

Project Report on

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# **Buy Recommendations on Various Stocks of Future and Options**

*Submitted by*

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# **CERTIFICATE**

This is to certify that the work titled 'Buy Recommendations on Various Stocks of Future and Options' submitted by Mohit Srivastava as part of his final year Major Project Project at Delhi School of Management, Delhi Technological University between January and May 2021 is his original work and has not been submitted anywhere else for the award of any credits/degree whatsoever.

The project is being submitted to the Delhi School of Management at Delhi Technological University as part of the requirements for the Master of Business Administration degree.

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Faculty Advisor

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Head of Department (DSM, DTU)

# **DECLARATION**

I hereby declare that the work titled 'Buy Recommendations on Various Stocks of Future and Options', which I submitted as part of my final year Major Project Project at Delhi School of Management, Delhi Technological University, from January to May 2021 under the supervision of Prof. Abhinav, is my original work and has not been submitted anywhere else.

The article was written by me in my own words and was not plagiarized. Anything in this article that isn't my own job has been properly referred to, quoted, and acknowledged.

**Mohit Srivastava**

(Roll No 2K18/MBA/064)

## **ACKNOWLEDGMENT**

It gives me great pleasure to express my gratitude for the assistance and guidance I received during the Project's growth. I'd like to express my gratitude to Prof. Abhinav, my faculty advisor, who encouraged me to pursue the subject of 'Buy Recommendations on Various Stocks of Future and Options' and led me through the project. The project presented me with a fantastic opportunity to learn more about economics and Analytics.

I owe a huge debt of gratitude to the Delhi School of Management at Delhi Technological University for allowing me to work on this project. Finally, I'd like to thank all of the distinguished faculty members for contributing their knowledge and expertise to this project.

I have put in all of my energies to ensure that the project is completed in the most efficient way possible, as well as to ensure that the project is completed in a timely manner.

**Mohit Srivastava**  
(Roll No. 2K19/DMBA/053)

# ABSTRACT

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Through this project my model will give the buy recommendation on various stocks from Future and Option index of Indian Stock Market. This strategy will be applicable for both the short and long term investors. It will give entry points for the long term investors of the stock market. My model will provide buy recommendations on various stocks from the Indian Stock Market's Future and Option indexes through this project.

This technique can be used by both short-term and long-term investors. It will have entry points for long-term stock market investors. Technical Analysis (also known as TA) is a common technique for doing exactly that.

It not only assists in developing a point of view on a specific stock or index, but also in defining the trade in terms of entry, exit, and risk.

The project that my model takes into consideration combination of variables instead of one. My model takes into consideration all the variable whether there is long buildup in the stock, RSI, MACD and PVO. My model fetch market data which includes prices (Both Last traded price and historical prices), open, high, low, open interest data and other data online and it updates automatically.

For fetching the data in my model I have used Google Sheets and there is in build function named Google-finance, with which my model can fetch data automatically. Some of the data is real-time (with little day than frequent changes on NSE) and some data my model get at the end-of-the day. Based on the end of the day data, my model will get some stocks under strategy which are for Buying for tomorrow's trading session. And all the data will automatically update.

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# Chapter 1

## INTRODUCTION

---

### 1.1 History of Stock Market

The stock exchange was established in the 18th century by the "East India Company." It was established in India in 1850 with 22 stock brokers in front of the town hall in Bombay. This stock exchange is regarded as Asia's oldest stock exchange. In chronological order, below is the history of the stock market:

- In the **11th century**, France's courtiers de change administered and controlled agricultural communities' debts on behalf of the banks. These men became known as "brokers" because they exchanged debts.
- In the **13th century**, commodity traders in Bruges met in the home of a man named Van der Burse, and this previously informal gathering became the "Bruges Bourse." –Belgium is a country in Europe.
- The **Amsterdam Stock Exchange** was founded in 1602, and it was the first company to issue stocks and bonds.
- **London Stock Exchange:** Established in 1698, this is one of the world's oldest stock exchanges. John Castaing founded the London Stock Exchange. The London Stock Exchange now lists 3,500 companies from 84 different countries.
- **The New York Exchange** is the most well-known and oldest of all American stock exchanges. This was established in 1792. The New York Stock Exchange (NYSE) has a market capitalization of approximately \$20 trillion and lists 2,800 firms.
- **The American Stock Exchange**, or Amex, is a stock exchange in the United States (Established in 1849). The mining industry was connected to the American Stock Exchange.

- **Bombay Stock Exchange:** Established in 1875, the Bombay Stock Exchange is one of Asia's oldest stock exchange markets. Every day, approximately 2,000,000 shares of stock are exchanged.

- **NASDAQ** was established in 1971 by the National Association of Securities Dealers Automated Quotation. This was the first stock exchange to incorporate electronic trading into its operations. (North America)

## **1.2 Growth and Evaluation of Stock market in India**

Process of liberalization and de-regulation that begin in late 1980's has directly affected the process of capital market of the country. No. of steps were taken by the Govt. in order to bring along economy back to rails. The extent of growth can be gauged from the fact that amount realized by the primary market which has lower's in 70's and during the next upcoming years. It went up high India has the highest no. of listed companies in the world and this no. as on the date more than 10,000 companies app.

## **1.3 What is a Stock?**

An instrument that represents a claim on a proportional share of a corporation's assets and income and represents an ownership interest (called equity) in the company. For instance, if a company has 1000 outstanding shares of stock and an individual owns 50 of them, he or she owns 5% of the company. Most stocks also come with voting rights, which offer shareholders a proportional say in how the company is run.

## **1.4 What are Markets?**

A stock exchange (Market) is a place where you can buy and sell company stock and derivatives. A market is a location where buyers and sellers of securities can conduct business, such as buying and selling shares, bonds, and debentures.

**1.4.1 Primary markets:** The primary market is the area of the capital markets where new shares are issued.

**1.4.2 Secondary markets:** A secondary market is a stock market where shares that have already been sold through a private or public offering can be traded. Securities are sold and exchanged from one investor or speculator to another in the secondary market.

### **1.5 Objectives of the Project**

The major objectives for carrying out the project work are:

- Through this project I will give the buy recommendation on various stocks from Future and Option index of Indian Stock Market.
- This strategy will be applicable for both the short and long term investors. It will give entry points for the long term investors of the stock market.
- Different variables will be used to predict which stocks to buy.
- Various tools and techniques of technical analysis will be use to maintain accuracy and predictability.

### **1.6 Scope of the Project**

My model will provide buy recommendations on various stocks from the Indian Stock Market's Future and Option indexes through this project. This technique can be used by both short-term and long-term investors. It will have entry points for long-term stock market investors. Technical Analysis (also known as TA) is a common technique for doing exactly that.

It not only assists in developing a point of view on a specific stock or index, but also in defining the trade in terms of entry, exit, and risk.

## **Chapter 2**

### **LITERATURE REVIEW**

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In his novel, Gupta (1972) examines the workings of Indian stock exchanges and offers a variety of suggestions for improving them. The study emphasises the importance of regulating the amount of speculation in order to meet liquidity and price stability requirements. It proposes that corporate shares be listed on several stock exchanges at the same time to increase liquidity.

Panda (1980) examined the position of stock exchanges in India prior to and following independence. According to the report, listed stocks covered four-fifths of the joint stock firms. Securities investing was no longer a monopoly of a single social class or a select group of people. It drew the attention of a significant number of people from the lower and middle classes.

In an extensive study titled "Return on New Equity Issues," Gupta (1981) claims that the investment performance of new issues of equity shares, especially those of new companies, warrants separate examination. The 'set price' at which new issues are issued has a major impact on the rate of return on new issues to the original buyers. Dividends and capital gains are included in the return on equities.

Jawahar Lal (1992) examines the characteristics of Indian investors and their investment decisions. He investigated their familiarity with, and comprehension of, financial data, as well as the degree to which it is applied. The information provided by the companies usually does not meet the needs of a wide range of individual investors, and there is a general feeling that it does not.

The results of L.C.Gupta's report, published in 1992, revealed that there is wild speculation in the Indian stock market. The overly volatile nature of the Indian stock market is reflected in extremely high concentrations of market activity in a few shares to the exclusion of the rest, as well as extremely high speculative counter trading velocities.

Arora (2017) briefly reported the analysis of the civil nuclear deal and STOCK MARKET inflows. The Project incorporated a study of initiatives by Japan to strengthen trade relations with India such as the amendment of the constitution to allow defense relations and the role in infrastructure growth. The study concluded the civil nuclear deal as a sign of a good relationship between India and Japan.

In the past, only a few Projects have attempted to forecast foreign direct investment flow using MODEL modeling. One of the noteworthy attempts in this direction was based on the augmented production function analysis that concluded the occurrence of a long-run association amongst STOCK MARKET and the growth of an economy (Shoter & Abdulrazzag, 2003).

Employing Box-Jenkins MODEL modeling on the 1976-2003 time-series dataset, the inflow of STOCK MARKET for India was forecasted from 2004 till 2025 by Bashier & Talal (2007). The paper illustrates the MODEL (0,1,1) as the best-fitted model based on p-value analysis. In closure, the authors discussed the factors responsible for the expected rise in the STOCK MARKET volumes over the period of analysis as forecasted by MODEL modeling.

## **2.1 Indian Stock Market and Investment Relations**

Bera & Joseph (2012) in their paper “Indian Stock Market and Investment Relations and their Future Prospects” analyzed the foreign investment flows between the economies. The authors have concluded that the long reluctance of Japan ended lately and that was a substantial increase in the STOCK MARKET inflow in India from Japan, along with a substantial increase in the imports from India in the recent years. However, the main concern is decreasing Indian export to Japan, which is even less than 2% of the total exports of India globally. In this paper, the authors have drawn their expectations towards trade improvement between India and Japan.

A study on the “Ex-Ante Impact Assessment of Indian Stock Market Comprehensive Economic Partnership Agreement on Fishing Sector” was carried out by Mouzam, G.S., Murali, & Subhash (2016) tied to assess the impact of the tariff, using SMART analysis, on the scattered produce in a single market. Employing SMART analysis, it has been found that the IJ-CEPA is expected to result in a surge in exports of fishing products. The rise in exports is due to trade diversion substituting Japan’s competent exporters such as Chile, Vietnam, China, and Thailand.

Rajamohan, Rahut, & Jacob (2008) discussed Indian Stock Market and challenges while analyzing pre-world war II and India, Japan, China trade relations in terms of mineral and oils. They concluded that the study indicates Indian Stock Market relations will progress politically and economically based on the analysis of the current and future dynamics.

Kojima (1964) developed a simple technique known as trade intensity. This technique emphasizes on measuring a nation's trade share with another nation as a share of the total proportion of global trade of the latter nation. Statistically, it is used to assess whether the exports of a region are greater than what is done by the world on an average. In other words, it is the export share. The technique is free from the 'size' bias; thus, it is easier to use and infer for different areas even when the exports are increasing. Raj & Ambrose (2014) carried out a study titled "A Brief Analysis of Stock Market Bilateral Trade: A Trade Intensity Approach" wherein they calculated the trade intensity indices for the period 2001 -11 to analyze the intensity of trade.

## **2.2 Concluding Remark**

In this chapter, the literature review was conducted to understand past studies regarding STOCK MARKET and Indian Stock Market relations. The next chapter deals with the Project methodology used, highlighting the data coverage and the tools and techniques to be employed to draw results.

## **Chapter 3**

### **PROJECT METHODOLOGY**

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The Project is a comprehensive explorative study with an attempt to employ mathematical models and perform statistical modeling to attain the defined objectives. This chapter deals with the Project methodology and briefly discusses the tools and techniques adopted for the study.

#### **3.1 Overview**

The daily data of the trading sessions of 142 F&O stocks was collected from different sources like NSE.

- A checklist was created so that the accuracy can be maintained. This checklist consisted of both Main and Supporting Variables.
- Various Technical Variables will be used like:

RSI-Relative Stock Indicator

MACD-Moving Average Convergence and Divergence

PVO- Percentage Volume Oscillator The volume of the selected stock will be analyzed using SMA and EMA i.e simple and exponential moving average of past 25, 65, 100 and 150 trading sessions.

- Specific support and resistance level of the selected stocks was provided to overcome the losses. Which will give the target price and stop loss of the selected stocks.
- For Accuracy of Predictability I have tested this strategy for at least 2 weeks and seen the success rate. This strategy will be use, only if the success rate is greater than 50-60%.

