A REPORT

ON

MACROANALYSIS & EQUITY RESEARCH ON INFOSYS

BY

HARSHIT KUMAR DUBEY
(2018B2A80706P)

AT

WILLIAM O'NEIL INDIA

WILLIAM O’NEIL, BENGALURU

A PRACTICE SCHOOL – I STATION

OF

BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI

JUNE 2020

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PREPARED IN PARTIAL FULFILMENT OF THE
PRACTICE SCHOOL – I COURSE NOS.
BITS C221/BITS C231/BITS C241
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Acknowledgment

I would like to use this opportunity to express our heartfelt gratitude to everyone who supported and helped us during the course of this ongoing project. I am thankful for their aspiring guidance, constructive criticisms and friendly advice during the past few weeks. I am immensely grateful to them for sharing their truthful and illuminating views on various issues related to the project.

I would like to thank the Practice School Division of BITS Pilani for providing us with an opportunity to pursue projects on a work-from-home basis. We are grateful to Mr. Mayuresh Joshi, Head of Equity Research, William O'Neil India, and his team for allowing us to pursue projects at a premier corporate like William O'Neil, India in such testing times as the COVID-19 pandemic.

I am especially thankful to our mentors, Rushit Sejpal, Equity Analyst for extending their valuable guidance, support for literature, promptness in solving doubts and inputs on the project and its report. I am also extremely grateful to our Practice School-I faculty, Professor Neetu Yadav for guiding us through the particulars of Practice School-I and providing us with the required software.

Last but not the least, I would like to thank my family for their moral support in this time of the COVID-19 pandemic.

BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI (RAJASTHAN)
PRACTICE SCHOOL DIVISION

Station: William O'Neil, India **Centre**: Bengaluru **Duration:** 6 Week

Date of Start: 18-May-2020 **Date of Submission**: 22-June-2020

Title of The Project: Macroanalysis & Equity Research on Infosys

Name /Id No./Discipline of the Submitter:

Harshit Kumar Dubey – 2018B2A80706P : B.E (Electronics & Instrumentation), M.Sc (Chemistry)

Name(s) and Designation(s) of the Expert(s):

1. Mr. Mayuresh Joshi – Head of Equity Research
2. Mr. Rushit Sejpal – Equity Analyst

Name of the PS Faculty: Ms. Neetu Yadav

Project Areas: Sectoral Study, Equity Research

Abstract

This project's primary goal is to analyse the IT sector's financial and economic performance in India. This report has taken a sample of the top large cap and some growth companies as a data set, and based the overview of the IT sector on the performance and plans of those companies. The first thing that an investor should look at when picking stocks is the industry that shows promise. That is why this report serves as a significant first step in analysing the company for further investments. This report wishes to achieve a holistic view of the IT sector and shows what headwinds and tailwinds the sector is facing, with a special focus on the effects of the Coronavirus pandemic on the economies. The report will also try to predict what the near future holds for these companies, and will seek to help the reader in having a better understanding about how the IT sector functions on a fundamental level.

Contents

1. Introduction

This report will consist of a brief introduction of the Macroeconomic Overview of the IT sector, followed by scenario analysis, along with the detailed analysis of Infosys and how has Infosys fared in the current market. Finally I will also attempt to predict Infosys's balance sheet for next two fiscal years and the rational behind it.

India's IT industry contributed around 7.7 per cent to country's GDP (Gross Domestic Product) and is expected to contribute 10 per cent to India's GDP by 2025. Total number of employees grew to 1.02 million cumulatively for four Indian IT majors (including TCS, Infosys, Wipro, HCL Tech) as on December 31, 2019. Indian IT industry employed 205,000 new hires and had 884,000 digitally skilled talent in 2019. Overall, we can get an idea from this about the potential of the IT sector in growing the economy.

IT companies in general, have performed very well in the past few years. Most IT companies provide services to sectors like the banking and financial sector, the travel and hospitality sector, the insurance sector etc. and many operate on a global level which gives them a good diversified market. IT companies are not very capital intensive; thus, their debts are usually quite low. And in this ever-increasing digital world, the companies have grown rapidly. All this has provided the companies to make a firm foundation that is hard to shake.

This brings us to the major topic of our discussion: the Covid-19 world crisis. Economies have taken a bad hit amidst this world pandemic, and sectors like the travel sector are struggling to survive. None the less, this crisis hasn't had as bad of a blow on the IT industry as one expected. Many companies have signed large deals even in the last quarter, which proves that the demand for IT hasn't reduced as much. And rightfully so, their clients are more in need of automation and digitization than ever before. Thus, the companies have taken billions of dollars' worth of orders executable in the next year. The sector which has been hit the hardest is the travel and hospitality sector, and this has also stood as a resistance towards the IT sector's growth. Many IT companies have major clients in the travel industry which have now been lost due to the pandemic. We have tried to describe in the next section the impact of the travel segment on IT industry.

I will also describe the various problems being faced by Infosys and how it is maneuvering through all this.

2. Analysis

2.1 Overview

India's IT Sector grew by 7.7% in FY20 to $191 billion, with exports touching $147 billion. The industry added 2,05,000 jobs in FY20, up from 1,85,000 jobs in FY19. The overall Industry growth was excellent considering that world economy grew just by 3%.

The final quarter of 2019-20 began on a steady note for the largest Indian information technology companies but lockdowns in various countries to contain the novel coronavirus outbreak in the last two weeks of March weighed down earnings.

An overview can be perceived from how the top 3 Indian IT players performed.

2.1.1 While the quarter was disrupted by the Covid-19 outbreak, top line was aided by deal wins in the past quarters. Tata Consultancy Services Ltd. and Infosys Ltd. saw a sequential growth in revenue in rupee terms. Wipro Ltd., which has had a relatively subdued year, saw a marginal decline.

Company	QoQ Change (%)	Vs Estimates
Wipro	-1.0	In Line
TCS	0.2	In Line
Infosys	0.8	In Line

Fig.1 Revenue Comparison of Top Three IT Firms Performance in January- March 2020

2.1.2 Earnings before interest and taxes margins remained largely stable. TCS saw a marginal expansion, while Infosys and Wipro saw contraction because of higher expenses from transition to work from home.

