

## **Group 1: Microeconomics Analysis of Civil Aviation Industry – Indigo**

### ***Executive Summary***

*India is one of the fastest growing aviation markets in the world. With the liberalization of the Indian aviation sector, the industry had witnessed a transformation with the entry of the privately-owned full-service airlines and low cost carriers. As of May 2006, private carriers accounted for around 75% share of the domestic aviation market. The sector has also seen a significant increase in number of domestic air travel passengers. Some of the factors that have resulted in higher demand for air transport in India include the growing middle class and its purchasing power, low airfares offered by low cost carriers, the growth of the tourism industry in India, increasing outbound travel from India, and the overall economic growth of India.*

*From the analyst point of view though this market is facing lot of issues and challenges it is growing at the rate of 18 percent per year. Many factors are contributing to this growth such as increase in disposable income of the population, industrial growth in the country or change in government policies such as FDI. From this perspective Indian market is lucrative*

*There is a larger working population with better capability to spend and upgrade their lifestyle. This has provided opportunity for low cost players to tap the market share and improve their profitability.*

*Industry has faced many challenges but is showing a sustainable growth. Many new players are entering into this market. Policy change such as 49 percent investment through foreign direct investment (FDI) is changing the face of the industry.*

### **Introduction**

The civil aviation industry in India has emerged as one of the fastest growing industries in the country during the last three years. India is currently considered the third largest domestic civil aviation market in the world. India is expected to become the world's largest domestic civil aviation market in the next 10 to 15 years. Highlights of airline industry.

- India's passenger traffic grew at 16.52 per cent year on year to reach 308.75 million. It grew at a CAGR of 12.72 per cent during FY06-FY18.
- Domestic passenger traffic grew YoY by 18.28 per cent to reach 243 million in FY18 and is expected to become 293.28 million in FY20E.
- In FY18, domestic freight traffic stood at 1,213.06 million tonnes.

- During Apr-Aug 2018, passenger traffic in India stood at 141.77 million (domestic passenger traffic 113.44 million, international traffic at 28.32 million). Total freight traffic handled in India stood at 1.49 million tonnes during the same time.
- During Apr-Aug 2018, domestic aircraft movement stood at 0.89 million while international aircraft movement stood at 0.19 million.

As of May 2018, there are nearly 558 commercial aircraft in operation in India.

**IndiGo** is a low-cost airline headquartered at Gurgaon, Haryana, India. It is the largest airline in India by passengers carried and fleet size, with a 41.3% domestic market share as of June 2018. It is also the largest individual Asian low-cost carrier in terms of jet fleet size and passengers carrier. The airline operates to 57 destinations both domestic and international. It has its primary hub at Indira Gandhi International Airport, Delhi.

It has maintained its market share by delivering low cost trips as its competitive advantage. There are various strategies implemented to ensure the low costs are sustainable while slowly venturing into various markets including international market. Adaptation of technology in its function shows a positive approach to the future where it can reduce its fuel cost and become more efficient.

### **Micro-Economic analysis of IndiGo airlines:**

#### **Factors affecting Demand:**

Aviation Industry demand is typically a derived demand from the need for individuals to travel or commute i.e. flights demand is derived from business travel, holidays, family trips, etc. but not from just the need or want to sit in a flight.

The factors that impact the demand for Indigo are:

1. **Price:** This one of the key factors that impact the demand for Indigo as it is working on the low cost strategy. With all the other players in the industry ensuring a lower price is a definite benefit. Any increase in the price does adversely affect the demand due to higher price elasticity (Steep Demand Curve)
2. **Personal Income:** Another key factor is personal income, which is directly linked to price of the tickets too. If the personal income is on the lower side, the elasticity is higher and vice versa. In India, the personal disposable income for the majority is on the lower side which implies the demand is highly elastic.

3. **Economic Climate of the Country:** This factor includes factors like GDP, exchange rate and economic state of the country. Considering that Indigo is a domestic airline, the impact of these have a lower impact on the demand.
4. **Demographic:** In a survey it was identified that more trips are business related and hence a country with larger section of population in the working age implies higher demands.
5. **Season Demands:** The demand is higher during holiday and festival seasons which reduces the elasticity as seen most of the airlines hike the prices during festivals and holiday seasons.
6. **Preference:** Flight selections are often dependent on preferences of the services, food type, duration of flights, seat availability, number of stops etc.
7. **Substitutes:** Substitutes like road and rail travels have a huge impact on the demand for flights in India as the income for the majority of population is lower however with the competition from low cost airlines like indigo has reduced the effect of these substitutes.
8. **Existing Entities:** The pricing strategies used by the competitors impact the demand for flights. This increases the price elasticity of demand for Indigo.