#### **3.2 Tools & Techniques**

The collected data was classified and tabulated in MS-Excel for analysis and interpretation. E-Views Statistical Software has been used for statistical modeling and analysis. The following listed statistical techniques have been employed in the study:



### 3.2.1 Relative Stock Indicator (RSI)

The RSI is a momentum oscillator that measures price movement speed and shift. The RSI fluctuates between zero and one hundred. When the RSI rises above 70, it is considered overbought, and when it falls below 30, it is considered oversold. Divergences and failure swings may be used to produce signals. The RSI can also be used to spot a broad pattern.

$$RSI = 100 - (100 / (1 + (\text{Average upward price change} / \text{Average lower price change})))$$

**RSI in the Model on different dates:**

**Date: 15/04/2021**

	A	B	C	D	E	F	G	H	I	J	K	L
1												
2	PRICE	ACC	ADANI	ADANI	ADANI	ADANI	ADANI	ADANI	ADANI	ADANI	ADANI	ADANI
46												
47	Change%	-0.27%	1.08%	-0.91%	0.28%	0.96%	0.58%	2.03%	1.13%	2.57%	-0.84%	1.15%
48		0.91%	2.04%	2.11%	0.28%	0.89%	0.92%	-0.37%	3.46%	0.06%	0.69%	1.57%
49		1.38%	0.26%	2.09%	0.69%	1.44%	-3.27%	0.90%	-0.87%	1.67%	3.17%	1.22%
50		-2.66%	-0.18%	0.66%	3.57%	0.94%	-3.03%	-1.73%	3.82%	-0.41%	-1.31%	-1.40%
51		0.94%	1.65%	-1.09%	-1.72%	0.66%	0.52%	-0.07%	2.61%	-0.82%	0.73%	0.83%
52		-0.62%	0.45%	-0.08%	-1.88%	2.27%	0.24%	-2.45%	4.54%	0.01%	-1.14%	-3.25%
53		0.65%	0.17%	1.32%	0.28%	-0.78%	3.92%	7.96%	-2.88%	-1.98%	-0.82%	6.54%
54		0.28%	1.51%	-0.96%	-1.18%	1.08%	1.21%	-3.87%	1.83%	0.95%	-0.45%	3.48%
55		0.09%	0.83%	-0.69%	0.28%	-2.07%	-1.96%	7.36%	-0.15%	0.50%	0.38%	2.28%
56		-0.50%	0.72%	0.16%	0.69%	0.81%	0.50%	0.83%	0.40%	0.83%	0.21%	-0.69%
57		1.60%	6.21%	3.70%	3.82%	1.05%	3.49%	0.99%	5.18%	0.49%	0.14%	0.40%
58		-0.56%	0.05%	3.02%	5.07%	0.20%	-2.26%	-0.81%	0.92%	3.71%	0.37%	-2.41%
59		-0.39%	-2.22%	-2.35%	-2.79%	0.46%	-1.26%	0.45%	-0.83%	-0.37%	-1.55%	-0.58%
60		0.42%	0.66%	-1.58%	-0.78%	2.35%	-0.62%	2.20%	1.13%	-4.22%	0.22%	0.39%
61												
62												
63	RSI	48.8	52.8	63.0	48.7	43.4	40.8	64.7	76.6	57.2	42.8	54.3
64												
65												

Date: 14/05/2021

	A	B	C	D	E	F	G	H	I	J	K	L
1												
2	PRICE	ACC	ADANIENT	ADANIPOORTS	ADANIPOWER	AMARAJABAT	AMBUJACEM	APOLLOHOSF	APOLLTYRE	ASHOKLEY	ASIANPAINT	AUROPHARM.A
47	Change%	-1.53%	0.55%	0.97%	0.16%	-2.02%	-1.51%	-0.72%	-1.65%	-0.94%	0.19%	-1.26%
48		1.05%	0.40%	-3.99%	1.41%	0.37%	1.47%	4.77%	-1.40%	1.22%	-0.75%	6.43%
49		0.41%	1.52%	0.37%	-0.21%	1.44%	0.95%	0.43%	-0.47%	1.69%	-0.72%	-0.88%
50		0.45%	0.94%	3.64%	0.21%	-0.56%	-0.68%	-1.08%	0.33%	0.18%	0.10%	0.40%
51		-1.00%	0.40%	-0.30%	1.49%	1.11%	-0.29%	0.39%	3.17%	1.53%	0.21%	3.45%
52		1.29%	-0.05%	-0.37%	0.51%	0.24%	1.14%	-1.97%	1.31%	-0.22%	-0.03%	-1.63%
53		-1.43%	-1.36%	-1.45%	-1.57%	2.08%	-1.86%	-1.89%	-1.16%	-1.99%	0.00%	-1.32%
54		-0.31%	-5.09%	-2.40%	-1.69%	-4.07%	-0.63%	-1.75%	-6.03%	-1.19%	8.54%	-1.04%
55		1.43%	5.63%	2.82%	1.30%	0.27%	1.01%	0.36%	1.13%	2.94%	0.30%	-0.43%
56		1.91%	2.92%	2.88%	5.00%	1.59%	1.76%	0.35%	1.95%	6.54%	1.40%	0.17%
57												
58												
59												
60												
61												
62												
63	RSI	42.8	26.1	49.3	39.5	32.2	54.4	55.7	42.8	51.6	85.7	73.6
64												

### 3.2.2 Moving Average Convergence and Divergence (MACD)

Convergence and Divergence of Moving Averages Average of Moving Averages The Moving Average Convergence Divergence (MACD) indicator is a trend-following momentum indicator that depicts the relationship between two security price moving averages. By subtracting the 26-period Exponential Moving Average (EMA) from the 12-period EMA, the MACD is estimated.

**MACD line: 12-Period EMA – 26-Period EMA**

**Signal line: 9-Period EMA**

**Histogram: Difference between MACD line and signal line**

MACD in the Model on different dates:

Date: 15/04/2021

1												
2	PRICE	ACC	ADANI	ADANI	ADANI	AMARA	AMBUJ	APOLLO	APOLLO	ASHOK	ASIAN	AURO
99	MACD	86.34	7.32	3.90	-0.49	8.24	12.23	-21.28	5.66	2.23	65.75	-14.05
100		84.95	8.54	3.81	-0.43	9.58	12.21	-23.72	5.32	2.34	63.58	-15.08
101		82.53	9.65	3.43	-0.37	11.12	12.17	-22.01	5.11	2.56	59.71	-15.02
102		88.98	11.04	3.69	-0.31	12.76	12.19	-21.03	5.29	2.71	57.18	-13.83
103		88.54	12.05	4.46	-0.23	14.80	11.38	-18.52	5.36	2.91	60.84	-11.99
104		75.73	12.64	5.20	-0.07	16.83	10.90	-19.26	5.81	3.81	59.26	-11.29
105		72.34	13.43	5.40	0.00	18.66	8.91	-19.74	6.41	2.99	59.25	-10.11
106		68.02	14.02	5.47	0.01	21.35	8.90	-23.97	7.38	3.48	56.56	-11.19
107		64.74	14.38	5.85	0.02	22.70	7.97	-14.98	7.79	3.68	52.36	-7.78
108		61.88	14.92	5.80	-0.01	24.21	8.12	-12.95	8.26	3.87	47.68	-2.84
109		58.91	15.42	5.49	-0.02	23.74	7.72	0.48	8.51	4.80	44.12	2.58
110		55.32	15.85	5.23	0.00	23.63	7.43	12.50	8.67	4.12	41.20	6.33
111		54.08	17.85	6.05	0.09	23.96	7.84	23.58	9.36	4.21	38.68	9.47
112		51.68	19.22	7.54	0.32	24.08	7.99	30.51	9.92	4.50	36.92	18.17
113		48.75	19.38	7.88	0.41	24.20	7.04	36.41	10.13	4.64	32.40	18.23
114		46.46	19.49	7.58	0.44	25.59	6.41	44.65	10.34	4.39	28.88	18.41
115												
116												
117	Signal	77.34	11.46	4.58	-0.21	15.12	10.56	-20.40	6.01	2.88	59.30	-12.25
118		74.23	12.15	4.82	-0.17	16.94	10.97	-18.91	6.46	3.88	56.98	-18.37

Date: 14/05/2021

2	PRICE	ACC	ADANI	ADANI	ADANI	AMARA	AMBUJ	APOLLO	APOLLO	ASHOK	ASIAN	AURO
93		1750.65	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
94		1620.98	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
95												
96												
97												
98												
99	MACD	-14.18	38.16	-3.82	-1.07	-16.49	1.17	108.52	-5.91	-0.19	15.73	41.15
100		-10.63	43.28	-1.82	-0.73	-17.42	1.61	104.14	-4.56	-0.35	15.69	38.83
101		-10.04	47.35	0.36	-0.44	-19.21	1.56	97.67	-3.74	-0.56	15.87	35.60
102		-7.91	50.40	-0.39	-0.10	-20.17	1.86	103.59	-3.30	-0.61	14.28	37.57
103		-5.53	53.75	-0.75	0.15	-19.80	2.31	108.19	-3.00	-0.49	11.38	37.97
104		-2.93	56.73	1.12	0.36	-19.64	2.46	107.66	-2.67	-0.38	9.19	38.17
105		-2.37	58.84	2.39	0.64	-18.60	2.49	107.05	-1.84	-0.14	7.80	40.67
106		0.02	59.77	3.14	0.88	-17.42	2.76	100.12	-0.94	0.02	6.56	40.81
107		-0.27	58.40	2.80	0.95	-14.99	2.47	88.65	-0.43	-0.03	5.51	39.37
108		-0.97	51.45	1.07	0.85	-15.52	2.07	74.20	-1.09	-0.18	22.04	36.94
109		0.63	50.89	1.35	0.87	-15.59	1.97	62.94	-1.41	-0.03	35.39	34.28
110		4.77	52.88	3.28	1.26	-14.49	2.31	54.30	-1.31	0.69	48.57	31.94

### 3.2.3 Percentage Volume Oscillator (PVO)

The Percentage Volume Oscillator (PVO) is a volume-based momentum oscillator. PVO is a percentage of the larger moving average that represents the difference between two volume-based moving averages. It has a signal line, a histogram, and a centerline, much like M.A.C.D.

**PVO looks like this:**



## PVO in my Model on different dates:

Date: 15/04/2021

	A	B	C	D	E	F	G	H	I	J	K	L
1	PRICE	ACC	ADANIEN	ADANIPO	ADANIPOWE	AMARAJAB	AMBUJACEM	APOLLOHOS	APOLLOTYRE	ASHOKLEY	ASIANPAI	AUROPHAM
99	Percentage Volume Oscill	23.76%	5.91%	20.46%	8.26%	40.09%	28.66%	-28.03%	14.25%	-2.66%	25.16%	-3.11%
100		17.91%	3.82%	23.61%	3.66%	33.90%	15.45%	-30.17%	5.06%	-4.38%	19.48%	-6.87%
101		12.67%	8.37%	23.67%	5.53%	31.37%	18.14%	-26.14%	8.09%	-2.61%	14.72%	-9.77%
102		7.83%	6.83%	33.42%	5.22%	25.23%	4.67%	-27.66%	16.96%	-4.73%	11.96%	-9.57%
103		5.03%	4.68%	37.36%	8.57%	19.88%	7.66%	-30.58%	17.66%	-7.69%	11.13%	-12.81%
104		3.16%	1.18%	31.88%	64.74%	15.46%	6.42%	-27.12%	22.21%	-9.78%	9.51%	-13.71%
105		5.36%	1.88%	27.01%	66.26%	9.50%	5.07%	-22.48%	18.29%	-9.19%	5.06%	-14.41%
106		2.08%	-1.39%	22.73%	46.53%	11.52%	4.52%	-10.99%	15.95%	1.68%	3.53%	-11.11%
107		5.20%	-5.21%	16.71%	37.46%	8.21%	4.66%	1.59%	12.35%	1.51%	3.33%	1.51%
108		4.31%	-6.21%	12.03%	31.56%	3.86%	2.36%	4.49%	18.15%	-0.77%	8.51%	26.71%
109		-0.56%	-9.32%	7.40%	23.87%	5.09%	8.82%	14.74%	4.48%	-4.79%	-2.05%	23.27%
110		-8.55%	-15.93%	-1.25%	14.71%	-2.43%	-7.32%	6.18%	-4.01%	-11.99%	-9.88%	13.51%
111		0.08%	-3.48%	5.47%	32.12%	-5.04%	-8.43%	5.10%	8.01%	-12.71%	-9.88%	14.81%
112		1.97%	2.32%	14.48%	47.64%	-6.04%	8.42%	0.89%	-9.26%	-8.67%	-9.16%	10.81%
113		1.10%	5.19%	12.08%	47.33%	-5.33%	-8.48%	4.82%	-2.14%	-6.57%	-4.95%	7.81%
114		-0.36%	4.24%	8.67%	38.76%	4.97%	-3.68%	4.57%	1.76%	-1.95%	-3.61%	5.31%
115												
116												
117	Signal	8.99%	1.81%	26.32%	25.27%	21.68%	8.79%	-22.40%	14.11%	-4.28%	11.63%	-8.81%
118		8.05%	8.21%	23.46%	25.52%	18.12%	7.49%	-17.92%	13.33%	-3.51%	9.41%	-1.77%

Date: 14/05/2021

2	PRICE	CIPLA	COALINDIA	COFORGE	COLPAL	CONCOR	CUMMINSIND	DABUR	DISHTV	DIVISLAB	DLF	DRREDDY
98												
99	Percentage Volume Oscill	6.97%	6.17%	-10.21%	3.31%	-11.08%	-2.58%	5.95%	-29.96%	23.95%	-9.32%	6.7
100		4.49%	5.31%	-13.50%	4.92%	-13.09%	-3.70%	3.19%	-18.50%	21.73%	-11.02%	3.1
101		4.50%	4.33%	-15.80%	4.38%	-15.30%	-4.42%	1.09%	45.19%	15.57%	-11.43%	-0.6
102		6.52%	-0.49%	-18.26%	0.49%	-18.49%	-3.86%	-3.03%	43.59%	11.93%	-13.79%	-2.4
103		14.32%	-2.18%	40.82%	-3.34%	-14.29%	-6.51%	-2.46%	37.05%	6.55%	-17.08%	-4.0
104		9.45%	0.69%	46.13%	-5.50%	-14.96%	-11.15%	18.67%	34.36%	0.74%	-5.26%	-6.6
105		7.96%	23.12%	44.29%	-5.77%	-17.03%	-6.45%	24.74%	36.90%	5.72%	-2.94%	0.8
106		4.41%	41.07%	41.60%	-9.20%	11.52%	-3.16%	19.96%	33.14%	1.88%	-2.34%	-1.5
107		0.85%	42.54%	33.12%	-10.64%	10.30%	11.69%	19.49%	29.00%	-0.39%	-3.78%	-3.9
108		7.26%	37.34%	23.74%	4.23%	6.91%	6.69%	17.24%	22.73%	-3.21%	-2.97%	6.9
109		10.85%	31.09%	17.31%	32.76%	3.16%	5.50%	12.29%	15.90%	-7.65%	-3.16%	5.8
110		5.97%	23.51%	12.93%	30.17%	18.36%	11.75%	8.26%	9.56%	-10.09%	-5.20%	2.2
111		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
112		#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!

### 3.2.4 Long Buildup

Long buildup indicates that more consumers are anticipating price increases and are taking Long positions. To get an idea, simply look at Price and Open Interest. It's a long buildup if the price and Open Interest both rise.

This indicates that more traders expect prices to rise.