Company	Operating Margin (%)	QoQ Change (bps)
TCS	25.1	10
Infosys	21.2	-70
Wipro	17.6	-80

Fig.2 IT Firms' Operating Margins Performance in January-March 2020

2.1.3 Wipro and TCS saw a sharp sequential decline in the sector's largest business vertical of financial services as lockdowns weighed on sentiment.

Company ▲	Revenue Contribution (%)	Growth (%)
Infosys	31	0.1
TCS	30	-1.8
Wipro	30	-2.3

Fig.3 How Biggest Vertical Fared Performance in January-March 2020

2.1.4 The three Indian software services providers reported a mixed performance in North America, their largest business geography.

Company	Revenue Contribution (%)	Growth (%) ▼
TCS	51	0.6
Infosys	62	-0.9
Wipro	59	-1.2

Fig. 4 How IT Firms Fared in Largest Market Revenue performance in North America in January-March 2020

Q4 Operating Margin:

Company	Operating Margin Q4
TCS	25.1%
Infosys	21.1%
HCL Technologies	20.9%
Wipro	17.6%
Tech Mahindra	15.5%

2.2 Challenges faced by IT Companies

Covid-19 Pandemic

Operations of the company are adversely affected by the disability of sections of the global workforce due to exposure to the pandemic, reduced productivity due to employee stress and impact on emotional well-being while under local lockdowns or quarantines, the inability to provide work from home to certain employees for logistical or security or contractual reasons, and the inability of suppliers. These have impacted revenue growth and have led to potential customer claims for non-compliance with service delivery obligations.

Demand for the company's services are adversely affected not only in pandemic-impacted industry segments – such as travel and hospitality, but also across other segments as a result of a sharp slowdown in the major economies of the world. In the short and medium term this is affecting the company's earnings.

Global Political and Economic Situation

Corporate technology spending has been closely linked to the growth of GDP.

Political disruptions or volatile economic conditions such as trade tensions, post-Brexit uncertainty, Covid-19 pandemic impacts on the global economy, US presidential elections, etc. have adversely affected that outlook resulting in lower expenditure that has restricted opportunities for revenue growth.

In the coming year, the impact of the Covid-19 pandemic could also make global mobility restrictions complicated leading to immobility of skilled employees.

Business Model and Strategy Challenges

Rapidly evolving technologies are changing patterns of technology consumption, creating new classes of buyers within each company, giving rise to completely new business models and, therefore, new types of competitors. This leads to increased demands on the agility of the company to keep pace with the changing expectations of the clients. Failure to cope can result in market share loss and an impact on business growth.

Hiring and Litigation

In view of the sector's scale and geographical spread, litigation risks can arise from trade disputes, perceived breaches of intellectual property rights and related matters related to employment. This risk is inherent in doing business across different countries, and is proportionate to the risk faced by similarly placed industry players. Litigation attracts negative media attention and poses reputation risk.

Complex and changing global regulations

An IT company must comply with complex and changing laws and regulations across multiple jurisdictions, covering areas such as employment, taxation, Health Safety and Environment (HSE), Data Privacy, etc. The rapid pace of changes in the regulatory environment also requires a quick understanding of their implications and adaptation to business operations. Failure to comply could result in penalties, damage to reputation and criminal prosecution.

Data Protection Laws, Cyber Security & Intellectual Property (IP) Violation

The new data protection and privacy rules enforced by other countries are preventing Indian companies to serve in those countries. For example, the European Union's GDPR (General Data Protection Regulation) law that became effective in May 2018.

GDPR is applicable to all the companies that operate in the EU or have their customers in the region – any company that deals with the personal data of European customers need to comply with GDPR rules.

Since not all the IT companies in India can comply with GDPR and other data protection rules, many had to stop serving EU customers. As mentioned above, most of the clients of the Indian IT industry are from Western countries, and many clients are choosing development options closer to home.

H1-B Visas and Hiring Local

The H1-B visa is a program that allows companies based in the US to temporarily employ highly skilled professions from other countries. This year, the Trump administration changed the policy of issuing H1-B visas. Unfortunately, the new procedure makes it difficult for companies to prove that the H1-B worker comes with specific and non-speculative qualifying assignments in a certain occupation.

According to the USCIS (US Citizenship and Immigration Services), nearly 75% of H1-B Visa holders are Indian citizens.

The new H1-B policy is negatively impacting the IT industry in India and people looking to find jobs in the US. There are several small and medium enterprises in India that rely on the US market and H1-B visa.

Also, the new policy states that the minimum salary of an H1-B visa holder should be a minimum of $130,000. Given this high salary, understandably, a lot of companies in the US now opt to hire Americans.

Today, Indian IT companies prefer to hire a large number of tech professionals in the home country. This is because the political sentiment around outsourcing has changed in the US. The liberal visa process that once allowed Indian tech firms to send employees to client location has turned hostile. Leading Indian IT firms are facing lawsuits for alleged discrimination in their hiring practices.

The anti-immigration and anti-outsourcing agenda in the US has created pressure on Indian firms to hire local talent in the US.

The Indian information technology (IT) services industry is likely to feel the heat if the Donald Trump administration decides to go ahead with suspension of employment visas, including the coveted H-1B visa.
The proposed suspension could bar any new H-1B holder outside America from coming to work until the suspension is lifted, though visa holders already in the country are unlikely to be affected, a Wall Street Journal report said.

Indian IT companies widely use H-1B visas to transfer highly-skilled workers to the US. India has been the only country that takes 70% of the 85,000 H-1B visas applied annually, according to market reports. The news about visa suspension comes at a time when the US visa rejection rates for Indian IT companies have been on an upswing, rising 24% in 2019, up from just 6% in 2015.

Negative Reputation around the world

India's IT giant, TCS was slammed by a penalty of $420 million by the US court in April 2016. The US-based company Epic Systems had accused TCS of stealing trade secrets, confidential information and data that belonged to Epic.

Infosys paid a penalty of $1 million for violating the visa and immigration rules in the US. The company was accused of employing foreign workers in New York without paying taxes and wages.

TCS and Infosys are the pillars of the IT industry in India. Such incidents negatively impact the image of the Indian IT industry in the global market.