### **Price Elasticity of Demand:**

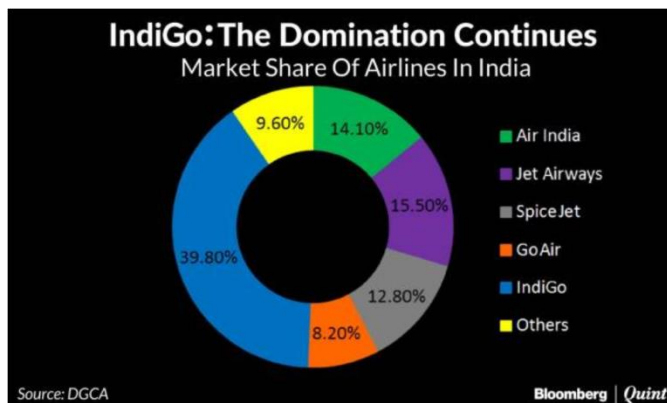
Going by the definition, price elasticity of demand is a measure of responsiveness of consumers to change in the price of a product. An airline industry is extremely price elastic which means that the passengers/customers can easily choose a different carrier without having a brand loyalty. IndiGo airline although being a low-cost carrier is relatively elastic. Significant changes in price will have a considerable amount of impact in the demand as IndiGo offers only economy seats. IndiGo having significant domestic market share (41.3%) due to its efficient, low-cost operations by attracting customers with low fare. Only economic seats and implementation of non-price competition (punctuality) are also factors enabling the low cost operations of IndiGo. IndiGo or any airline industry usually cannot reduce the price just to increase the number of customers or vice versa, as this will not lead to a significant impact. Considering IndiGo's major domestic market share, the price elasticity of demand coefficient for domestic air tickets for IndiGo is less compared to the PED's of other airlines offering domestic services.

### **Competitors, Substitutes, Complements and market leader**

Five main IndiGo airlines competitors are Jet Airways, Vistara, Air India, Go Air and Spicejet. Airlines being the fastest modes of transports face threats from substitutes. Some of the

substitutes being from different modes of transportation such as a car, bus, train and boats. The main complements to airline travel are hotels and rental cars. This interdependence is evident by the frequent bundling packages offered by airlines, hotels, and rental cars. Companies such as Expedia, Travelocity, and Priceline seek to capitalize off of connecting these industries together in order to simplify the process for consumers.

Indigo continues its dominance in the Airline industry with approx. 40% share.



## Production

The Production function shows the relationship between inputs and output. In particular, it shows the maximum amount of output that can be produced by a given level of inputs. Production function also describes technology which shows relationship between input and output. Now, of course, there's a problem with measuring output as well. When it comes to things like steel, agricultural products, and other such products, that is quite easy to measure output. It's much more difficult to measure output when it comes to services.

Indigo is the fastest growing domestic airlines. It has 21% of the domestic market share which has low-cost and premium operations. Indigo has the highest load factor of 89.40%. Airlines has planned to step into international market. Indian Aviation industry has served 90 million domestic passengers and 20 million International passengers. Operations with 920 airlines, at 4200 Airports with 27000 Aircrafts. Indigo has always been valuing customer with affordable fares, on-time performance and hasslefree service which is also their mission statement. Strengths of Indigo airlines is their business model, High brand awareness, cost leadership, High efficiency, Innovation, Age of Equipment, Tie Ups, Continuous Improvements, Debt free.

For production function, we can consider various inputs for Indigo's aviation industry, which are having low Turnaround Time, Aircraft Utilization, Young fleet of aircraft hence less maintenance issues, Indigo has lower employees per aircraft. Since the aircraft fleet is still new, it has fuel

efficient engine, zero inventory of components and the main factor is same configuration of all aircrafts providing flexibility in allocation.

The output of the Indigo Airlines has maximized due to various factors like low price tickets, point to point routes, frequent and reliable departures and targeting high load factors. Even cost leadership and competencies has impacted the production function of Indigo's airlines where there is no free meals, strategic usage of disposable bags for quick cleaning of aircrafts before landing, highest number of seats, light weight seats, internet reservations, cost and service culture, human resource training on efficient processes, centralized operations controls center, highest number of CAT-III compliant pilots

Considering that it functions on almost 90% capacity with low cost , it can be said that they are able to achieve economies of scale. They can try to increase the client base to reach the perfect equilibrium.