### Results of Long Buildup in my model:

Date: 14/05/2021

	A	B	C	D	E	F	G	H	I
1	14 May 2021	Exchange	Company name	LTP	Long Buildup Alert	RSI Alert	ALERT	MACD Alert	PVO
2	ACC	NSE	ACC Ltd	1936.2	Long Buildup	42.8	Bullish	4.48	
3	ADANIENT	NSE	Adani Enterprises Ltd	1344.45		26.1		-0.70	
4	ADANIPOWER	NSE	Adani Ports and Special Economic Zone Ltd	780		49.3		0.69	
5	ADANIPOWER	NSE	Adani Power Ltd	101.9		39.5		0.51	
6	AMARAJABAT	NSE	Amara Raja Batteries Ltd	787.2		32.2		1.65	
7	AMBUJACEM	NSE	Ambuja Cements Ltd	315.25	Long Buildup	54.4	Bullish	-0.08	
8	APOLLOHOSP	NSE	Apollo Hospitals Enterprise Limited	3172		55.7		-27.34	
9	APOLLOTYRE	NSE	Apollo Tyres Limited	215		42.8		0.93	
10	ASHOKLEY	NSE	Ashok Leyland Ltd	123.1	Long Buildup	51.6	Bullish	0.20	
11	ASIANPAINT	NSE	Asian Paints Ltd	2818.95		85.7		17.53	
12	AUROPHARMA	NSE	Aurobindo Pharma Ltd	1002		73.6		-3.39	
13	AXISBANK	NSE	Axis Bank Ltd	712.3		60.3		-1.28	
14	BAJAJ-AUTO	NSE	Bajaj Auto Ltd	4065		49.8		-6.85	

Date: 4/05/2021

1	4 May 2021	Exchange	Company name	LTP	Long Buildup Alert	RSI Alert	ALERT	MACD Alert	PVO
74	INDUSINDBK	NSE	Indusind Bank Ltd	965.45		32.1		9.08	
75	INFRATEL	NSE	Bharti Infratel Ltd	#N/A		81.6		5.71	
76	INFY	NSE	Infosys Ltd	1334.65	Long Buildup	43.6	Bullish	#N/A	#N
77	IOC	NSE	Indian Oil Corporation Ltd	107		41.8		-0.50	
78	ITC	NSE	ITC Ltd	207.85		92.3		1.72	
79	JINDALSTEL	NSE	Jindal Steel & Power Limited	420.95		53.9		1.78	
80	JSWSTEEL	NSE	JSW Steel Limited Fully Paid Ord. Shrs	705.8		55.2		-7.34	
81	JUBLFOOD	NSE	Jubilant FoodWorks Ltd	3004		48.0		-11.82	
82	JUSTDIAL	NSE	Just Dial Ltd	731.85		18.4		-6.99	
83	KOTAKBANK	NSE	Kotak Mahindra Bank Ltd Fully Paid Ord. Shrs	1730.95	Long Buildup	52.9	Bullish	#N/A	
84	L&TFH	NSE	L&T Finance Holdings Ltd	90		NA		-2.48	
85	LICHSGFIN	NSE	LIC Housing Finance Limited	448.3		44.7		0.57	#N
86	LT	NSE	Larsen & Toubro Limited	1403		87.3		4.29	
87	LUPIN	NSE	Lupin Limited	1207.35		19.4		10.10	
88	M&M	NSE	Mahindra & Mahindra Limited	783.65	Long Buildup	48.6	Bullish	#N/A	
89	M&MFIN	NSE	Mahindra & Mahindra Fin. Services Ltd.	154.15		52.1		0.96	
90	MANAPPURAM	NSE	Manappuram Finance Ltd	157.95		37.5		1.44	#N
91	MARICO	NSF	Marico Limited Fully Paid Ord. Shrs	474.15		84.0		1.09	#N

**Date: 7/05/2021**

1	7 May 2021	Exchange	Company name	LTP	Long Buildup Alert	RSI Alert	ALERT	MACD Alert	PVO
43	DISHTV	NSE	Dish TV India Limited	12.55	-	80.0		0.33	
44	DIVISLAB	NSE	Divi's Laboratories Ltd	4041.8	Long Buildup	53.6	Bullish	-14.45	
45	DLF	NSE	DLF Ltd	264.3		67.2		3.71	
46	DRREDDY	NSE	Dr.Reddy's Laboratories Ltd	5247		23.6		-23.57	
47	EICHERMOT	NSE	Eicher Motors Ltd	2569.95	Long Buildup	58.5	Bullish	18.71	
48	EQUITAS	NSE	Equitas Holdings Ltd	89	-	68.0		1.02	
49	ESCORTS	NSE	Escorts Limited	1175.1		89.6		12.77	
50	EXIDEIND	NSE	Exide Industries Ltd	187.1		72.2		1.22	
51	FEDERALBNK	NSE	Federal Bank Ltd	84.35		39.2		0.40	
52	GAIL	NSE	GAIL (India) Limited	151.95		84.4		2.09	
53	GLENMARK	NSE	Glenmark Pharmaceuticals Ltd	616	Long Buildup	62.2	Bullish	-0.86	
54	GMRINFRA	NSE	GMR Infrastructure Ltd	26.6		67.1		0.41	
55	GODREJCP	NSE	Godrej Consumer Products Limited	820		39.4		18.93	
56	GODREJPROP	NSE	Godrej Properties Ltd	1278		51.0		-7.73	
57	GRASIM	NSE	Grasim Industries Ltd	1384.25		NA		5.76	
58	HAVELLS	NSE	Havells India Ltd	1072.8		47.3		4.67	
59	HCLTECH	NSE	HCL Technologies Ltd	932.95		43.4		5.36	
60	HDFC	NSE	Housing Development Finance Corp Ltd	2461.15		49.2		1.94	

### 3.4 Final Selection of Stock

Project on Buy recommendation on various stocks of Future and Option index for the investors.

- The Buying strategy is based on the variables that have been discussed.
- We will choose the stocks from our scanner in the following cases:
- When there is a long buildup
- If the RSI of the stocks is between 40-70
- To support our strategy, PVO and MACD are also calculated and all will be automatically updated.

### 3.5 Concluding Remark

This chapter dealt with the tools and techniques discussing the Project methodology for the study. The next chapter discusses the analysis of the data based on various indices and statistical tests discussed in this chapter. Further, the next chapter highlights the findings of the analysis furnishing appropriate reasons behind it.

## Chapter 4

### SECTOR ANALYSIS

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#### IT SECTOR

##### **Overview:**

IT industry in India has grown despite the global meltdown in the year 2009. Where world saw negative growth in their economy, The Indian IT sector managed to increase growth to 5.5 percent. 12% growth was also seen by the domestic market, this year. Estimation of Indian offshoring industry is at 120-180 US billion dollars in the coming years. The IT Sector has approx. 1 million people as employees and is providing indirect employment to approx. 2.5 million citizens of India. It is a prediction that it will add extra 1, 50,000 jobs, NASSCOM reports.

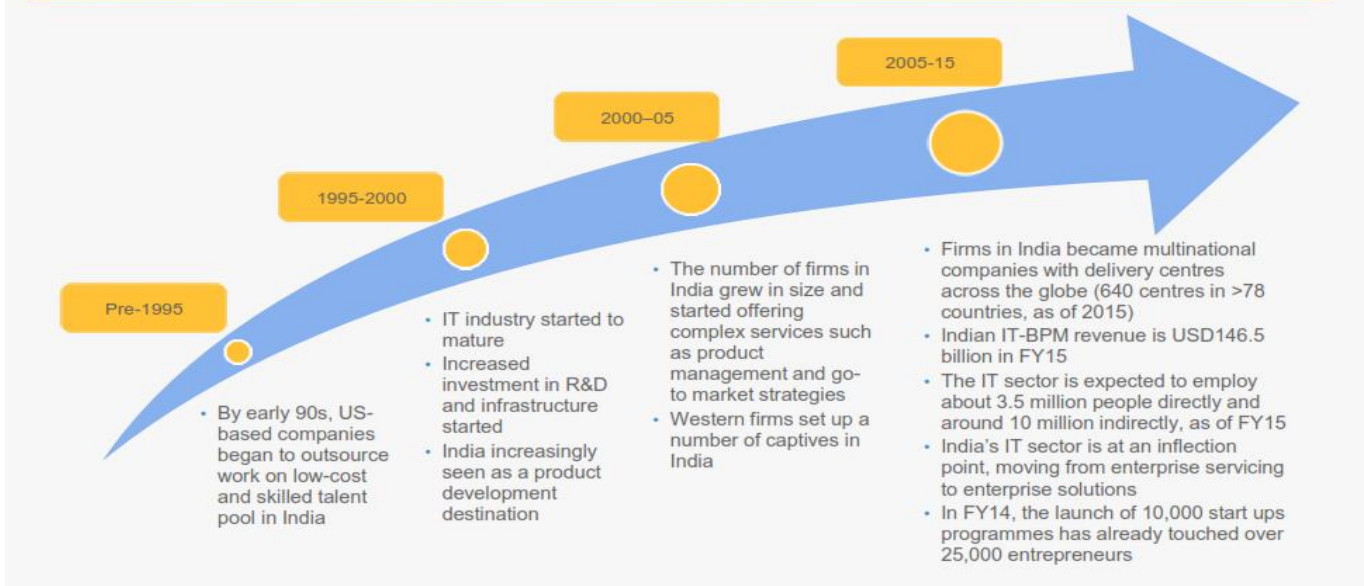
Indian IT-sector has its growth because of:

- Its expansion into various dimensions.
- Various services provided
- Increased market capture

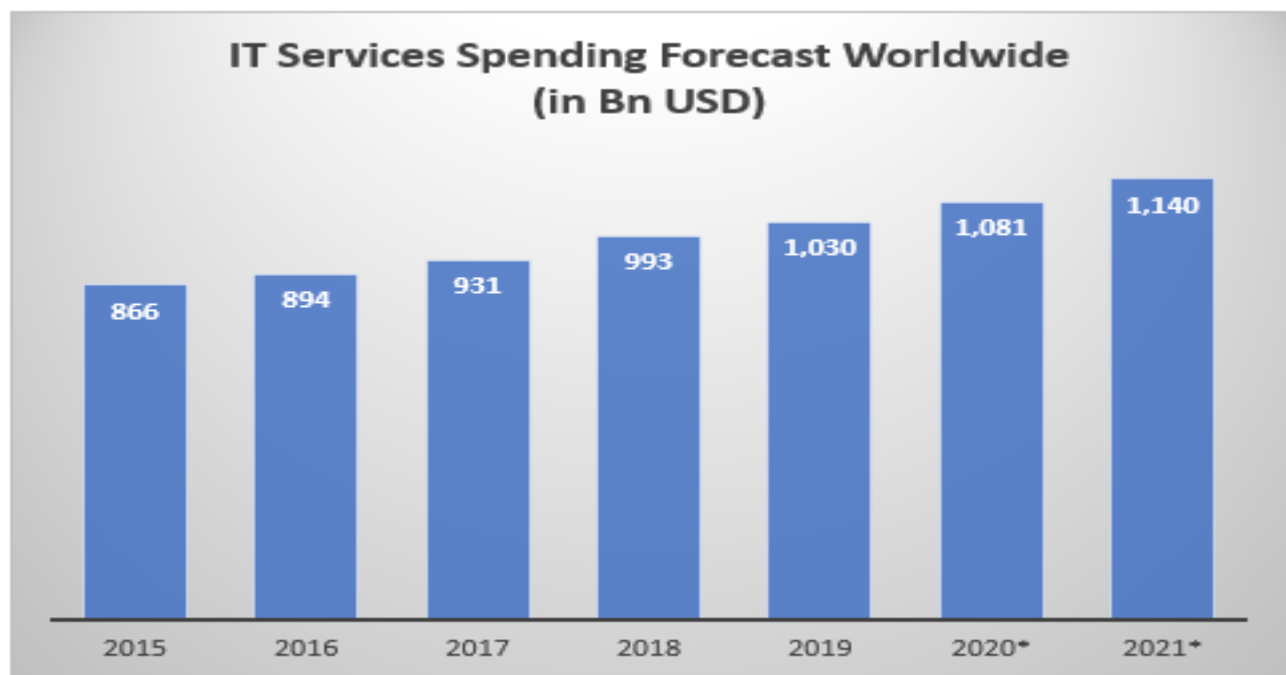
Indian IT sector's success is contributed by government policies, increasing industry demands, growth of dependent industries and competitive environment amongst the industries. These factors helped the Indian IT industry make its position on the global map.



## EVOLUTION OF INDIA'S IT SECTOR



## IT Services Spending around the globe:



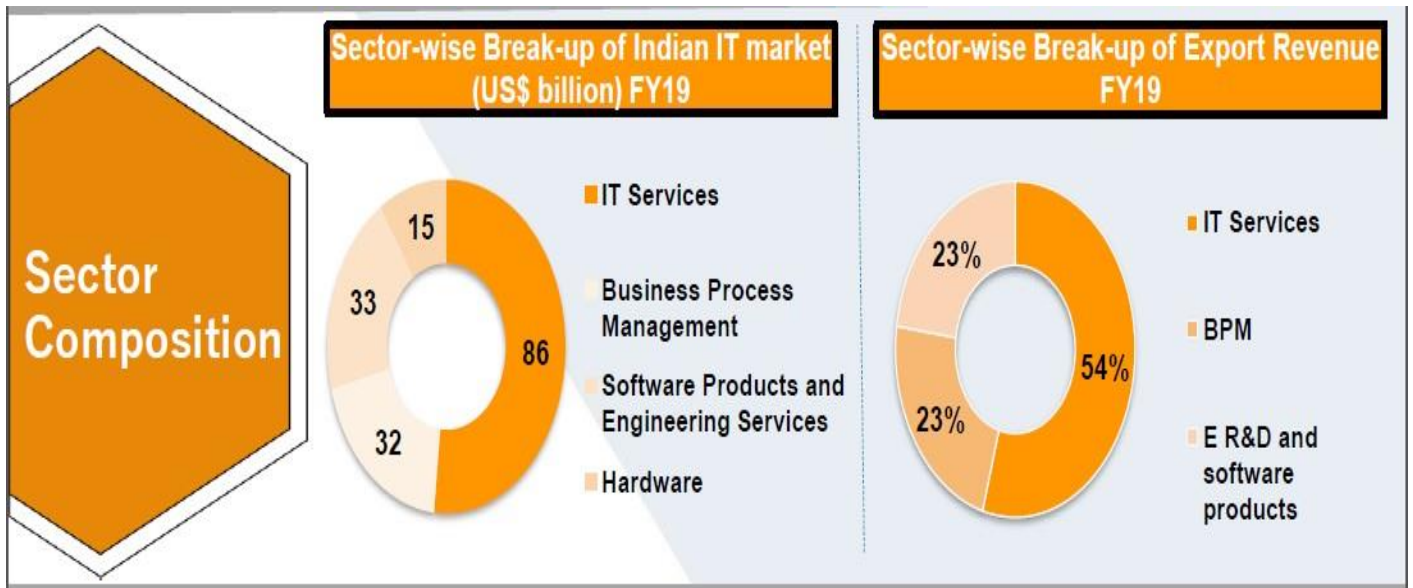
Source: Statista (\*- forecasted figures)

As we can see the amount of money spend in the IT industry is increasing at a very faster rate.