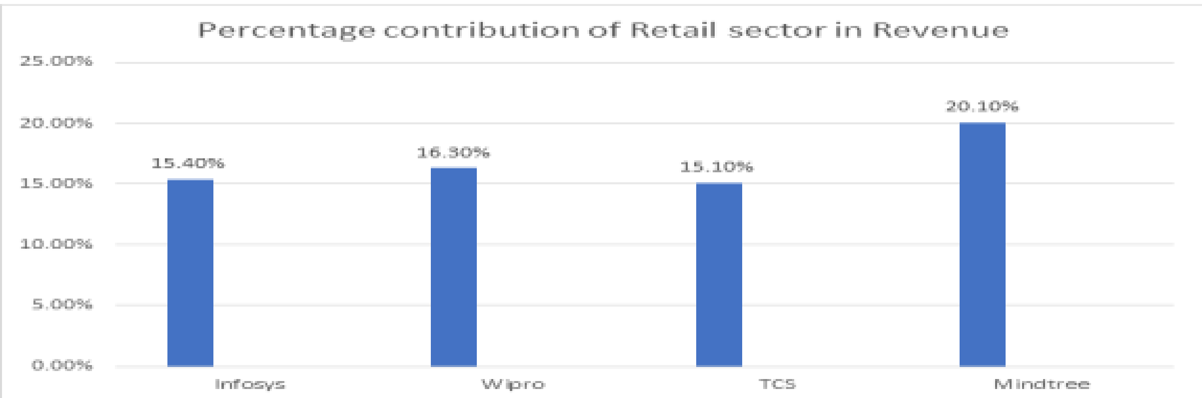
Overseas expansion

Top tech firms including TCS, Infosys and their rivals are queuing up to hire skilled engineers to meet the needs of the changing market. These tech firms are increasingly hiring engineers, mathematicians, data scientists, sales and marketing professionals. With these companies having strong business demand in the overseas markets, they are hiring techies in large numbers.

Indian IT firm, TCS has sourced 20% of its new employee requirement locally in the last 12 months, as reported by ET. Cognizant, which heavily relies on India for hiring coders has approximately 50,400 employees In North America and 13,800 in Europe. HCL Technologies has hired 17,000 workers in the US. Wipro has expanded its team in the US with 14,000 tech workers.

2.3 Segment Analysis

1. **Banking and Financial Services and Insuarance (BFSI):** The COVID-19 pandemic could be one of the most serious challenges faced by the financial services industry in nearly a century. The COVID-19 impact on banking will be severe – fall in demand, lower incomes, production shutdowns - and will adversely affect the business of banks. The situation is exacerbated by staff shortages, inadequate digital maturity, and pressure on the existing infrastructure as firms scramble to deal with the impact of COVID-19 on financial services.
2. **Retail:** According to several reports, as many as 13 retailers in the US with 3,800-plus stores have already filed for bankruptcy in 2020 ytd (year-to-date). These include J Crew, True Religion, J C Penny and Stage Stores. Certain others such as Victoria's Secret and Bath & Body Works are also potential candidates.
   Analysts now believe that the retail sector will be the worst hit for Infosys, Wipro and Mindtree and a few others, as their exposure to retail clients is among the highest.



3 . Manufacturing: The global spread of COVID-19 has created an unprecedented situation for the manufacturing sector, resulting from mandated lockdowns across the global ecosystem, not just local or regional ones as in previous disasters. Supply chains are disrupted, stopping the flow of materials, intermediate parts and finished goods. Assembly lines are forced to halt or curtail operations because of a lack of workforce and parts. Innovative adjacencies and health imperatives (like ventilator shortages) have driven product mix changes with alternative components.

4.Digital Segment: Firms define digital differently. Virtualization, cloud, workspace transformation all form part of digital. That is one of the elements of digital where we will see some traction, anything that helps clients to move more and more of their work into the remote working approach.

RAPID RISE IN DIGITAL SHARE

	FY18		FY19		FY20	
TCS	4	21	5.9	29	7	33
Infosys	2.8	26	4	34	5.4	42
Wipro	2	27	2.8	35	3.4	41

Digital revenue ($ bn) % of total revenue Source: Company financials

Services which relate to areas around cloud and virtualization are actually gaining traction. Services which relate to some more project level work, which is discretionary, which will probably be slower. Post COVID-19 we expect a strong opportunity for Cloud, Data Services and creating new digital bank capabilities

3. Key Takeaways from IT Sector

3.1 Highlights

The following data shows the percentage growth year-on-year (YoY%) as well as quarter-on-quarter (QoQ%) for the Market Capitalization (Mkt Cap), Revenue and Net Profit (PAT) of IT sector companies in NIFTY 200.

Sr. No.	Company Name	M. Cap QoQ%	M. Cap YoY%	Revenue QoQ%	Revenue YoY %	PAT QoQ%	PAT YoY %
1	HCL Technologies Ltd.	8.00%	19.20%	3.50%	15.50%	8.60%	13.00%
2	Hexaware Technologies Ltd.	-10.60%	1.50%	3.2%	22.1%	-8.7%	35.8%
3	Info Edge (India) Ltd.	24.50%	78.90%	1.70%	19.20%	7.00%	14.90%
4	Infosys Ltd.	-7.10%	8.00%	2.00%	7.90%	10.60%	23.70%
5	Larsen & Toubro Infotech Ltd.	18.40%	4.40%	9.40%	13.70%	4.50%	0.30%
6	Mindtree Ltd.	12.60%	-5.80%	2.70%	10.00%	45.90%	3.00%
7	Mphasis Ltd.	-1.40%	-8.00%	5.50%	15.50%	7.40%	5.60%
8	Oracle Financial Services Software Ltd.	-11.20%	-26.50%	-0.20%	-2.20%	27.30%	49.30%
9	Tata Consultancy Services Ltd.	5.20%	13.90%	2.30%	6.70%	1.10%	0.30%
10	Tech Mahindra Ltd.	8.20%	4.30%	6.40%	7.90%	-0.10%	-9.00%
11	Wipro Ltd.	6.10%	-4.30%	2.30%	2.70%	-4.00%	-3.30%
	Average	**7.40%**	**9.90%**	**3.00%**	**8.10%**	**4.30%**	**6.20%**

- Third quarter for this sector has been affected by weak global macro outlook regarding growth in 2020/FY2021 and less working days. Moreover, companies have not benefited much from the corporate tax cut of Sep 2019 as they were already in low tax brackets.
- The reduction in growth was mainly due to reduced spending on IT services by Banking & Financial Services industry. Other sectors like Retail, Communication, Healthcare have contributed to the growth.
- This quarter is considered as a weak quarter in IT due to less working days. As a result, only Tech Mahindra was able to sign new deals. It can be seen from its positive revenue growth.
- L&T Infotech's growth is supported by large deals in Insurance & Manufacturing sector and recovery from large accounts.
- TCS is largely led by operational efficiencies and INR depreciation.
- HCL Technology has grown in both IBM products (acquired in July 2019) as well as services segment.