### **Market Structure**

Airline industry is an Oligopoly market implying that the market structure of Indigo is oligopoly. Airlines Industry is controlled by a small group of firms because the barrier to entry is imposed by high capital investment, government regulation and existing incumbent firms. One sees the following characteristics with respect to the Indian passenger airlines market.

1. Few number of firms contributing to over 50% of the market share.
2. Products are differentiated in terms of service quality and offerings.
3.  $MR=MC$
4.  $P>MC$
5. Entry barriers
6. Firm is a price setter
7. Long run profit  $\geq 0$
8. Strategy dependent on individual rival firm's behaviour

### **Strategy of IndiGo**

1. IndiGo has made sure that its average fleet age remains four years till 2032. The last plane of the three bulk orders of 530 aircraft that IndiGo placed will come in 2026 — 100 Airbus A-320 in 2005, 180 A-320 Neos in 2011 and 250 A-320 Neos in 2015. IndiGo's bulk buying helped negotiate better rates. They buy planes at a lower price than what a seller would buy for. IndiGo gain right at the beginning — this is netted against their rentals and brings their cost down.

2. Once all airplanes are delivered, IndiGo will not have a fleet of 530 planes — this is due to the ‘buy, sell and lease back’ strategy. At peak they will have 330 planes. Once the order is placed the planes are sold to lessors at market price. The planes are then leased back for the next six years — which means for the first six years IndiGo receives a plane every month.

3. Every month a plane goes out of IndiGo’s fleet and a new aircraft joins, thus reducing the average fleet age, and with an average fleet age that is low the cost of maintenance is also lower. In 2011, IndiGo was the first customer for Airbus to order the new range of fuel efficient A-320 Neo planes. Neos help in saving 10-15% of the overall fuel cost. Fuel makes up for 50% of a carrier’s cost.

4. Because of the six year lease back plan, with the next two-and-half years one-third of IndiGo’s fleet will be Neos, and in the next six years it will have an all Neo fleet. There is a straightaway positive impact of 7% on the company’s bottomline because of the Neos.

5. With orders in place, IndiGo is planning to increase its presence in the number of cities it flies to — adding two to three cities to its portfolio every year. In the next eight and half years it plans to have presence in 56 airports compared to 33, now. Regional flying is not on the radar, and neither are smaller planes. Indigo do not have any plans to induct smaller planes into their fleet.

### **Marketing Strategy of Indigo**

Indigo is a no-frills carrier, a strategy which is helping the airline in keeping the cost of operation low and passing on the benefits to the end customers.

Operating to limited number of destinations has helped the carrier to remain focused and this is one the competitive advantage that Indigo have over peer companies.

### **Products in the marketing mix of Indigo airlines**

The core product of Indigo airlines is of course Air travel. The travelling is mostly for passengers but the cargo line of Indigo airlines is growing fast as well.

Another strategy which Indigo applies is **deft route planning** such that it increased the number of aircrafts per route instead of increasing the number of routes. The low cost model strategy, purchasing only one type of aircraft and keeping the operational costs as low as possible coupled with an emphasis on punctuality are the main reasons for its success.

### **Promotion in the marketing mix of Indigo airlines**

The airline relies on its cost and availability to promote its brand across the market. This investments in advertisement is low because it affects the cost.

The airline has adopted a strategy of connecting flights to other destinations from one destination such that customers will not have to book another airline to arrive to their destination.

Other promotion methods used by Indigo aircraft include media vehicles like billboards, print media advertising and advertising on travel portals.

### **Price in the marketing mix of Indigo airlines**

Indigo airlines is of the cheapest airline in India. In fact, that happens to be its competitive advantage when travelers are comparing prices. This makes it one of the most sought airline service in India because of its quality service as well.

The complete credit for Indigo's success goes to the cost control department at Indigo airlines. Indigo uses **computer generated mechanisms** to determine how much petrol it will need from point A to point B. Thus savings on fuel is high. Furthermore, the servings on flight are minimum.

It follows one service one fleet strategy. The fleet had higher fuel efficiency and alliance with Airbus maintenance. Per flight employees set by Indigo went down below 100 as compared to 250 in Air India. Indigo also became the only domestic Indian airline to adopt RNP approach which in turn helped in fuel and cost saving and faster turnaround at airports. Indigo also gradually expanded in all possible destinations in the Indian market. It tried to lower the ratio of flight to market ratio. It also opted for secondary airport whenever possible. For its routes, Indigo followed hub and spoke model, more accessible e-ticketing, single class configuration. It also focused on no In-flight entertainment systems and looked for ancillary revenues. Indigo was one the first companies to choose V2500 engines manufactured by Zurich-based IAE to cut the fuel burn by almost 2%.