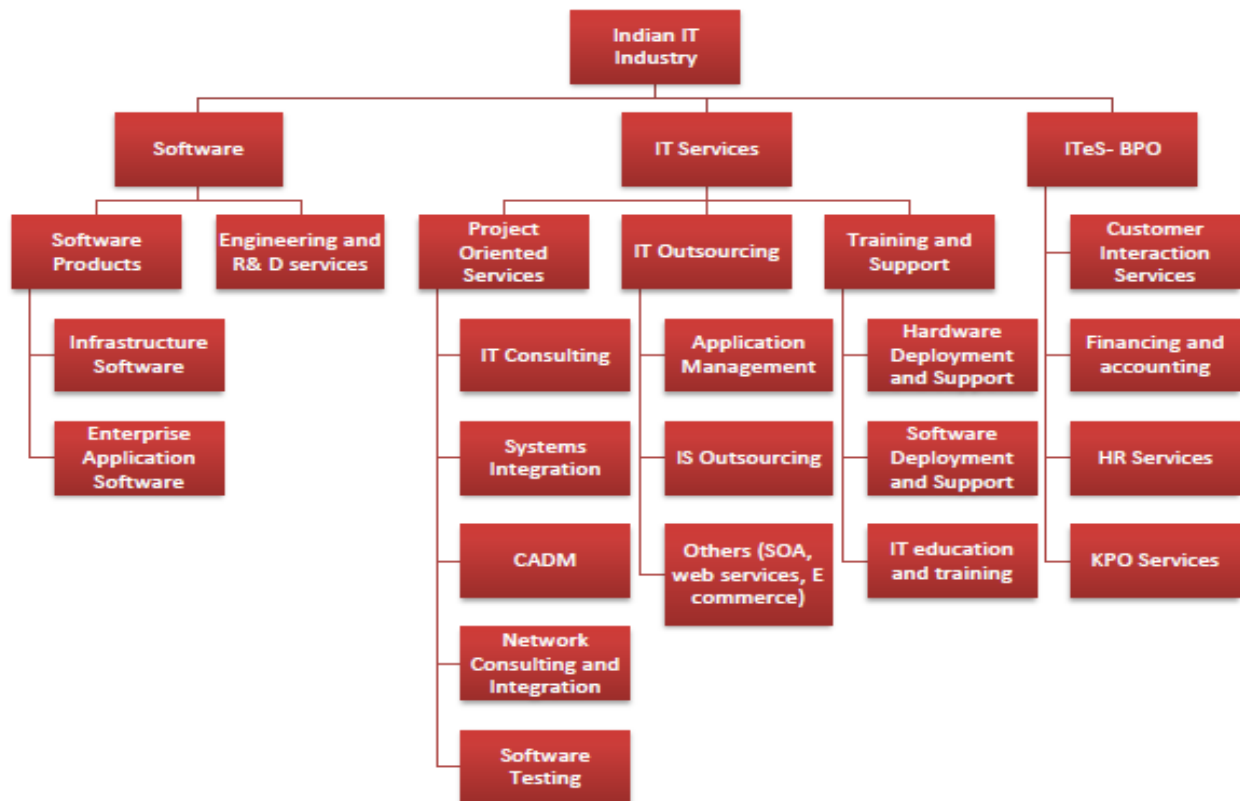
It is because of:

- Increasing demand of IT services.
- Software is treated as an asset by the industries.
- AI and Machine learning is the Future.

### Sector Composition



## Industry Segmentation



Indian IT sector is broadly divided into 3 parts that are:

- Software
- IT services
- ITeS-BPO

Further let us study in detail how these categories help in the composition of the Indian IT Industry Market and what is the market share of these categories.

### Software:



Software services are must for every industry in today's world. Everybody is surrounded by application and softwares all around them.

It consists of:

- Software Management Services
- Cloud Services
- Infrastructure Software services
- Enterprise Application Software Services

India is the leading provider of IT-services in recent times. Indian IT service market grows by double rate as seen below:

## India's IT Services Market\*

Large Indian IT services firms' organic, constant currency growth has declined from

**13.1%**  
CQ3 2015

to

**7.8%**  
CQ3 2016

However, as a group, they still are growing at more than

**double**

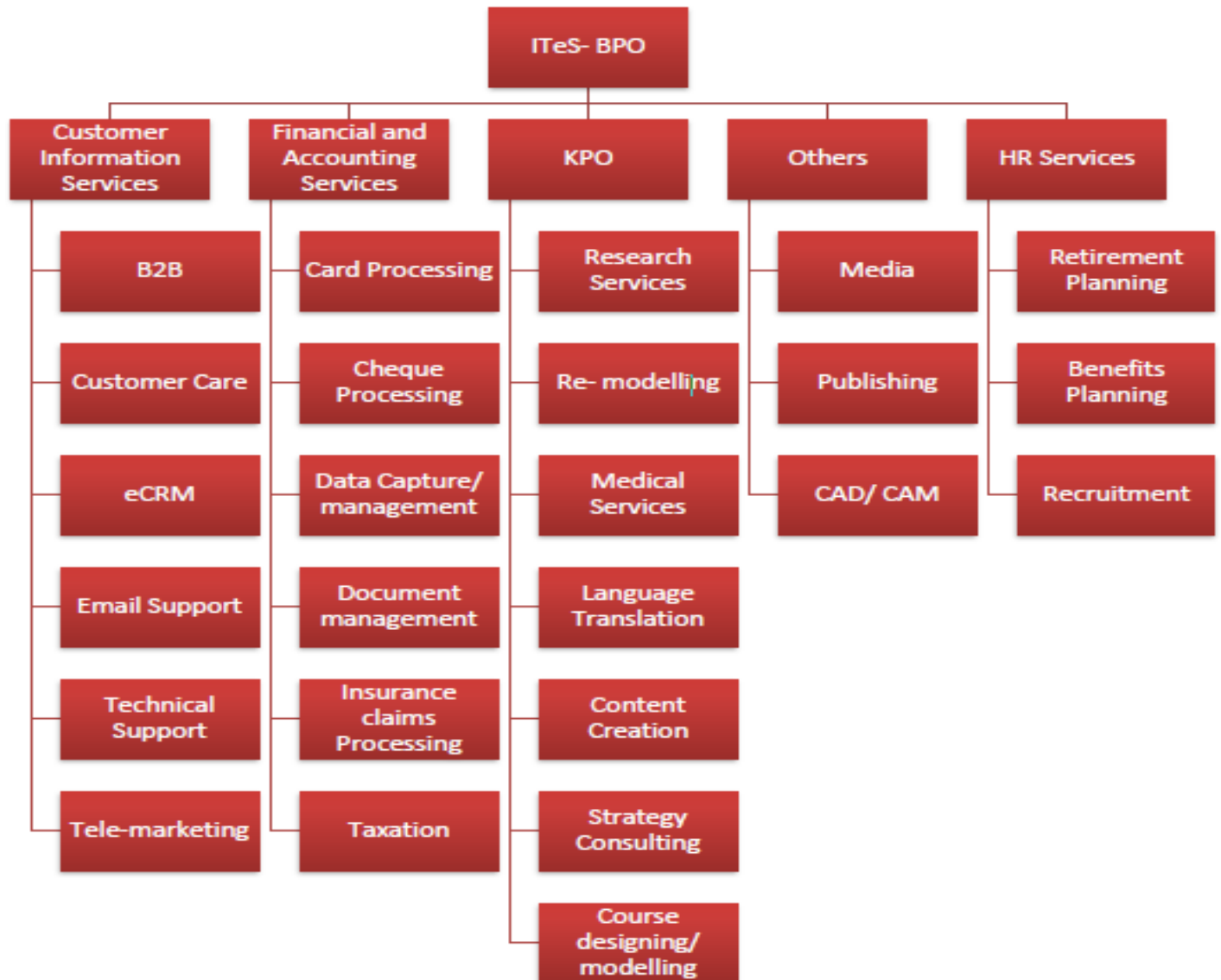
the overall industry average of

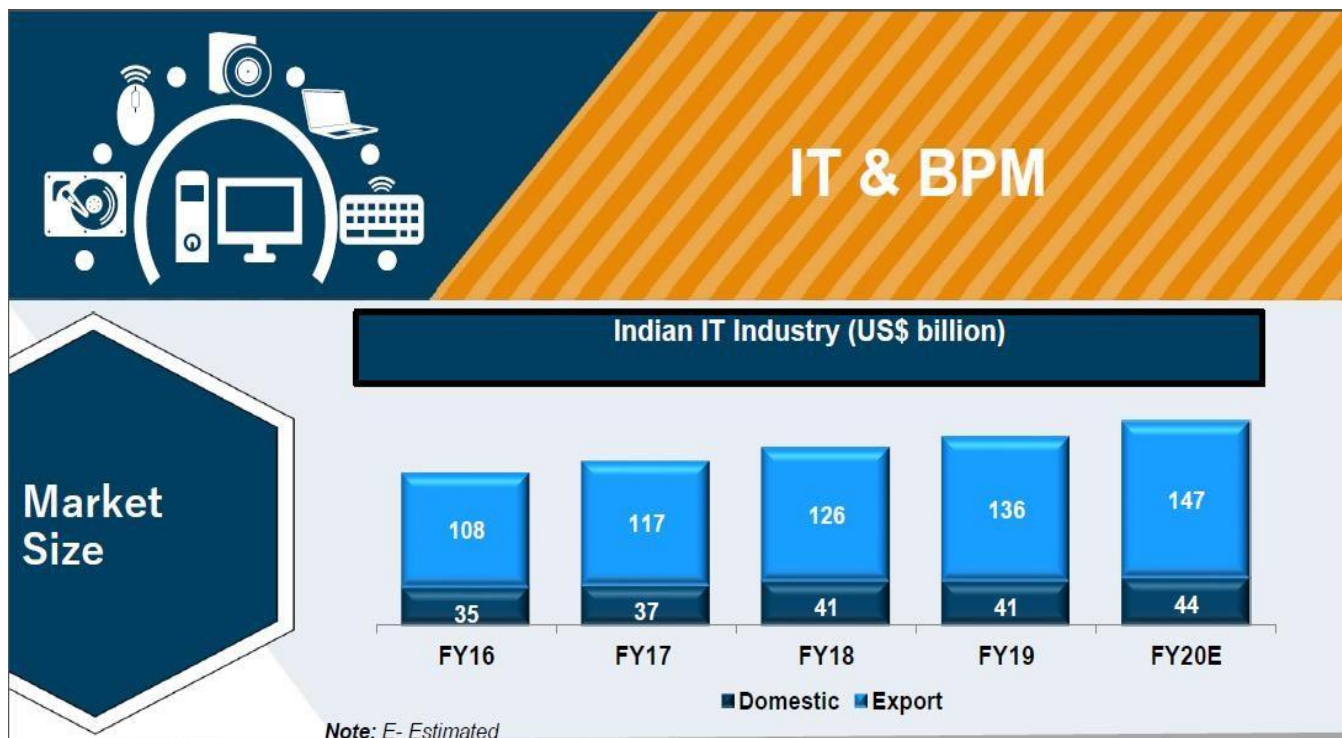
**3.1%**

\* Data from quarter ending September 2016; available data trails by 1-2 quarters

IT Services Forecaster™, an analysis of 19 IT services market segments

- Customer Information Service
- Financial and Accounting Services
- KPO(Knowledge Process Outsourcing)
- HR Services
- Others