3.2 Future Outlook

- The pandemic has introduced an unprecedented level of uncertainty in an already unstable global economy.
- TCS expects to deal with near-term uncertainty and believes that the peak negative impact from the Covid-19 situation would be comparable to the peak impact of the Global Financial Crisis of 2008.
- Biggest difference in the impact of this pandemic compared to GFC is that the GFC started in the financial services world and then slowly moved into the real economy. Here, the impact has been across most sectors very rapidly. The hope is that the recovery will also be equally widespread given the nature of the impact that has happened.
- Q1 FY21 is expected to show impact on the timelines of deals already sealed.
- There might be SLA slippage in fixed price contracts.
- Near-term bottom in industry verticals is expected to arise due to both supply and demand issues.
- Post-Covid world is anticipated with whole business continuity planning getting strengthened.
- Biggest Technology shift is going to be in areas like collaboration tools and digital technologies. The acceleration in migration to cloud will be even faster. The whole area of intelligence analytics, and adoption of technologies for self-healing of the infrastructure that will provide you that resiliency will also be accelerated.

- In terms of movement, there is a movement from the smaller or the less capable vendors to larger or the more capable vendors. IT giants like Infosys, TCS are expected to benefit from this movement.
- Execution-cum-advice-led services would be valuable in the future in the consulting field.
- Digitalisation, migration to cloud and approach to building resilience in terms of self-healing and self-learning, would be the key.
- There might be a market with enterprises having an urgency to accelerate tech. As things come back to the new normal the spend on digital will continue to increase.
- Hiring is kept on a complete freeze as of now, however the company will honour all the offers made in the past. Job security will be given more preference over salary cuts.
- Services which relate to areas around cloud and virtualization are actually gaining traction. Services which relate to some more project level work, which is discretionary, which will probably be slower.
- Virtualization, cloud, workspace transformation all form part of digital segment. These are the elements of digital where we will see some traction, anything that helps clients to move more and more of their work into the remote working approach. As things come back to the new normal the spend on digital will continue to increase.
- IT giants like Infosys, Wipro have collaborated with IBM to help their clients migrate to hybrid cloud, a cloud computing environment that uses a blend of on-premise infrastructure and private and public cloud services. There are couple of reasons for such partnerships. For IT firms, revenue from core services are decreasing. Due to the coronavirus outbreak, digital revenues are going to take a hit as clients are cutting down their discretionary spends.

Crisil Research:

- Typically, new deals get finalised between March and May, but this time around, most clients will focus on mitigating emerging business risks and defer discretionary IT spend, while letting existing contracts continue.
- The IT industry's largest client segment of banking, financial services and insurance which accounts for 28 per cent of the industry revenues will deliver an 8 per cent topline growth on rising share of digital transactions and presence of larger and longer-term maintenance contracts that are critical to operations
- While healthcare segment, which accounts for 8 per cent of the IT industry revenues, will also grow at similar levels, it said.
- Other segments including retail (32 per cent of IT service revenues), and communication, aerospace, defence and transportation (22 of revenues) and manufacturing, travel and tourism and oil and energy will see a steep and immediate impact on revenues considering sluggish demand in these sectors.

- Most IT firms in their Q4 results pointed out that cloud would be one of the key growth drivers.

3.3 Cost Control Measures

1. **Salary Capping:**

    - Wipro is considering temporarily putting employees on leave in order to manage costs.
    - Infosys has already frozen salary hikes, stopped campus hiring and has temporarily frozen suspended promotions.
    - According to a report, the average annual increase in employees was 6% in India. For the top five IT Companies, employee cost ranges from 30% to as much as 54%.

Company	Actual employee cost FY20	% of revenue
HCL Technologies	₹ 9,916 crore	30.4%
TCS	₹ 64,906 crore	49.4%
Infosys	₹ 42,434 crore	53.7%
TM	₹ 9,282.70 crore	31.8%
Wipro	₹ 26,171.80 crore	51.9%

2. Work From Home:

- HCL Tech has proposed a 50/50 plan- where only 50% of its employees will need to work from office at any time.
- TCS wants only 25% of its employees on any project at any place, at any time.
- This would axe travel and real estate costs by roughly 300 to 400 basis points.

3. Weaker Rupee:

- Infosys has already gained 2 percent on rupee depreciation-which meant a 50 basis points margin benefit.
- HCL technologies also saw a similar benefit of around 53 basis points in their margin.
- For TCS, movement in currency exchange rate resulted in positive impact of 0.1% in their revenue.

4. Subcontracting

- Indian IT firms may reduce dependence on subcontractors to control costs as COVID-19 pandemic threatens to slow new deals flow and pressure margins.
- Subcontracting costs can from as much as 25% of total employee cost.
- Some of the firms have asked their subcontractors to take rate cuts or take deferred payments.

Company	% of Revenue
TCS	13%
Infosys	12%
Wipro	22%
Mindtree	11%

4. Infosys: Detailed Analysis

Infosys Limited, is an Indian multinational corporation that provides business consulting, information technology and outsourcing services. It has its headquarters in Bangalore, Karnataka, India. Infosys is the second-largest Indian IT company after Tata Consultancy Services by FY2020 revenue and 596th largest public company in the world based on revenue. On March 29, 2019, its market capitalisation was INR 3,01,483.24 Cr.