### **Recommendation for IndiGo Airlines**

IndiGo dominates the Indian skies with over 40 percent domestic market share. Passenger traffic saw a compounded growth of 27.7 percent over FY15-18, as against industry growth of 20 percent, on the back of its competitively priced no-frill products, reach and on-time performance.

Since IndiGo cannot control fuel prices, they need to manage costs. They can explore more in the cargo transportation which may help them to manage costs and improve its economies of scope. They can tie-up with e-commerce travel and tourism players as they charge and create combo deals. These deals are at a discounted price which are borne by the e-commerce companies. This helps IndiGo as they achieve higher occupancy at sustainable costs.

Indigo can also venture into luxury segment of airline, which will attract the rich customer base and would help to increase profit and get better revenue. Indigo may also venture into international market by having tie-ups with other international airlines. The initial flights can be to Asian regions or to the key countries airports like London, New York, Dubai, etc. This will support in expanding the market while having limited capital investment because of joint ventures. Implementing loyalty program for its existing clientele can help reduce the elasticity and ensure sustainable customers. They can also have tie ups with companies to get the consistent business travel deals.

The company has also started adding fuel-efficient A320neo aircraft in its fleet, which would help it reduce fuel cost by close to 15 percent.

In conclusion, due to Indigo's business model, freight market has much more opportunity for indigo. We can consider Indigo's opportunities as listed here: Increased domestic air traffic, international markets, Chartered services, Regional connectivity. Also aim at cost reduction by using more fuel-efficient flights and sustaining their client base through loyalty programs. The diversification in to other markets can help achieve economies of scope.



## Group 2: Microeconomic Analysis of One Plus

### **Executive Summary**

*In this project we have made an attempt to analyze how a fledgling company named OnePlus shook the industry. The young company had penetrated the market around 4 years back as a budget mobile and now dominates the premium mobile phone market with over a massive 50% share in the Indian market.*

*The project takes a dive in to insights on the demand of the product and how it grew over the years. The strategy implemented by the firm. The production process and keeping the demand in check. Along with growing in production to meet the demand. There are interesting strategies taken by the company to survive in the market as the competition was not only with the leaders in the market but also many new comers like xiaomi which had similar philosophy of OnePlus to provide the best features at pocket friendly rates. These companies posed a bigger threat to the firm rather than the like of Samsung and apple.*

*Here, we have also considered the market structure shedding light upon the competing firms. The trend in the market power. The project also does an analysis of pricing strategies hoe the prices smartly evolved over time establishing the company as a premium market which was a new face as compared to a budget phone as advertised earlier.*

*We understand that surviving as a firm wouldn't be limited to the strategies as mentioned above. The project also does justice to other strategies that were implemented to thrive in the market in a short period.*

### **Introduction**

Technological evolution has been a constant since dawn of time and even has the potential to shape human evolution. Technology has helped reduce human workload significantly from the first wheel to the latest app on our mobiles. Today, we hold in our hands, tech that is as powerful as what was used to send humanity to the moon, which in turn has seen its own share of developments, innovations and parts of various runs in various markets, over the years there have been several players in the industry who have not only revolutionized the product, increased job opportunities for skilled and unskilled labor, but also built a solid global market for the product All this development comes at a cost be it accounting or economic and would not be possible if not for

several factors that went into play.

