

Demand Side Analysis:

- COVID-19 has led to the acceleration in digital adoption as well as transition to cloud which has also pushed new product and service development. In addition, the surge in remote working, need for business continuity planning and increased focus on digitalization has also led to an increase in demand for IT services.
- IT services individual spending is expected to grow to 8-9% as compared to 4-6% in the pre-COVID era.
- Cloud, AI, IoT, Blockchain, Edge Computing are some technologies that are expected to see an increase in spending from end consumers.

References

1. <https://economictimes.indiatimes.com/tech/information-tech/it-firms-may-see-1-3-dip-in-margins-as-travel-resumes-talent-crunch-depends/articleshow/87146848.cms>
2. https://www.business-standard.com/podcast/companies/what-s-behind-record-staff-exits-at-indian-it-giants-121101900242_1.html
3. <https://www.livemint.com/market/stock-market-news/employee-attrition-a-big-headache-for-indian-it-companies-can-they-tide-over-it-11629870315500.html>
4. <https://www.equitymaster.com/research-it/sector-info/software/Software-Sector-Analysis-Report.asp>
5. <https://www.screener.in>
6. <https://www.livemint.com/industry/infotech/indias-top-4-it-companies-are-struggling-here-s-why-11635136260762.html>
7. https://www.theregister.com/2021/10/20/india_it_services_covid/