Financial Performance

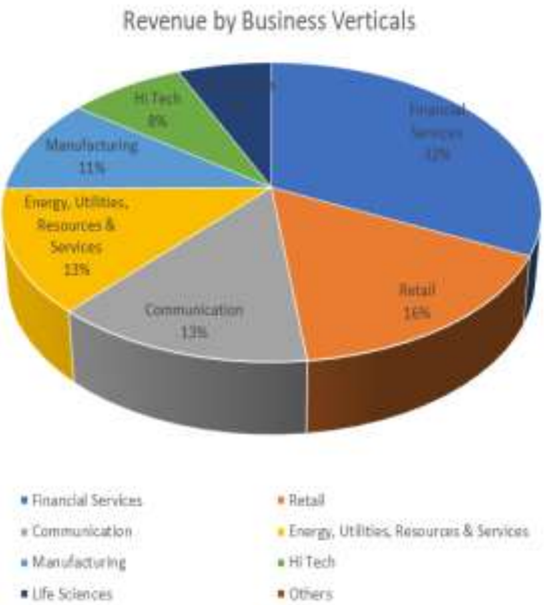
FY20 was an exceptional year for Infosys with double-digit growth across all sectors. Infosys grew at 9.8% in constant currency in FY20. Although it reported -0.8% QoQ growth in constant currency in Q4. Operating margin was 21.3% in FY20 and 21.1% in Q4. Total revenue for FY20 was $12.8 bn compared to $ 11.8 bn in FY19. Infosys signed deals worth $9 bn in FY20 and worth $1.65 bn in Q4. Some of these were in the last two weeks of the quarter. Digital revenue saw the biggest jump and grew by 38% making it 42% of the total Revenue. While the core revenue shrunk by 3%. EPS grew by 8.3% in dollar terms. Yield on cash balance was 7.06% in Q4 compared to 7.77% in Q3.

Particulars	2020	2019
Digital Revenue	35,617	25,797
Core Revenue	55,174	56,878

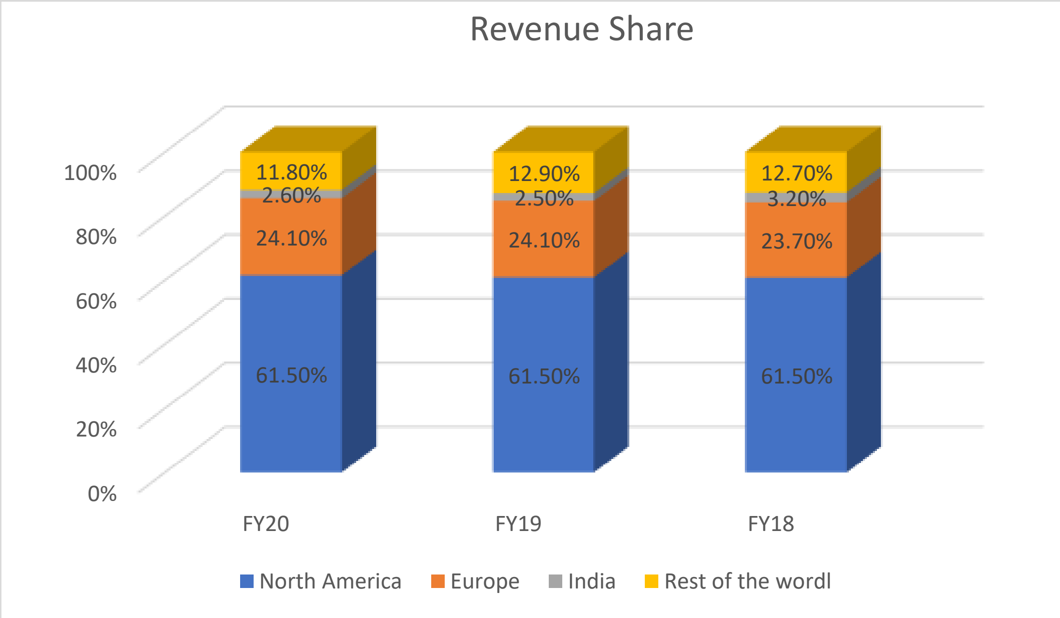
Total income from operations was Rs 20,187 Cr in Q4 FY20 compared to Rs 20,064 Cr in Q3 FY20. On consolidated basis, total income from operations was Rs 23,267 Cr in Q4 FY20 compared to Rs 23,092 Cr in Q3 FY20.

Segment Wise Growth:

Five of the business segments Communication, Energy, Utility, Resources and Services, Manufacturing, High-Tech and Life Sciences recorded double-digit growth in FY2020.



Both North America and Europe clocked double digit growth in constant currency. Revenue in North America grew by 11.5%, Europe by 10% and by 15.5 % in India.



SWOT Analysis

Strengths:

- Company with no debt and extremely strong cash position with $ 3.6 bn.
- Company with Zero Promoter pledge.
- Increasing revenue every quarter for past 4 quarters.
- Strong cash generating ability from core business- Improving cash flow from operations for last 2 years. For FY2020, operating cash flow grew 15.4% to $2.611 bn. Free cash grew 12.1% and crossed $2 bn for the first time.
- Company able to generate Net Cash- Improving Net Cash flow for last 2 years. Cash flows are robust and our operating cash flows have increased from Rs 14,841 crore in FY19 to Rs 17,003 Crore in FY 20.
- Infosys has partnered with major technology and business players in order to strengthen its services and business solutions. The company has earlier partnered with HP, IBM, Microsoft and Amazon etc. The strong partnership network allows Infosys to deliver innovative and collaborative solutions. Infosys recently partnered with IBM to help their clients migrate to cloud.

Weakness:

- Decline in Net Profit(QoQ). Net profit in Q3 was Rs 4,457 Crore and in Q4 was Rs 4,321 Crore.
- Decline in net profit with falling profit margin(QoQ).

Quarter	Q4	Q3	Q2	Q1
Operating Margin	21.1%	21.9%	21.7%	21.4%

- Book Value Per Share deteriorating for last 2 years.
- Major fall in TTM Net Profit.
- Infosys is one of the tech companies in India which has been a victim of the high attrition rate. Many employees leave for better career opportunities and higher education. High attrition rates affect company's image. Infosys's attrition rate continued to be higher than its peers and stood at 23.4%.
- Infosys has concentrated operations majorly based out of the America and Europe. Together, North America and Europe constitute over 80% of the company's revenue. This makes the company susceptible to instability and uneven growth.

Opportunities:

- Brokers recommended upgradation or target price in past three months.
- Positive breakout third resistance (LTP>R3).
- There is a positive outlook for cloud-based solutions as the fundamental nature of computing has been changed by cloud computing. Infosys having a significant presence in cloud computing market is set to be benefitted by the

increasing demand. Post COVID-19, There would be a strong interest in looking at cloud movements and making changes in virtualization.
- India is an emerging market for Infosys, it recorded over 15% growth in revenues in FY20.