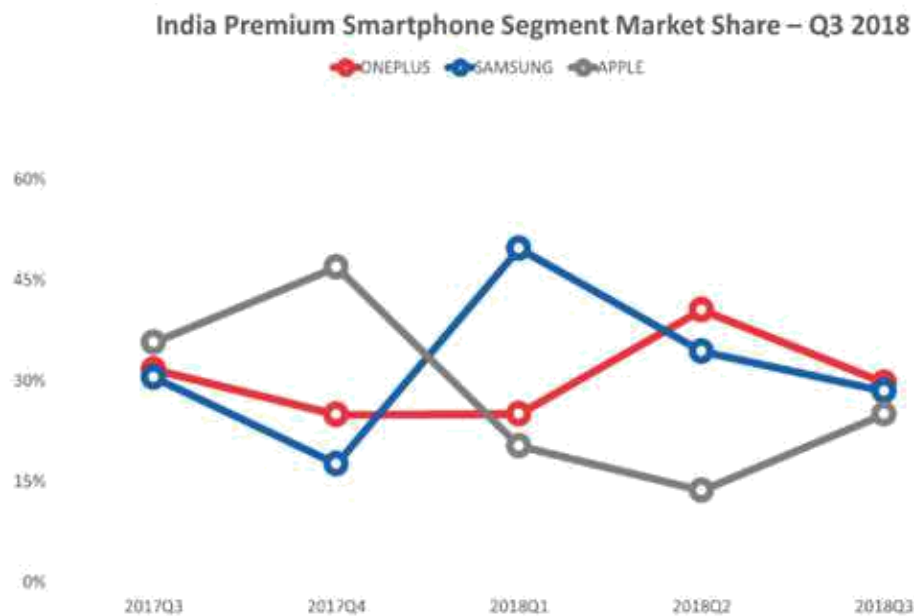
OnePlus, called Flagship Killer colloquial is is one such company who has been able to build a strong name for themselves in under 5 years. Launching 9 variants of the phone since their inception in quick succession whilst not compromising for quality, design, specifications or feasibility is intriguing as to how a company with lesser experience was able to go head to head with global leaders.

## **Product Demand**

One Plus's invite only strategy was a very big hit amongst the early adopters and people who wanted something new. It's the smartphone that's managed to dominate the market in a very short amount of time, an impressive feat accomplished largely due to a clever marketing plan. The demand for the invite-only smartphone was so great that traffic to the website skyrocketed, reaching 25.6M visits in December 2014 – just one year after the OnePlus web site was launched.

For OnePlus, India happened by chance. And, of course, some clever reading of the sale data. When the company brought its first phone OnePlus One to the market in April 2014, India wasn't among the countries where the device went on sale. The OnePlus One came to India only in late December that year. But nearly four years after OnePlus One became available on Amazon, India is not only the biggest market in the world for OnePlus, it is also a market where OnePlus is the top phone brand in the premium segment.

On 31st July, Counterpoint research came out with its smartphone report card for the Q2, 2018. For the first time, OnePlus, with a market share of 40 per cent, leads the premium segment in India, ahead of Samsung that has a share of 34 per cent, and Apple that has somewhat fallen behind and is now at 14 per cent. As much as this triumph of OnePlus could be attributed to the OnePlus 6, a phone that launched in May this year and that currently has a market share of 30 per cent in the Rs. 30,000 or above segment, calling it out as the sole reason for success will be unfair to the OnePlus story. The saga of brand OnePlus in India includes more than just one or two great phones. It's a story of near flawless execution and Zen-like focus. As noted earlier, the story starts with some sales data OnePlus collected even before it had entered India.



- Nation's economic activity - The growing availability and decreasing cost of phones and accounts, combined with the absence of landlines in many parts of the world, combined to create a volatile market where millions of people acquired mobile phones in a very short period of time. The intensity of the sales surge appears to have been short lived, and some mobile phone manufacturers now believe that they are approaching world wide market saturation. It was during this upward tide that a lot of mobile phone manufacturers including One Plus gained a lot of traction.
- Price of the product - Given the design elegance and features provided by OnePlus, it comes at a relatively lower price than its immediate competitors Apple and Samsung. The invite-only strategy also gives the owner pf the phone a premium feel.
- Taste, Preference and Habits - The need to remain socially active and connected to the internet all the time was a big factor that boosted smartphone sales all over the world. The ease of calling and messaging someone from anywhere in the world was a huge lifestyle change and a lot of people adopted smartphones like OnePlus to remain tech savvy.
- Income - One Plus is a big hit amongst people with high income and spending capacity. It perfectly fits in the budget and is relatively cheaper than other phones in this category.
- Complementary Services - Network carriers have drastically reduced the call rates and data plans which has positively influenced the demand for smartphones.