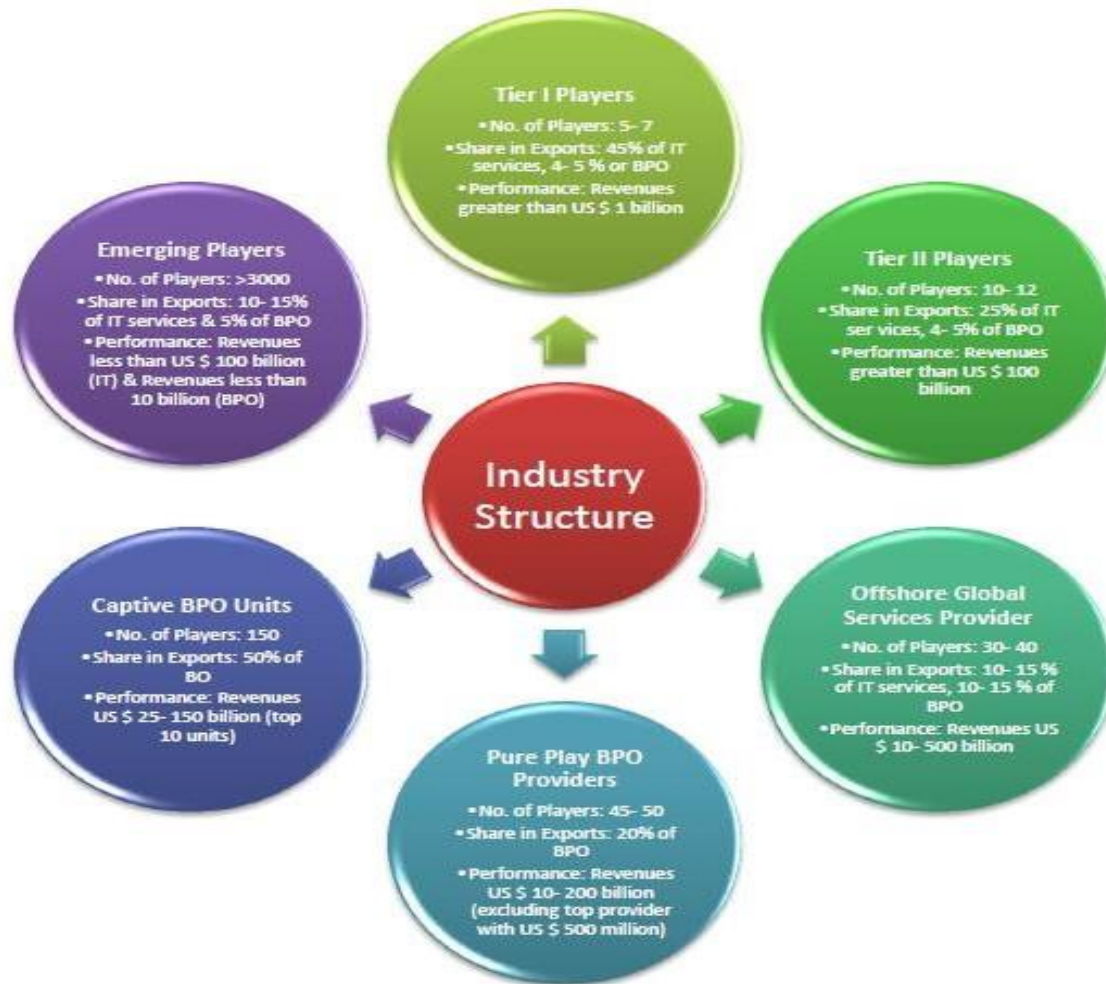




**Market Size of Indian IT Sector**



## IT Industry Structure



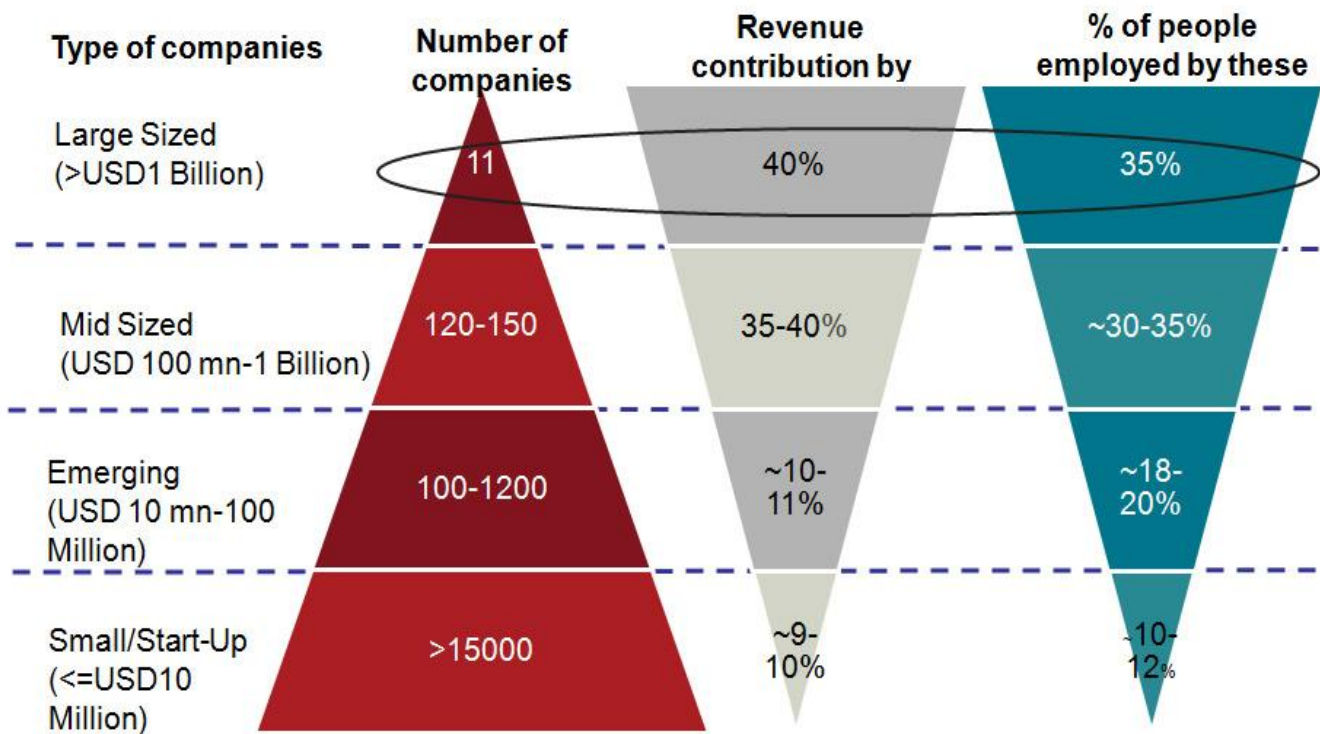
### Some of the above terms:

**Tier I Players:** The no. of players in this section is (5-7) and they contribute about 45% of IT Services and 4-5% of BPO exports. They are increasing their sales with the assistance of their strong managing capabilities and with GDM (Global Delivery Model) they have boosted venturing into new services that are consulting, Research and Development (R & D), testing etc.

**Tier II Players:** There are about (10-12) players in this section and they contribute about 25% of IT services and 4-5% of BPO exports and because of low no. of clients, they have registered low rate of growth than Tier I firms.



## Current Industry Structure of IT:



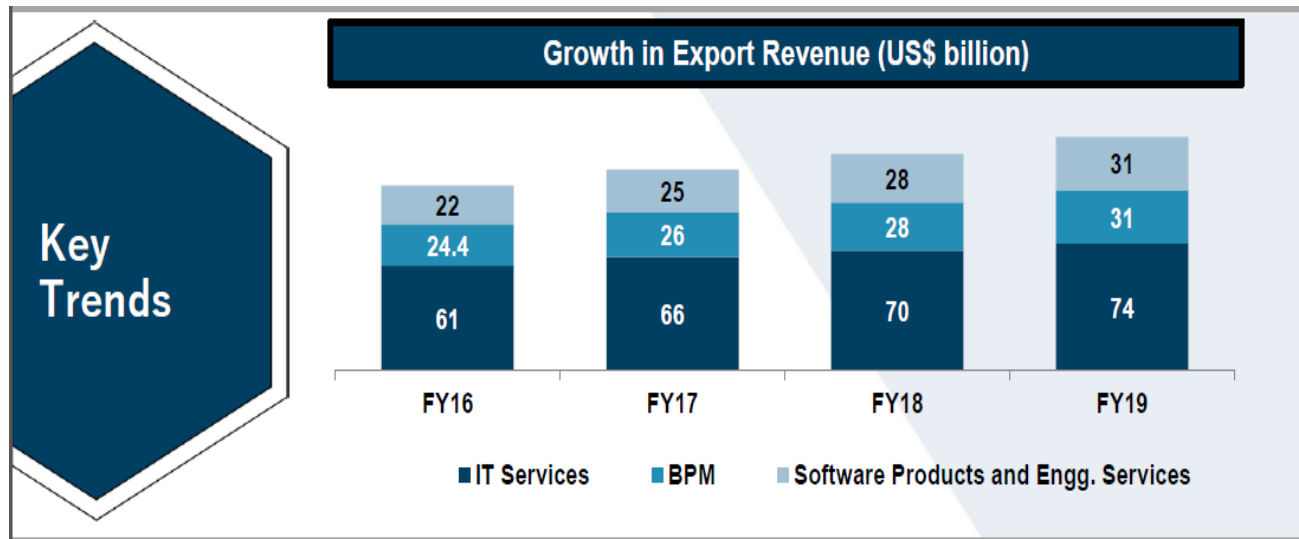
**Large Sized Companies:** They are 11 in number and contribute about 40% in the revenue generated and 35% people are employed in these companies.

**Mid Sized Companies:** There are about 120-150 companies and they contribute 35-40% in the revenue generated and there are approx. 30-35% of the total employees working for these companies.

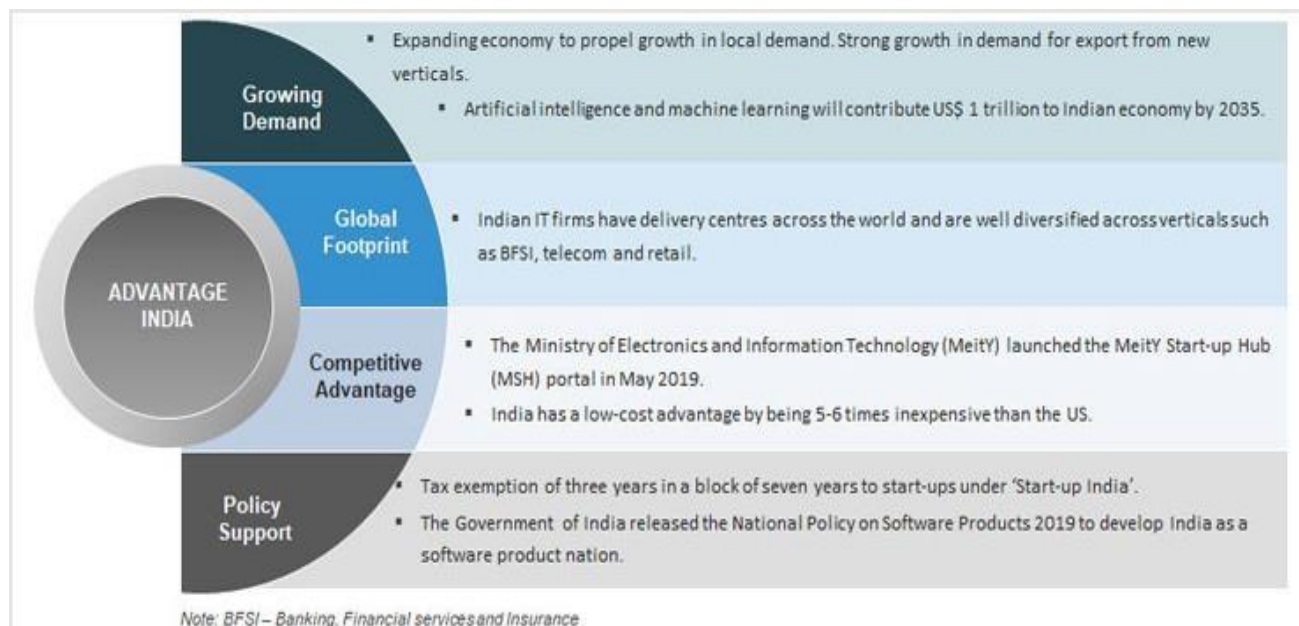
**Emerging Companies:** There are 100-1200 companies in this category and they contribute around 10-11 percent in the revenue generation and employ around 18-20 percent of the total employees.

**Small/Start-up Companies:** They are more than 15000 in number and they contribute around 9-10 percent in the revenue generation and employ around 10-12 percent of the total employees.

## Key Trends:



## Advantage India:



### **4.3 Concluding Remark**

This chapter detailed the Sector analysis based on the Indian Stock Market STOCK MARKET and the variables of the study. The next chapter discusses the recommendations and conclusions of the study.

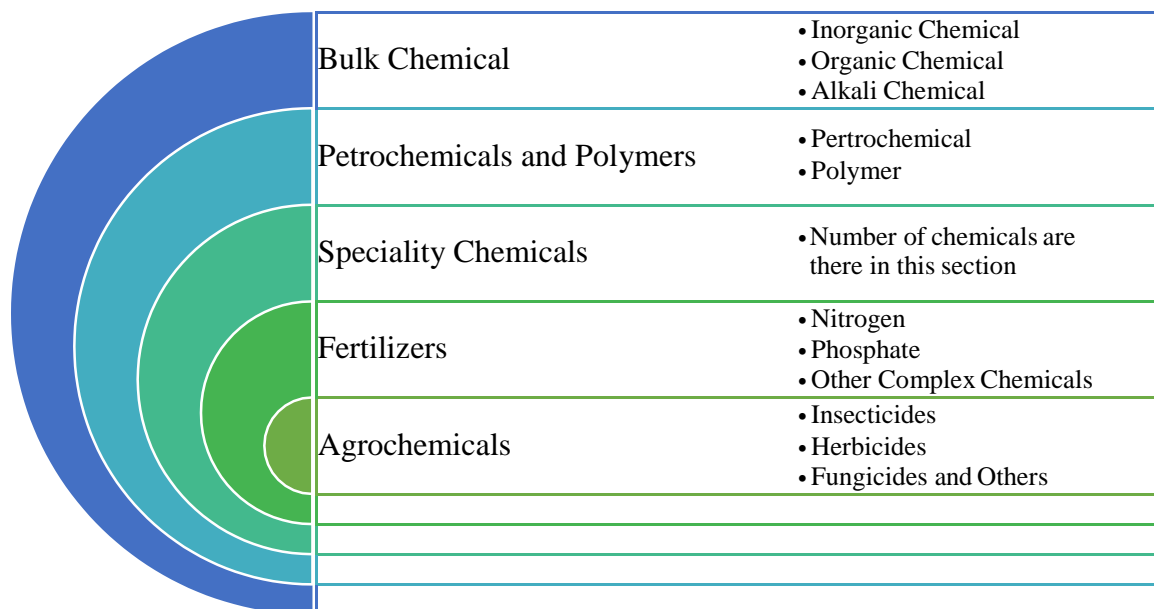
## CHEMICAL SECTOR

In industrial/sector analysis we understand the financial and economic condition of the organization and along with that we understand the prospects of the industry along with the threat to the industry as well.

### Introduction: -

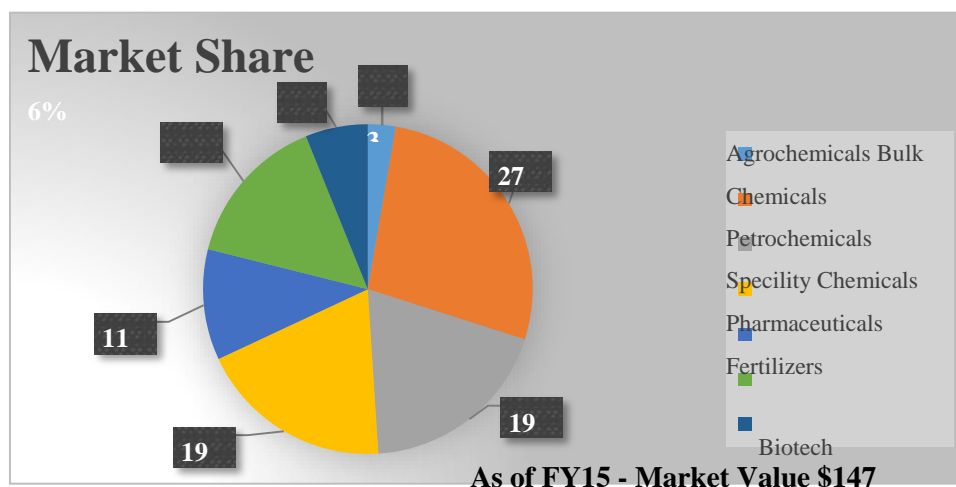
Chemical Sector is one of the largest contributor to the Indian GDP (around 2.1% of India's GDP and 15.95% of India's Manufacturing Sector). It is the sixth largest producer of chemical and has a share of 3.4% to the global Oil industry. However, within India the chemical sector has been underutilize both in terms of production and consumption. For example, India's per capital consumption of chemical is 1/10<sup>th</sup> of global average which provides an immense potential in chemical sector as India's rising population, rising disposable income and rise in the middle class family. Likewise, in chemical production different segment are net importer such API for pharmaceutical, inorganic bulk chemicals are underutilized and working at under-capacity.