Threats:

- Recent broker downgrades in reco or target price.
- Global economic slowdown due to COVID-19 may continue for several years – hence low IT spending globally.
- Due to rise in unemployment, US govt is set to ban H1B visas temporarily.
- Shrinking margins due to rising wage inflation, Rupee-dollar movement affects revenue and hence margins.
- Infosys has been facing various lawsuit in different countries. Recently, a former Infosys employee has filed a lawsuit for racial discrimination.
- No regular supply of innovative products – Over the years the company has developed numerous products but those are often response to the development by other players. Secondly the supply of new products is not regular thus leading to high and low swings in the sales number over period of time.
- As the company is operating in numerous countries it is exposed to currency fluctuations especially given the volatile political climate in number of markets across the world.
- The IT services industry is a highly competitive industry. Infosys competes with large technology and consultancy firms like Accenture, Capgemini and TCS etc. The company also competes with software consultancy giants like Oracle and SAP. Intense competition leads to pricing pressures and investment in innovative technology to gain competitive advantage.

PESTLE Analysis:

Political:

- Impact of Brexit in UK and European market.
- Impact of stringent visa policies by various governments.
- Impact of lawsuits against the company.
- Government restrictions due to COVID-19.

Economical:

- Impact of Delocalization in cost of employees.
- Advantage of Special Economic Zones.

Social:

- Growing trend of Digitalization in market.
- Strong employee culture with emphasis on trading and diversity.

Technological:

- Platform and products to be the future of growth drivers.
- Impact of automation.

Legal:

- Strong ethics and legal culture within the organization

Environmental:

- Sustainable initiatives and Green IT infrastructure.

<u>Outlook, risks and other concerns</u>

Risks related to COVID-19:

- Many of the clients' business operations may be negatively impacted due to the economic downturn – resulting in postponement, termination, suspension of some ongoing projects and / or reduced demand for the services and solutions.
- The ability to continue to deliver service delivery obligations while employees work from home are sometimes constrained by contractual terms with clients and are therefore dependent on receiving the requisite approvals from them in time.
- Profitability may be marginally impacted as some clients have sought price reductions or discounts.
- Some of the clients or suppliers have invoked *force majeure* clauses in the contracts with them, negatively impacting the business with limited recourse.
- Profitability may be negatively impacted if company is unable to eliminate fixed or committed costs in line with reduced demand. Additionally, any sudden change in demand may impact utilization in the short term thereby impacting margins.
- Lower profitability and prolonged payment terms requests from clients can impact the cash flows negatively and may impact the ability to provide dividend to shareholders.

Risks related to the market:

- Economic slowdown or other factors may affect the economic health of the United States, the United Kingdom, the European Union (EU), Australia or those industries where revenues are concentrated.
- Financial stability of clients may fluctuate owing to several factors such as the demand and supply challenges, currency fluctuations and other macroeconomic condition which may adversely impact ability to recover fees for the services rendered from them.
- Intense competition in the market for technology services could affect win rates and pricing, which could reduce market share and decrease revenues and / or profits.

Risks related to cost structure:

- Expenses are difficult to predict and can vary significantly from period to period, which could cause share prices to decline.
- Any inability to manage growth could disrupt business, reduce profitability and adversely impact ability to implement growth strategy.

- Wage pressures in India and the hiring of employees outside India may prevent administration from sustaining some of the competitive advantage and may reduce the profit margins.
- Infosys is investing substantial cash assets in new facilities and physical infrastructure, and our profitability could be reduced if the business does not grow proportionately.
- Currency fluctuations and declining interest rates may affect the results of the operations.

Risks related to contractual obligations

- Failure to complete fixed-price (including maintenance) and fixed-timeframe contracts, or transaction-based pricing contracts, within budget and on time, may negatively affect profitability.
- Client contracts can typically be terminated without cause, which could negatively impact revenues and profitability.
- Client contracts are often conditioned upon performance, which, if unsatisfactory, could result in lower revenues than previously anticipated.
- Some of long-term client contracts contain benchmarking provisions which, if triggered, could result in lower future revenues and profitability under the contract.

Risks related to operations

Reputation could be at risk and may incur financial liabilities if privacy breach incidents under General Data Protection Regulation (GDPR) adopted by the European Union or other similar regulations across the globe are attributed to Infosys and if they are not able to take necessary steps to report such incidents to regulators within the stipulated time. Further, any claim from the clients for losses suffered by them due to privacy breaches caused by the employees may impact them financially and affect the reputation.

Risks related to legislation and regulatory compliance

- Due to the COVID-19 health crisis and the corresponding substantial increases in unemployment rates across certain countries in which we operate, including the United States, United Kingdom, European Union and Australia, governments have led and may in the future lead to the enactment of restrictive legislations that could limit companies in those countries from outsourcing work to us, or could inhibit ability to staff client projects in a timely manner thereby impacting revenue and profitability.
- New and changing regulatory compliance, corporate governance and public disclosure requirements add uncertainty to compliance policies and increase costs of compliance.
- The intellectual property laws of India do not give sufficient protection to software and the related intellectual property rights to the same extent as those in the US. We may be unsuccessful in protecting intellectual property rights. We may also be subject to third-party claims of intellectual property infringement.

- Net income would decrease if the government of India reduces or withdraws tax benefits and other incentives it provides or when tax holidays expire, reduce or terminate.
- In the event that the government of India or the government of another country changes its tax policies in a manner that is adverse to us, tax expense may materially increase, reducing profitability.
- We operate in jurisdictions that impose transfer pricing and other tax-related regulations on us, and any failure to comply could materially and adversely affect our profitability.
- Changes in the policies of the government of India or political instability may adversely affect economic conditions in India generally, which could impact business and prospects.
- Attempts to fully address concerns of activist shareholders may divert the time and attention of Management and Board of Directors and may impact the prices of equity shares and ADSs.
- International expansion plans subject to risks inherent to doing business internationally.
- Ability to acquire companies organized outside India may depend on the approval of the RBI and / or the Government of India and failure to obtain this approval could negatively impact business.
- Indian laws limit ability to raise capital outside India and may limit the ability of others to acquire , which could prevent Infosys from operating business or entering into a transaction that is in the best interests of shareholders.