## Substitutes and complements

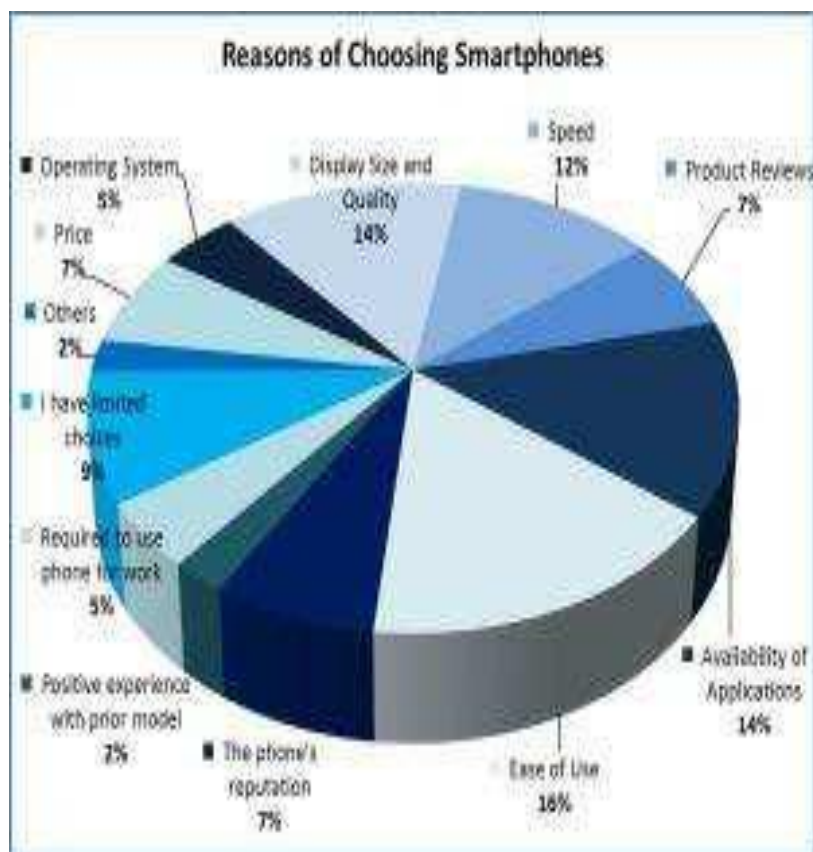
Substitutes of OnePlus include:

- Rival smart phones like Samsung, Microsoft, Apple, Xiaomi, etc.
- Fixed line services
- Laptops - Some of the functionalities of a smart phone like social media, internet browsing, etc. can easily be done on a laptop

Complements of OnePlus include:

- Mobile accessories like cases, compatible smart watches, memory extensions, etc
- Plethora of mobile applications for everything from tracking your health to managing your finances are huge complements to smartphones

## Factors influencing demand

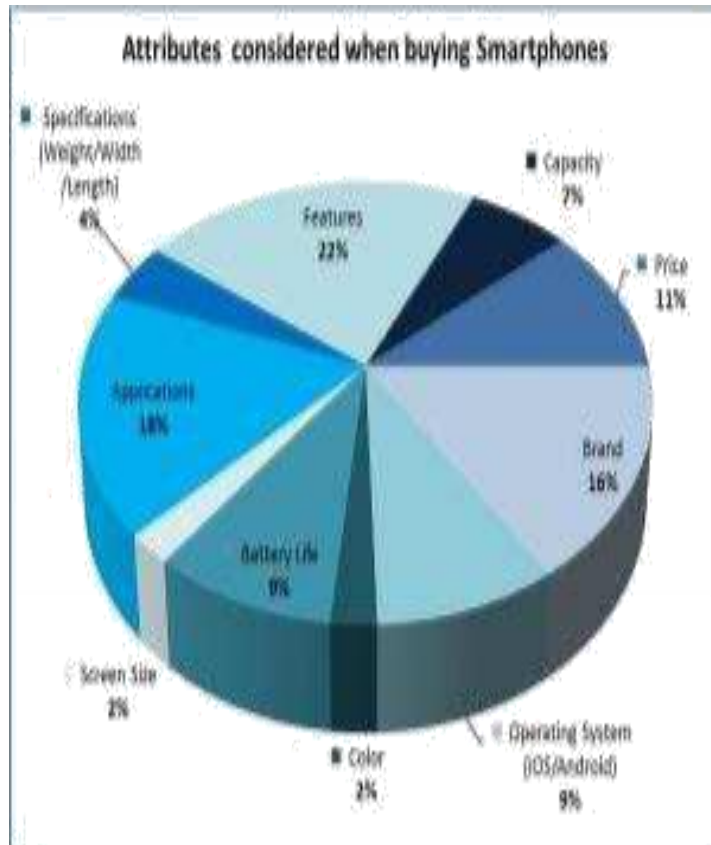


The ease of use (16%), availability of applications (14%) and display size and quality (14%) are the top 3 reasons for consumers to choose their existing smartphones.

Interestingly the phone's reputation is not something that customers are worried about. Hence the new consumer generation is concerned more about the functionalities meeting the needs rather than the firm building a reputation.