**There are five major segments in the Indian Chemical sector. These are as shown Below:**



### USERS OF DIFFERENT CHEMICALS SEGMENT: -

1. **Bulk Chemicals:** These Chemical has high volume and Low value. Themajor users are textile, FMCG, Aluminium and others etc.
2. **Petrochemicals and Polymers:** The majors of this segments are packaging, textile, automotive, FMCGs, Power and energy etc.
3. **Specialty Chemical:** These chemicals have low volume, high value and require high R&D. These chemicals have variety of user not restricted to few sectors such as FMCGs, Surfactant, flavor, paints & coatings, Textile, Construction and water.
4. **Fertilizers:** Fertilizers are materials which provide nutrients forplant growth. So these are majorly use in agriculture sector.
5. **Agrochemical:** Chemicals which are used to protect crops against insects and pests are covered under this section.

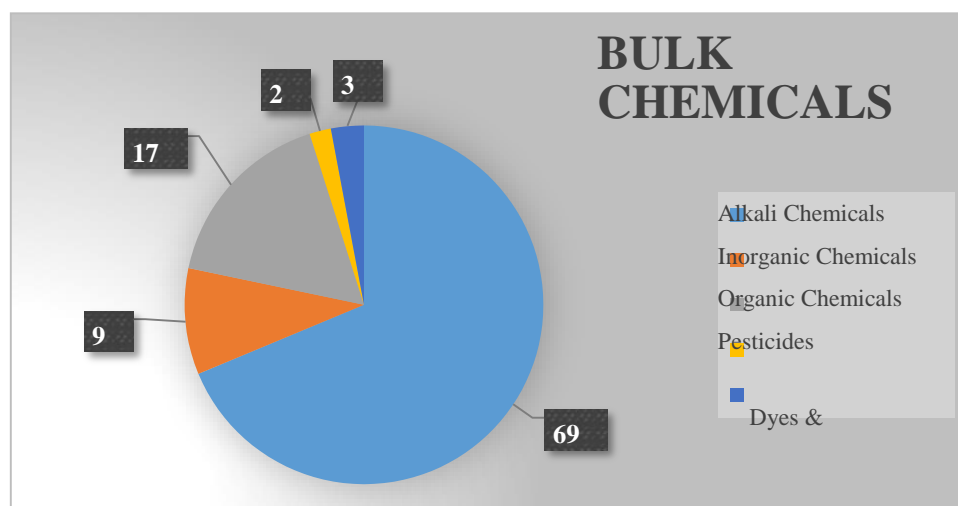


Bulk Chemicals, Speciality chemical and Petrochemical contributes more than 65% of the market share while agrochemical and fertilizers also contributes major segment to the overall market share.

As of FY19, the market size of chemical sector is around \$178 Billion with speciality sector contributes around \$35 Billion (or 22% of overall market size). The total production of major chemicals in India is 27858 MT as of FY19 growing at 4.18%.

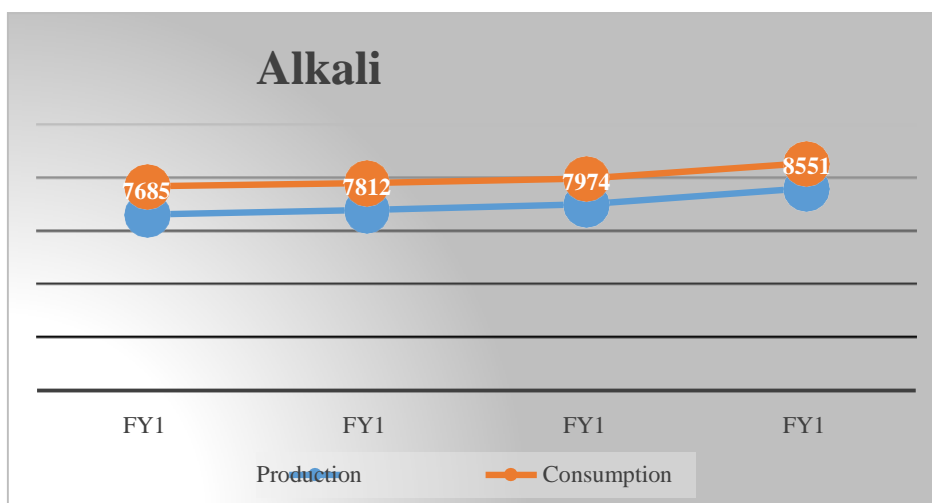
## 1. BULK CHEMICALS: -

- Alkali Chemicals:



Alkali Segments contribute 69% of the total production of Basic/Bulk chemical and it has large number of users ranging from FMCGs, textile and aluminium. Soda Ash contribute 43% of total demand of Alkali Chemicals.

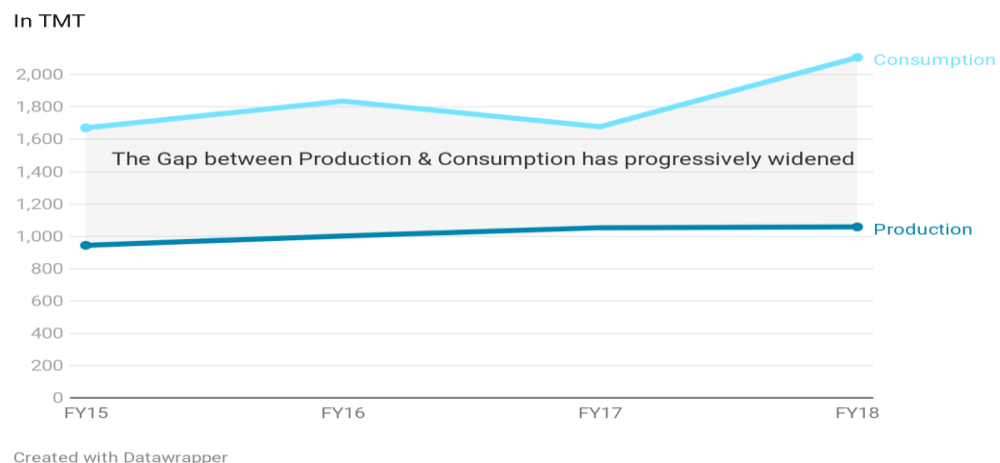
It provides decent opportunity as the Consumption of alkali chemical is more than its production in India. And the difference between Production and consumption is stable over the years. It is also growing at a CAGR of 5%.



So this provide enough opportunity as India is moving Self-Reliant (ATAM NIRBHAR), and to catch this difference in Production and consumption.

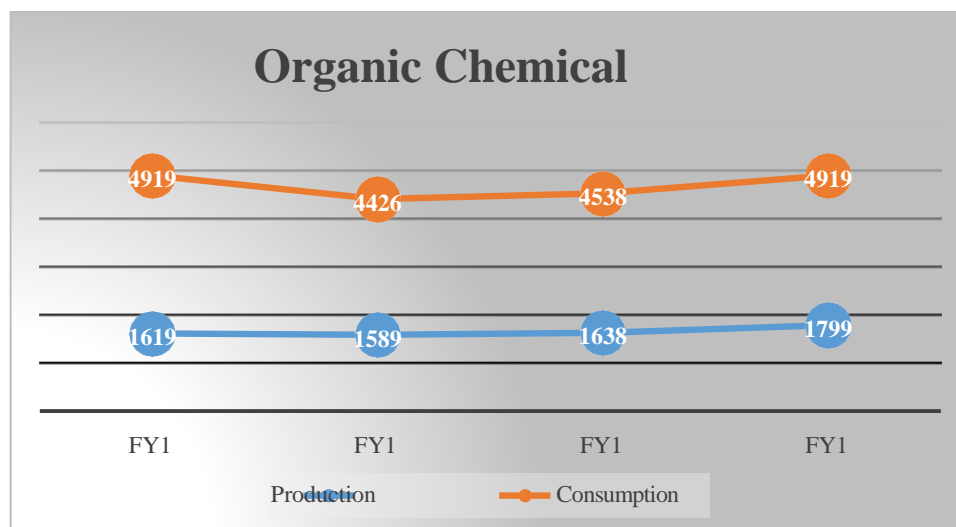
**Inorganic Chemical:** Inorganic chemical also contributes major portion towards the production of Bulk chemical and has diverse users. It contributes 9% of total production. It is growing at CAGR of 8%, and Carbon black contributes 76% of domestic demand in Inorganic Segment. In Inorganic chemical also the domestic consumption is more than its domestic production and this difference is progressively widening from the last four years.

### Bulk Chemical - Inorganic Chemicals



So again these provide enough opportunity for domestic producer and with the support of Government to increase production, growth and profitability.

- **Organic Chemical:** Demand for organic chemicals has grown at 5.4% CAGR during FY15-FY18. Methanol and acetic acid constitute 76% of total domestic demand for organic chemicals. India Imports more than 69% of total domestic demand. So again the producer has enough opportunity to catch up this difference and grow their sales and profitability at a higher rate than previously.



## 2. Petrochemicals and Polymers: -

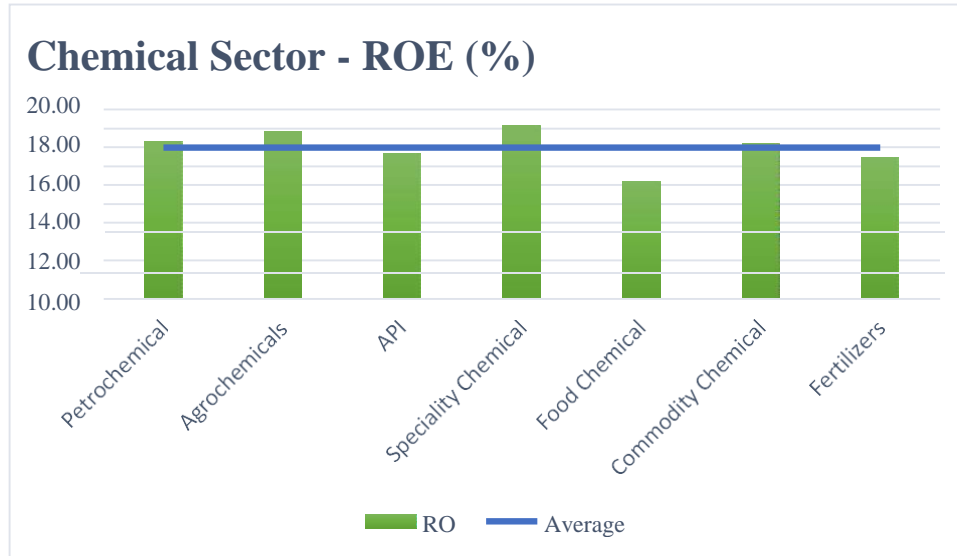
Demand for petrochemicals has grown at 5.4% CAGR during FY15-FY18 (42,254 TMT in FY18). 37% of this demand comes from polymers while 22% from olefins. India imports around 11.2% of its total demand for petrochemicals. Most imports are for polymers which is around 37% of the total demand for that segment. Petrochemicals demand is expected to grow at 7.5% CAGR from FY19-23, with polymer demand growing at 8%.

Growth in end-user industries like packaging and textiles (growth of around 10%) will drive demand in this segment. Upcoming investments in plastic parks and automotive clusters will create huge demand for polymers and synthetic rubber. But petrochemical segment has less than average Operating profit margin of industry. Its OPM is 12.21% while average chemical sector OPM is 14.82%.

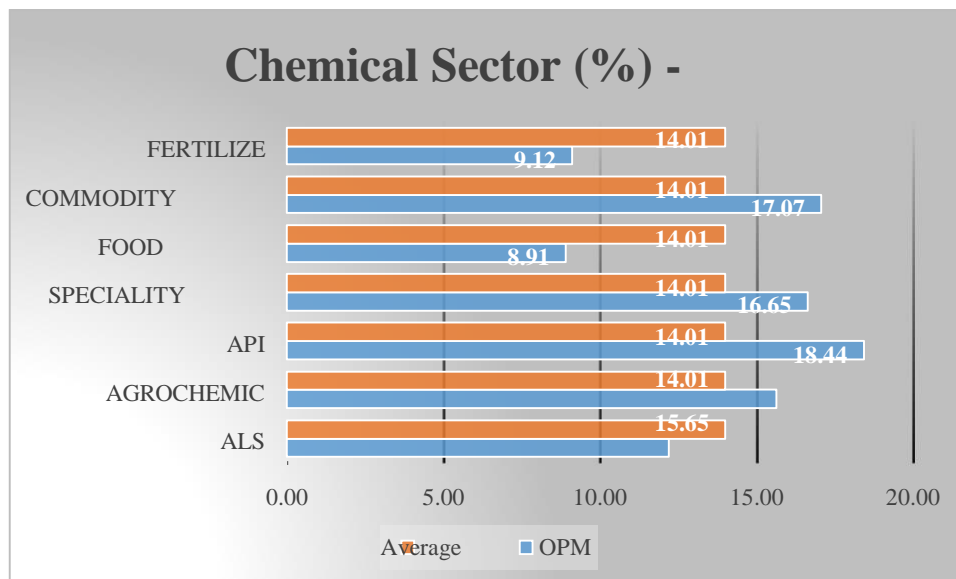
## 3. Specialty Chemical: -

This segment has less volume and has high value but it also requires high R&D as compare to other section. This segment is growing at 12% CAGR way higher than any other segment. It has large set of users not limited to few industry that's it is one of the most lucrative segment of Chemical sector.