O'Neil Methodology and Technical viewpoint:

- Infosys is hovering around it's 200-Day Moving Average.
- RS rating is 52 and bullish.
- Decline in institutional sponsorship.
- Increase in quarterly earnings for the past four quarters.
- ROE for the stock stands at 25%.
- Earnings Per Share Rating indicates great yearly and recent period earnings growth for Infosys.
- Relative Strength Rating indicates mediocre price performance for Infosys.
- Accumulation/Distribution Rating indicates that there is strong professional buying of Infosys.
- Industry Group Rank indicates that Infosys's industry group Computer-Tech Services has shown average price performance.

Key Ratios:

Annual	*2020*	*2019*	*2018*
EBIT Margin	26.04	27.25	32.14
Pre Tax Margin	25.90	27.25	32.14
After Tax Margin	19.66	20.11	26.08
ROCE	31.28	31.38	31.00
ROE	24.97	23.44	25.44
Sales(Cr)	79,047.00	73,107.00	61,941.00
Sales % Chg	+8%	+18%	+4%
Net Income(Cr)	15,543.00	14,702.00	16,155.00

Quarter	*Mar-20*	*Dec-19*	*Sep-19*	*Jun-19*
EBIT(Cr)	5,159.00	5,433.00	5,151.00	4,848.00
EBIT % Chg	+4%	+10%	-2%	+1%
Pre Tax Income(Cr)	5,128.00	5,045.00	5,123.00	4,821.00
Pre Tax Income % Chg	+4%	+9%	-2%	+1%
Net Income (Cr)	4,069.00	4,076.00	3,829.00	3,569.00
NI % Chg	+7%	+16%	-1%	+2%

5. Scenario Analysis

1.Base Case:

Infosys Ltd (INFO IN) - Base Case

In Millions of INR	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Current/LTM	FY 2021 Est	FY 2022 Est
12 Months Ending	03/31/2014	03/31/2015	03/31/2016	03/31/2017	03/31/2018	03/31/2019	03/31/2020	03/31/2020	03/31/2021	03/31/2022
Market Capitalization	1,875,800.3	2,535,141.8	2,784,572.2	2,336,511.0	2,459,754.9	3,225,299.7	2,720,443.2	3,056,335.8		
- Cash & Equivalents	259,500.0	303,670.0	327,720.0	325,950.0	262,250.0	261,950.0	233,040.0	233,040.0		
+ Preferred & Other	0.0	0.0	0.0	0.0	10.0	580.0	3,940.0	3,940.0		
+ Total Debt	0.0	0.0	0.0	0.0	0.0	0.0	46,330.0	46,330.0		
Enterprise Value	1,616,300.3	2,231,471.8	2,456,852.2	2,010,561.0	2,197,514.9	2,963,929.7	2,537,673.2	2,873,565.8		
Revenue, Adj	501,330.0	533,190.0	624,410.0	684,840.0	705,220.0	826,750.0	907,910.0	907,910.0	930,161.3	1,017,718.0
Growth %, YoY	24.2	6.4	17.1	9.7	3.0	17.2	9.8	9.8	2.5	9.4
Gross Profit, Adj	179,920.0	204,360.0	—	252,310.0	253,920.0	288,080.0	300,590.0	300,590.0	321,845.1	352,639.3
Margin %	35.9	38.3	—	36.8	36.0	34.8	33.1	33.1	34.6	34.7
EBITDA, Adj	133,440.0	146,780.0	171,820.0	187,440.0	190,110.0	208,945.0	224,390.0	224,390.0	223,195.6	251,894.8
Margin %	26.6	27.5	27.5	27.4	27.0	25.3	24.7	24.7	24.0	24.8
Net Income, Adj	107,529.6	124,937.8	135,563.5	143,677.0	159,345.0	157,921.5	165,601.7	165,652.7	160,440.7	181,308.7
Margin %	21.4	23.4	21.7	21.0	22.6	19.1	18.2	18.2	17.2	17.8
EPS, Adj	23.52	27.33	29.66	31.42	35.29	36.27	38.83	38.87	37.84	42.73
Growth %, YoY	13.7	16.2	8.5	5.9	12.3	2.8	7.1	10.4	-2.5	12.9
Cash from Operations	123,910.0	110,790.0	124,110.0	142,840.0	149,860.0	163,980.0	189,320.0	189,320.0		
Capital Expenditures	-27,450.0	-22,470.0	-27,230.0	-27,600.0	-19,980.0	-24,450.0	-33,070.0	-33,070.0	-27,472.5	-30,141.3
Free Cash Flow	96,460.0	88,320.0	96,880.0	115,240.0	129,880.0	139,530.0	156,250.0	156,250.0	138,966.2	154,792.2

2.Worst Case:

Infosys Ltd (INFO IN) - Worst Case

In Millions of INR	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	Current/LTM	FY 2021 Est	FY 2022 Est
12 Months Ending	03/31/2014	03/31/2015	03/31/2016	03/31/2017	03/31/2018	03/31/2019	03/31/2020	03/31/2020	03/31/2021	03/31/2022
Market Capitalization	1,875,800.3	2,535,141.8	2,784,572.2	2,336,511.0	2,459,754.9	3,225,299.7	2,720,443.2	3,056,335.8		
- Cash & Equivalents	259,500.0	303,670.0	327,720.0	325,950.0	262,250.0	261,950.0	233,040.0	233,040.0		
+ Preferred & Other	0.0	0.0	0.0	0.0	10.0	580.0	3,940.0	3,940.0		
+ Total Debt	0.0	0.0	0.0	0.0	0.0	0.0	46,330.0	46,330.0		
Enterprise Value	1,616,300.3	2,231,471.8	2,456,852.2	2,010,561.0	2,197,514.9	2,963,929.7	2,537,673.2	2,873,565.8		
Revenue, Adj	501,330.0	533,190.0	624,410.0	684,840.0	705,220.0	826,750.0	907,910.0	907,910.0	895,768.4	920,749.6
Growth %, YoY	24.2	6.4	17.1	9.7	3.0	17.2	9.8	9.8	-1.3	2.7
Gross Profit, Adj	179,920.0	204,360.0	—	252,310.0	253,920.0	288,080.0	300,590.0	300,590.0	283,167.0	315,647.8
Margin %	35.9	38.3	—	36.8	36.0	34.8	33.1	33.1	31.6	34.2
EBITDA, Adj	133,440.0	146,780.0	171,820.0	187,440.0	190,110.0	208,945.0	224,390.0	224,390.0	204,403.7	230,894.8
Margin %	26.6	27.5	27.5	27.4	27.0	25.3	24.7	24.7	22.8	25.1
Net Income, Adj	107,529.6	124,937.8	135,563.5	143,677.0	159,345.0	157,921.5	165,601.7	165,652.7	144,973.9	171,376.8
Margin %	21.4	23.4	21.7	21.0	22.6	19.1	18.2	18.2	16.2	18.6
EPS, Adj	23.52	27.33	29.66	31.42	35.29	36.27	38.83	38.87	32.36	39.76
Growth %, YoY	13.7	16.2	8.5	5.9	12.3	2.8	7.1	10.4	-16.0	22.9
Cash from Operations	123,910.0	110,790.0	124,110.0	142,840.0	149,860.0	163,980.0	189,320.0	189,320.0	143,780.0	195,670.0
Capital Expenditures	-27,450.0	-22,470.0	-27,230.0	-27,600.0	-19,980.0	-24,450.0	-33,070.0	-33,070.0	-23,483.5	-34,141.3
Free Cash Flow	96,460.0	88,320.0	96,880.0	115,240.0	129,880.0	139,530.0	156,250.0	156,250.0	120,296.5	161,527.0