Since smartphones nowadays are used not just as a phone but as all in one and an easy to use device, consumers look for features that enable them to do anything with as much ease as possible. For instance, shortcuts to applications on the home screen, multi-windows in a screen, gestures mode and so on. Besides, the survey revealed that 14% of respondents choose their smartphone(s) depending on the availability of applications because applications can enhance the users' experience, regardless whether it is for work, e-mail, notes, widgets or games. Alternatively, positive experience with prior model is not significant in affecting the demand of smartphones.

This indicates that consumers have less loyalty towards a brand of smartphone. They are more willing to try and switch to different brands because they are exposed to many other types of smartphones.



Our survey also found that the features of smartphones (22%), applications (18%) and brand (16%) are the top 3 key attributes a smartphone consumer will consider the most. As what we can see from above (on the previous page), the attributes that the consumers will consider the most is the features of the smartphone. This is a reliable result, since most of them are choosing their smartphones by determining the ease of use.

## Elasticity

### Price Elasticity

The price elasticity is the degree of responsiveness of the quantity demanded of a good to changes in price of a good. A product is known to be elastic if the consumers are sensitive towards to changes in price. Conversely, a product is inelastic when the consumers are not sensitive towards the changes in price. Smartphones, which is considered a luxury good, has an elastic demand. This is shown when the majority of 87% respondents choose not buy a smartphone when the price increases by 50%.

$$\begin{aligned}\text{Price Elasticity of demand} &= \frac{\% \text{ change in quantity demanded}}{\% \text{ change in price}} \\ &= \frac{87\%}{50\%} \\ &= 1.74\end{aligned}$$

Since the value of answer is more than 1, therefore the hypothesis above is said to be proven. Smartphone has an elastic demand, or literally indicates that the consumers are more responsive towards the changes in price.

### Cross-price Elasticity

The cross-price elasticity of demand is a measurement of the quantity of a good demanded to a change in price of another related good. We used a scenario where the price of non-smartphones decreases by 50%, what is the behavior of respondents.

$$\begin{aligned}\text{Cross Price elasticity of demand} &= \frac{\% \text{ change in Quantity demanded of Smart phones}}{\% \text{ change in price of non smartphones}} \\ &= \frac{27\%}{-50\%} \\ &= -0.540\end{aligned}$$

The cross-price elasticity of demand should be more than 0 and has a positive value because this implies that the consumers are more likely to change their products when a substitute good change in price. However, the respondents somehow do not change their choice to non-smartphones. This indicates that smartphone is important to individuals and has its unique features that the consumers will not want to change. The usage of smartphones has become a part of consumers' life.

## Income-Elasticity

The income elasticity of demand also indicates that the smartphone is a luxury good. Income elasticity of demand is the measure of degree of responsiveness of demand to changes in income. In the scenario when income increases by 30%.

$$\begin{aligned}\text{Income Elasticity of demand} &= \frac{\% \text{change in quantity demanded}}{\% \text{change in income}} \\ &= 47\% / 30\% \\ &= \mathbf{1.567}\end{aligned}$$

$$\begin{aligned}\text{Income Elasticity of demand} &= \frac{\% \text{change in quantity demanded}}{\% \text{change in income}} \\ &= 67\% / 50\% \\ &= \mathbf{1.340}\end{aligned}$$

We can conclude that the answers have a positive sign and it is more than 1. This shows that the changes in demand for smartphones are higher changes in income. It is simpler to explain when we compare a luxurious good to an inferior good such as the non-smartphone. According to our results, consumers will not buy a non-smartphone if their income increases, even if they can afford a smartphone.

### **Group 3: Maruti Suzuki- A microeconomic point of view**

#### ***Executive Summary***

*The automobile industry in India is one of the largest in the world with an annual production of 23.96 million vehicles in FY (fiscal year) 2015–16, following a growth of 2.57 per cent over the last year. The automobile industry accounts for 7.1 per cent of the country's gross domestic product (GDP).*

*India is also a prominent auto exporter and has strong export growth expectations for the near future. Automobile exports grew 26.56 per cent during April-July 2018. It is expected to grow at a CAGR of 3.05 per cent during 2016-2026. In addition, several initiatives by the Government of India and the major automobile players in the Indian market are expected to make India a leader in the two-wheeler and four-wheeler market in the world by 2020.*

*This report is prepared to study historical trends of Maruti in terms of numbers and strategies. This report will cover how and why Maruti maintained their status as a market leader for three decades. What were the strategies for Demand and supply and how they managed their portfolio in terms of costs. It will also cover major strategic initiatives of Maruti and their core principles which gave them edge over the competition? Status and trends of Maruti as well as major competitors is also included for a holistic point of view.*