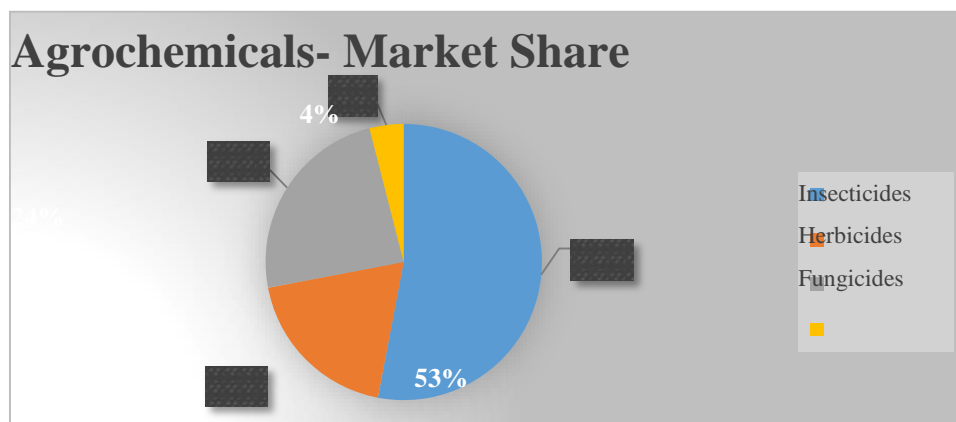


Speciality chemical has the highest ROE and way above the average ROE of Chemical sector and any other segment in chemical sector.



And as far as profitability is concerned, we can see from graph that Operating profits margin of Specialty sector is above sectorial average.

#### 4. Agrochemicals: -



The agrochemicals segment is growing at 8% CAGR and is expected to grow at the same rate. While the important thing is Fungicides and Herbicides which is major export segment has shown a growth of 16.2% and 31.5% respectively. India is a net exporter of agrochemical. India's per hectare consumption of pesticides is among the lowest in the world (0.6 kg/ha) against 5-7 kg/ha in the UK and about 13 kg/ha in China. Low awareness levels among farmers regarding pesticides has resulted in lower per hectare pesticide consumption in India. This provides good opportunity.

Both ROE and OPM of Agrochemical segment is above industrial average.

#### 5. Fertilizers: -

India is the second largest contributor of Fertilizer in the world. The demand of Fertilizers is stagnant in real terms and it is growing at a CAGR of 2.2% from the last five years. And the demand is expected to be same in the next few years. It has 15% market share in the overall Chemical Market Size. As we can see fertilizers OPM is way lower than the average OPM of sector. Not only this, its ROE is also less than the sectoral ROE and it is the second lowest after food chemical.

#### 6. Other Segment: -

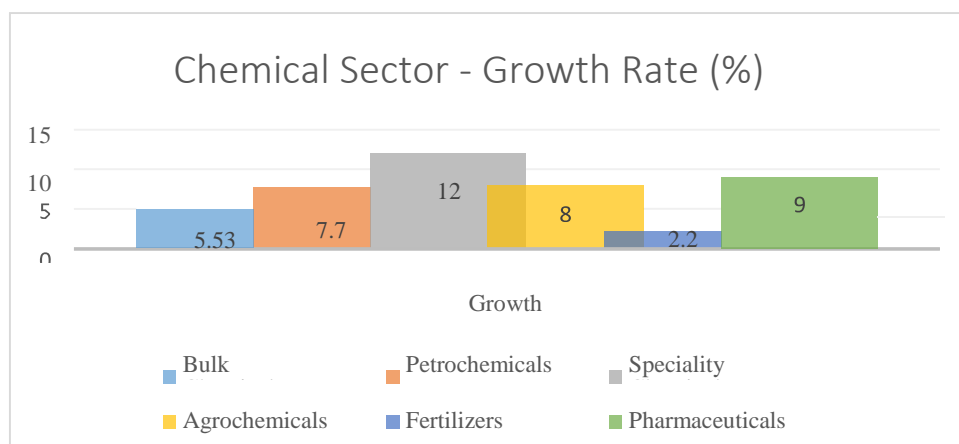
There are various other segment in chemical sector but we are going to about pharmaceutical, because this segment is also major contributor to the chemical sector.

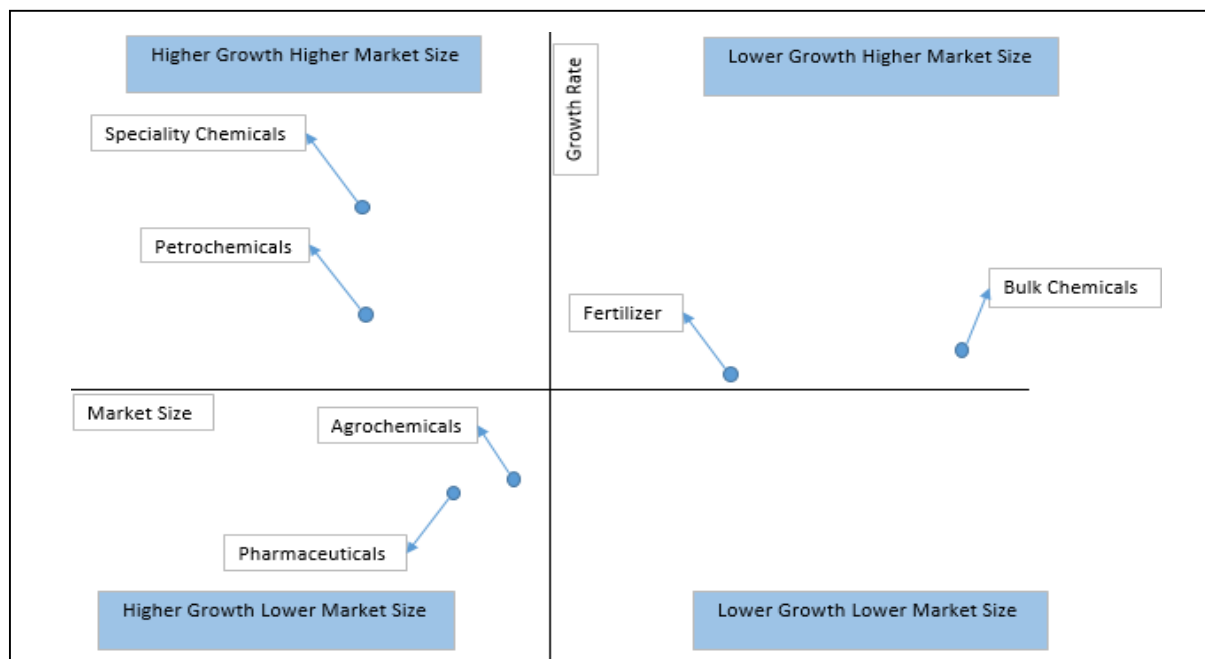
**Pharmaceuticals (API):** India is a significant contributor of low cost and high quality medicines. It is the world's largest generic medicine exporter with

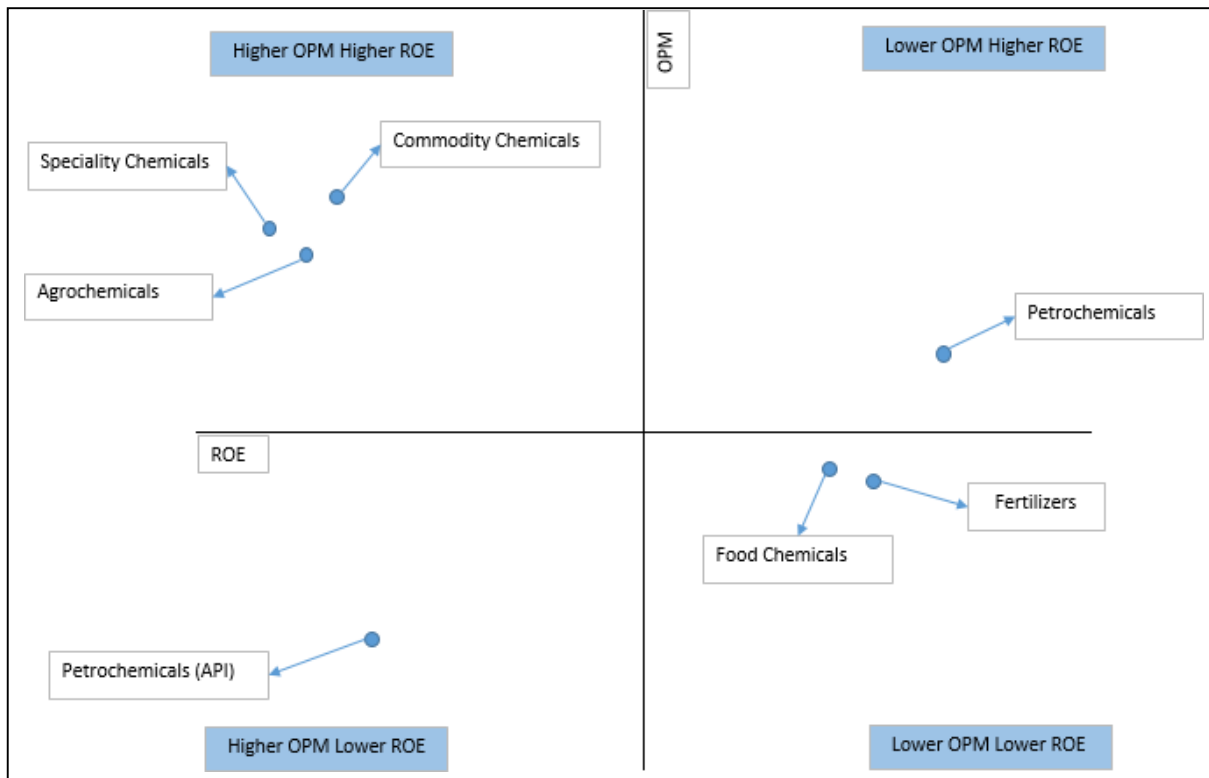
the global market share of 20%. It has largest approval of USFDA than any other country. Chemical that is used in Pharmaceutical is API (Active

Pharmaceuticals Ingredient). API's demand is growing at 9% CAGR and it is expected to grow even faster than 9%, this is because of disruption caused by Covid-19. 60% of India's API is imported and of 83% of imports come from China. With the launch of ATAM NIRBHAR (Self-Reliant) and confrontation with China, India's local production is expected to grow at higher rate as well as demand due to Covid-19. So API'S manufacturer is expected to increase their growth and profitability at a higher rate. From the past data, API's has the highest Operating profits margin in the chemical sector as we can see from the above chart.

### **CONCLUSION: -**







As seen from the above insights, 4 out of the 6 Segments are in the High growth territory, of which two are Higher market size while 2 are lower market size.

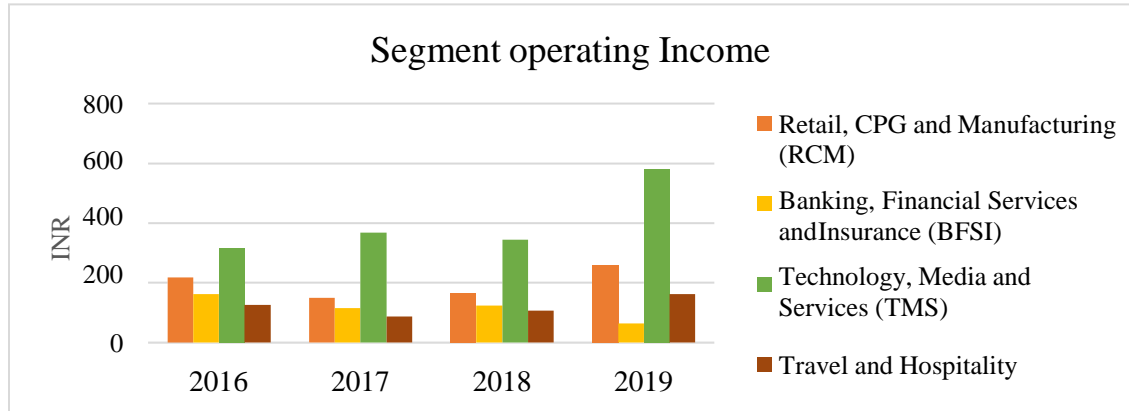
Speciality Chemical sector and Pharmaceuticals (API) segments are major sector which can be in focus because of Covid-19, growth rate and profitability as discussed above.

## Chapter 5

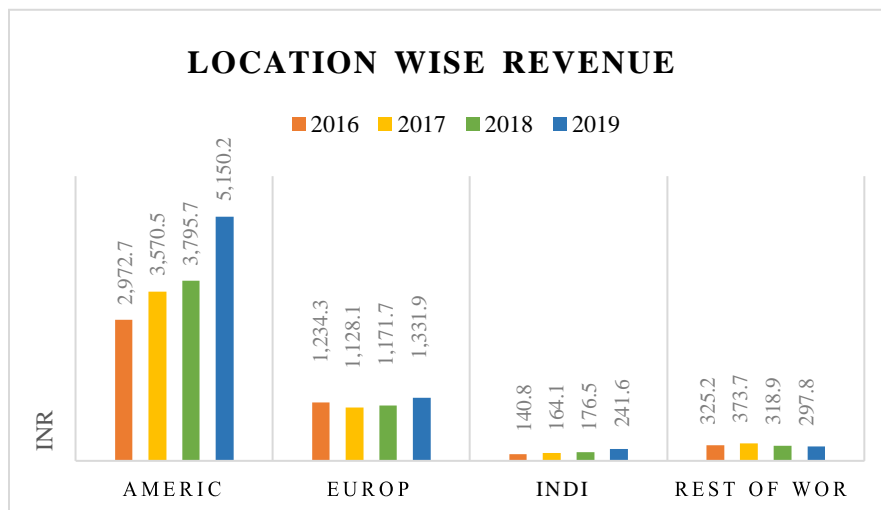
### TECHNICAL ANALYSIS (MINDTREE)

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#### Company Analysis



Mindtree Segment wise operating revenue overall increase, FY 2019 RCM profit is Rs. 257.9 Cr, BFSI profit is Rs. 62.8 Cr, TMS profit is highest Rs. 581 Cr, TH profit is 162.8 Cr. Mindtree BFSI Segment profit only decrease year-on-year.



Location wise America is highest revenue generated than other location for all the years.