3.Best Case

Infosys Ltd (INFO IN) - Best Case

In Millions of INR 12 Months Ending	FY 2014 03/31/2014	FY 2015 03/31/2015	FY 2016 03/31/2016	FY 2017 03/31/2017	FY 2018 03/31/2018	FY 2019 03/31/2019	FY 2020 03/31/2020	Current/LTM 03/31/2020	FY 2021 Est 03/31/2021	FY 2022 Est 03/31/2022
Market Capitalization	1,875,800.3	2,535,141.8	2,784,572.2	2,336,511.0	2,459,754.9	3,225,299.7	2,720,443.2	3,056,335.8		
- Cash & Equivalents	259,500.0	303,670.0	327,720.0	325,950.0	262,250.0	261,950.0	233,040.0	233,040.0		
+ Preferred & Other	0.0	0.0	0.0	0.0	10.0	580.0	3,940.0	3,940.0		
+ Total Debt	0.0	0.0	0.0	0.0	0.0	0.0	46,330.0	46,330.0		
Enterprise Value	1,616,300.3	2,231,471.8	2,456,852.2	2,010,561.0	2,197,514.9	2,963,929.7	2,537,673.2	2,873,565.8		
Revenue, Adj	501,330.0	533,190.0	624,410.0	684,840.0	705,220.0	826,750.0	907,910.0	907,910.0	945,556.6	1,057,378.5
Growth %, YoY	24.2	6.4	17.1	9.7	3.0	17.2	9.8	9.8	4.1	11.8
Gross Profit, Adj	179,920.0	204,360.0	—	252,310.0	253,920.0	288,080.0	300,590.0	300,590.0	317,051.8	391,117.4
Margin %	35.9	38.3	—	36.8	36.0	34.8	33.1	33.1	33.5	36.9
EBITDA, Adj	133,440.0	146,780.0	171,820.0	187,440.0	190,110.0	208,945.0	224,390.0	224,390.0	236,789.0	283,459.3
Margin %	26.6	27.5	27.5	27.4	27.0	25.3	24.7	24.7	25.0	26.8
Net Income, Adj	107,529.6	124,937.8	135,563.5	143,677.0	159,345.0	157,921.5	165,601.7	165,652.7	173,489.2	205,469.1
Margin %	21.4	23.4	21.7	21.0	22.6	19.1	18.2	18.2	18.3	19.4
EPS, Adj	23.52	27.33	29.66	31.42	35.29	36.27	38.83	38.87	39.06	44.89
Growth %, YoY	13.7	16.2	8.5	5.9	12.3	2.8	7.1	10.4	0.4	14.9
Cash from Operations	123,910.0	110,790.0	124,110.0	142,840.0	149,860.0	163,980.0	189,320.0	189,320.0	201,789.5	241,569.5
Capital Expenditures	-27,450.0	-22,470.0	-27,230.0	-27,600.0	-19,980.0	-24,450.0	-33,070.0	-33,070.0	-33,745.0	-41,456.0
Free Cash Flow	96,460.0	88,320.0	96,880.0	115,240.0	129,880.0	139,530.0	156,250.0	156,250.0	168,044.5	200,113.0

Conclusion

The IT sector has looked strong even in these harsh economic conditions. The firms which focus on cloud computing, automation, digitization etc. have especially been resistant to the Covid 19 crisis. But such a giant upset in the economy is bound to affect the firms to some degree. Thus we might see a slowdown in growth in Q1 of FY21, if not a small negative growth. The firms have restricted the hiring to an on need basis, to cut down extra costs. The revenue have taken a hit in those divisions of the company which are connected to badly hit sectors like travel, manufacturing etc.

The earnings and margins for most IT firms have been robust. The problem which their stock is facing is the market trend. Even if a company is performing exceptionally well on paper, if the market sentiment is pessimistic, their stock might not do as well.

One key thing to notice is that the market is going up, even when the economy is going down. This might give rise to a bull trap, which means that the markets can fall again. People might be placing their bets on the market based on the Q4 results of the companies, which had, for the most part, not seen the full impact of the coronavirus. It is possible that as the Q1 results of FY21 arrive in July, the markets will fall. The unemployment has been about 22% in the recent days, which is very high as compared to the predicted 14%. This is another reason why this could be true, thus making investments in stocks a bit risky for now.

Despite the pandemic and global economic slowdown, cash rich Indian IT companies are poised to absorb whatever their business might take, on account of their long term relations with fortune 500 companies.

Compared to other capital intensive sectors, like manufacturing, IT sector shows much better promise and is thus more attractive to retail investors right now. Big firms like TCS can be good for a long term investment, and even growth companies like NIIT Tech can give good results in short term.

The future plans and prospects of the IT sector looks strong, especially in a developing economy like India. Many foreign investors have poured large amounts of money into Indian firms, showing promise. Moreover, the shift of tech firms from China to India due to recent events also shows an optimistic future, especially in the upcoming years.

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