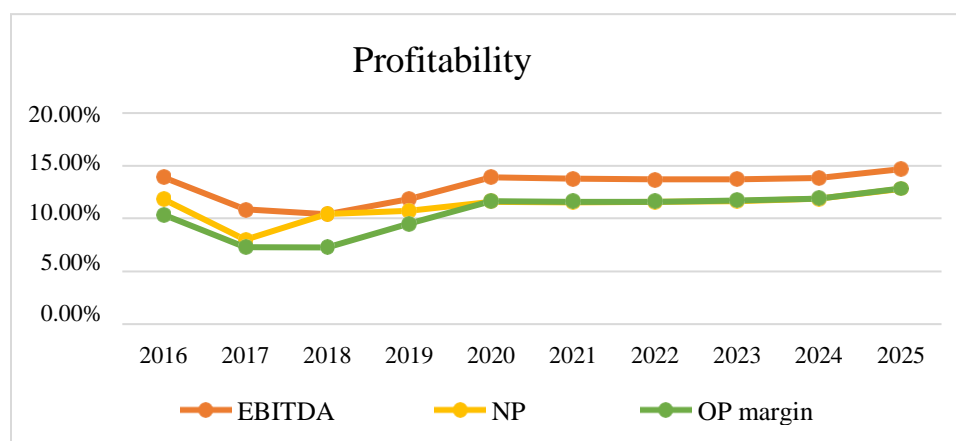
### Technical Analysis



- Mindtree last traded price is 1334. The price is trading below its 30 day SMA from last 21 days and it is trading below its 50 day SMA.
- The data is scaled by an exponential moving average (EMA) based on its newness. The most recent data is given the most weight, while the oldest is given the least. In the above table, the 20 day EMA is 1349.4.
- The MACD is 1.69, indicating that there is positive momentum in the stock and that it is trending upwards. The magnitude increases as the momentum increases.
- The Relative Strength Index (RSI) is a momentum oscillator that oscillates between 0 and 100. A value of 0 to 30 is considered oversold, and a value of 70 to 100 is considered overbought; the value of 54.6 is considered neutral.

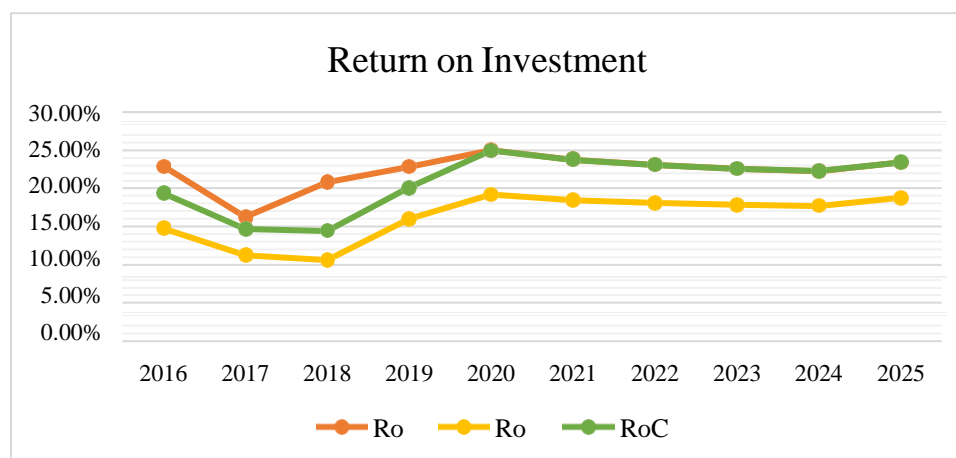
## Ratio Analysis

### NP margin, OP margin, EBITDA margin



As per graph we can see that from last 3 years EBITDA margin, OP margin increased for mindtree. In FY 2017 NP margin decline from previous years. This ratio indicates how company is profitable or not.

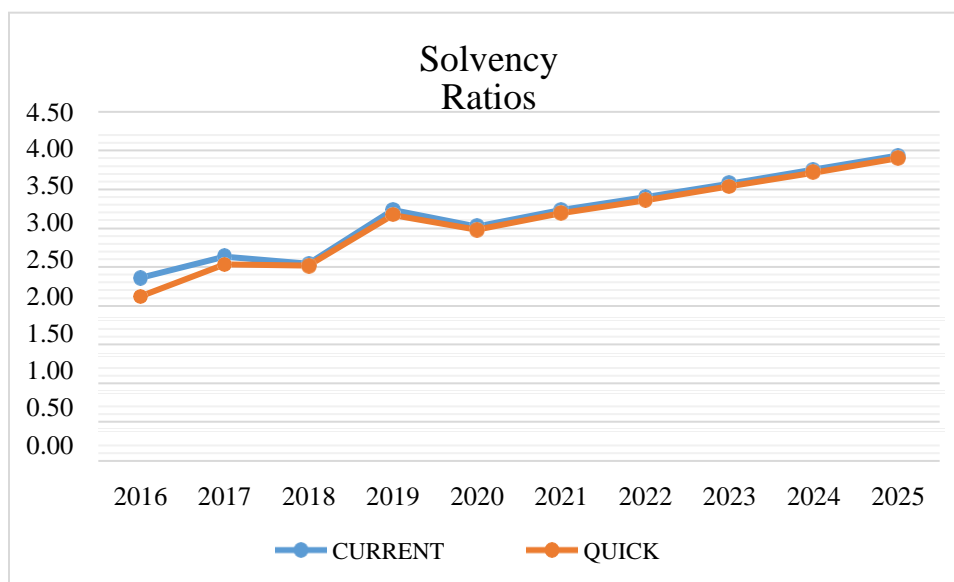
### Return on investment ratios



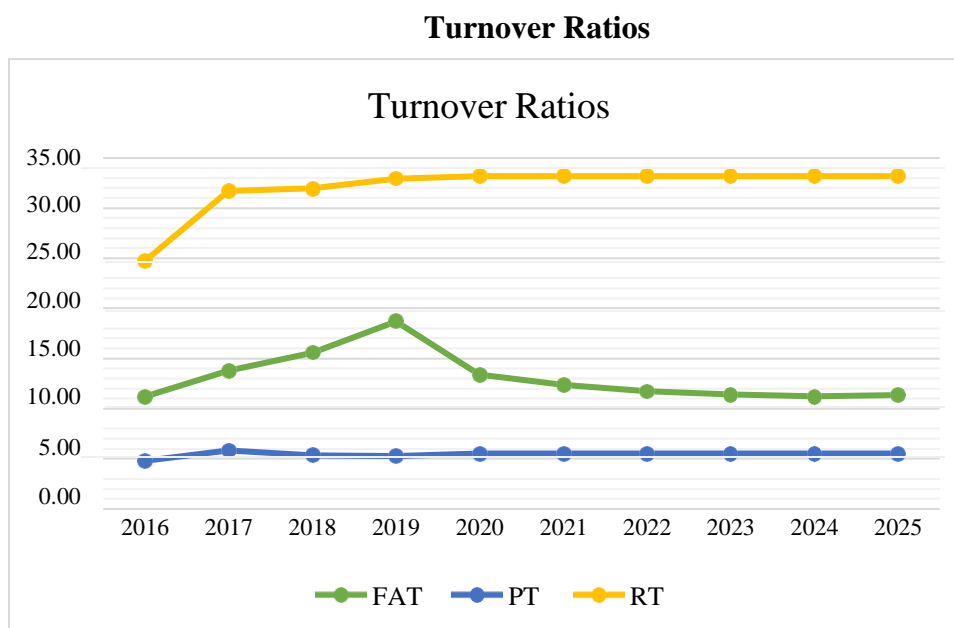
Above graph ratio indicates return on investment for the company. For last 3 years RoE, RoCE are increase year-on-year. RoE for last 3 years are 16.24%, 20.80%, and 22.81%, RoA for last 3 years are 11.28%, 10.62%, and 15.98%, RoCE for last 3 years are 14.66%, 14.42%, and 20.09%.



## Current Ratio and Quick Ratio



In graph we can see that some fluctuation in Current and quick ratio in last 3 years, this ratio show company ability to meet long- term obligations.



## Financial Analysis

Financial Summary					In Crs
Year End March	2018	2019	2020E	2021E	2022E
Net Revenue	5462.8	7021.5	8481.6	9568.5	10752.7
<i>Revenue Growth</i>	4.32%	28.53%	20.79%	12.81%	12.38%
EBITDA	568.30	831.80	1179.64	1317.82	1474.49
<i>EBITDA Margins</i>	10.40%	11.85%	13.91%	13.77%	13.71%
PAT	570.1	754.1	985.1	1105.3	1244.0
EPS	34.28	45.85	59.99	67.32	75.76
ROE	20.80%	22.81%	24.99%	23.75%	23.06%

INR Crore	2020	2021	2022	2023	2024	2025	2026	Terminal Value
Net Profit	985.1	1105.3	1244.0	1406.4	1598.6	1951.2		
Add Depreciation	191.02	208.53	226.05	243.56	261.08	278.59		
Less Change in WC	-87.53	90.59	98.71	107.92	118.36	147.48		
Less Capex	330.73	350.25	367.76	385.28	402.79	420.31		
Add changes to Debt	0	0	0	0	0	0		
Less Dividend	349.72	392.39	503.82	569.58	647.43	790.22		
FCFE	583.22	480.63	499.76	587.16	691.08	871.75	958.92	26505.29
Opening Cash	256.2	839.4191	1320.053	1819.81	2406.96	3098.05		

Balance					6	1		
Closing Cash Balance	839.42	1320.05	1819.81	2406.97	3098.05	3969.80		
Growth		-17.6%	4.0%	17.5%	17.7%	26.1%	10%	6%
Terminal Growth								
Cost of Equity								
PV								
Terminal Value								
Cash								
Total								
Shares								
Intrinsic Per Share								
Risk Free rate								
Beta								
Risk Free Premium								
Time Left		0.36	1.36	2.36	3.36	4.36	5.36	
PV		462.9577	434.337	460.428	488.967	556.520	552.350	11214.638
					7	9	7	63

## **Conclusion**

Mindtree is young company compare to other IT giants like TCS, INFOSYS, WIPRO, have potential and have survive tough time after covid-19 pandemic. Company need to find new segments for revenue generation. Company has L & T Group promoters, which have increase their shareholding in Mindtree, which sees faith in Mindtree growth potential for long term horizon. Mindtree need to focus post covid-19 situation to reduce their capital expenditure to maintain their net profit and debt. MindTree top management unhappy with their major promoters Larsen & Toubro Group which need to resolve for longer stable growth.

## Chapter 6

### RECOMMENDATIONS AND CONCLUSIONS

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This chapter details the recommendations and conclusion of the study ‘Buy Recommendations on Various Stocks of Future and Options’ based on the empirical analysis and findings.

#### 5.1 Recommendations

The project that I have chosen takes into consideration combination of variables instead of one. I have taken into consideration all the variable whether there is long buildup in the stock, RSI, MACD and PVO.

My Model will fetch market data which includes prices (Both Last traded price and historical prices), open, high, low, open interest data and other data online and it updates automatically.

For fetching the data, I have used Google Sheets and there is in build function named *Googlefinance*, with which we can fetch data automatically. Some of the data is real-time (with little day than frequent changes on NSE) and some data I get at the end-of-the day.

Based on the end of the day data, my model will suggest some stocks under strategy which are for Buying for tomorrow's trading session. And all the data will automatically update.

## 5.2 Results

1	4/9/2021	4/12/2021	4/13/2021
2	Apollo Hospital (2.20%)	Manappuram Finance Ltd (1.07%)	Bharat Forge Ltd (1.02%)
3	Bajaj Finance Ltd(3.95%)	Cipla (1.01%)	Hindustan Petroleum Corporation Limited(2.2%)
4	HDFC Life Insurance Company Ltd (1.05%)	Bajaj Finance Ltd(1.08%)	LIC Housing Finance Limited (1.01%)
5	Hindustan Petroleum Corporation Limited(0.33%)	Glenmark Pharmaceuticals Ltd	HDFC Life Insurance Company Ltd (2.08%)
6	Oil & Natural Gas Corporation Limited (1.03%)	LIC Housing Finance Limited (1.01%)	Bharti Infratel Ltd 2.86%)
7	NTPC Limited (2.23%)	Motherson Sumi Systems Limited (1.04%)	Page Industries Limited (1.33%)
8	Glenmark Pharmaceuticals Ltd(1.00%)	Shree Cement Limited (1.065%)	NTPC Limited (2.08%)
9	Petronet LNG Ltd (2.01%)	Tata Elxsi Limited (1.02%)	
10			
11			
12			
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I have tested the strategy for trading days. We got some stocks every day mostly under our logics. Based on intraday movement (i.e. Difference between close price and open price) is used to know the success rate. The data for the stocks day-wise is given in the google sheet.

Through this project my model will give the buy recommendation on various stocks from Future and Option index of Indian Stock Market. This strategy will be applicable for both the short and long term investors. It will give entry points for the long term investors of the stock market. Technical Analysis (also abbreviated as TA) is a popular technique that allows to do just that.

It not only helps to develop a point of view on a particular stock or index but also helps to define the trade keeping in mind the entry, exit and risk perspective.

The project that my model takes into consideration combination of variables instead of one. My model takes into consideration all the variable whether there is long buildup in the stock, RSI, MACD and PVO. My model fetch market data which includes prices (Both Last traded price and historical prices), open, high, low, open interest data and other data online and it updates automatically.

For fetching the data in my model I have used Google Sheets and there is in build function named Google-finance, with which my model can fetch data automatically. Some of the data is real-time (with little day than frequent changes on NSE) and some data my model get at the end-of-the day. Based on the end of the day data, my model will get some stocks under strategy which are for Buying for tomorrow's trading session. And all the data will automatically update.

### **5.3 Concluding Remark**

This chapter discussed the recommendations and the conclusion. The following chapter discusses the limitations and the scope of further Project that may be conducted.

I have tested the strategy for trading days. I got some stocks every day mostly under logics. Based on intraday movement (i.e. Difference between close price and open price) is used to know the success rate. The data for the stocks day-wise is given in the google sheet.

## Chapter 7

### LIMITATIONS & FURTHER PROJECT

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To allow Projections with insight for further analysis, this chapter presents the limitation of study and scope for further work. The limitations of the study can be overcome when available with required resources such as manpower, time, and technology.

#### 6.1 Limitations of the Project

The study is subject to some limitations that may be explored in further works in the future. The study used secondary data which is the only source at which my model works. The data of stocks has been used for the study limiting the period under analysis. Modeling as the methodology for forecasting, which only employs time-series data collection. Even, for the measurement of MACD, RSI and PVO, Model is dependent on the server to fetch the data automatically. Despite these limitations, this model has provided several important insights.

#### 6.2 Further Project

In this project, exploratory analysis and forecasting have been the main essence. However, the scope of the study can be extended by incorporating the below-mentioned models/ indices in the methodology that may yield some interesting results.

- 1. Reward to Risk Ratio from Dow Theory:** To give more accurate results of the stocks suggested to buy.
- 2. Regression Analysis:** Factors affecting the Balance of Trade.



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