*We will end the report with recommendations for Maruti which would improve their future outlook and de-risk loss of market share. Following points are considered to come up with recommendations:*

- Growing Demand: Rise in middle class income and youth population*
- Opportunities: India is expected to become market leader in shared mobility by 2030. Shifting focus towards electronic cars can also provide opportunities in the sector*
- Rising investment: FDI inflow for automobile sector stood 19 billion USD from 2000-2018*
- Policy support: Government of India has come up with reforms like GST to boost the sector*



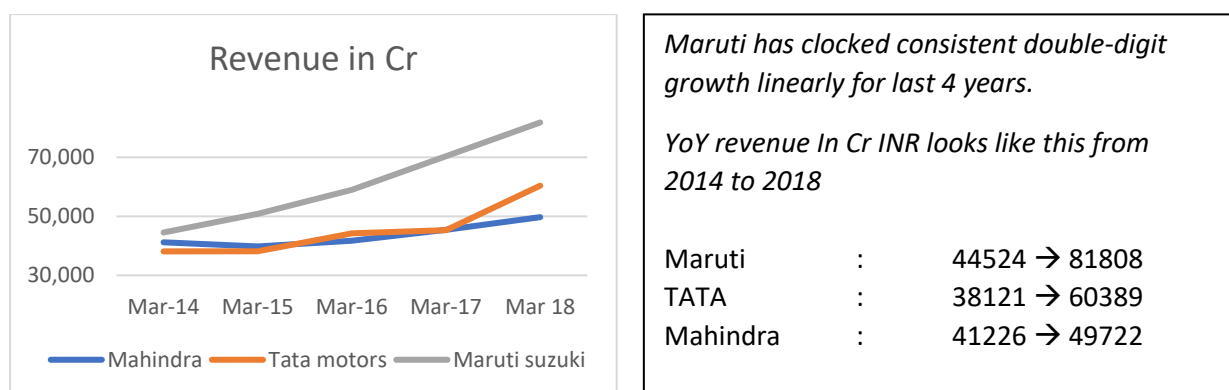
## Introduction

Maruti Suzuki India Limited, formerly known as Maruti Udyog Limited is an automobile manufacturer in India. Headquartered in New Delhi, it is a 56% owned subsidiary of Japan's Suzuki Motor Corporation. Presently it holds 53% market share in India. It was incorporated as Maruti Udyog Limited in 1977. In 1982 it signed a joint venture agreement with Suzuki of Japan. Till 1991 India was a closed market. Post liberalization in 1991 Suzuki increased its stake to 50%. In the upcoming decade Maruti launched new models like Zen, Esteem, Wagon-R, Omni, Baleno and Versa. In 2001 Maruti True Value, selling and buying of pre-owned cars was launched. Maruti has 1820 sales outlets across 1471 cities in India. Its dealership network is bigger than that of all the competitors combined. With the greatest number of service stations (3145) across India (1506 cities) Maruti has been able to consistently maintain its status as market leader.

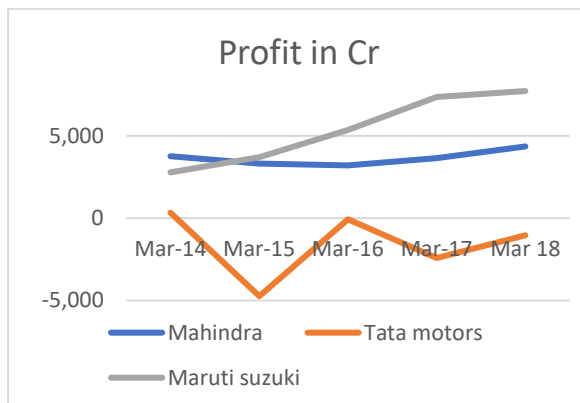
In 2015 Maruti launched NEXA, a new dealership format for its premium cars. It also started many other verticals to increase their bottom line and customer stickiness. Maruti Insurance (2002), Maruti Finance (2002), N2N fleet management, Maruti accessories, Maruti driving school are some of the examples.

Maruti has been able to outperform its competitors on all fronts.

In terms of revenue Maruti, TATA Motors and Mahindra and Mahindra closed 2014 at approximately same revenue level. From then till 2018 Maruti has doubled while others lagged.



Portfolio in terms of profit looks the best for Maruti. While TATA Motors has done okay on revenue front, profits are practically absent.



*Maruti has managed to consistently increase its profit almost as linearly as its revenue.*

*YoY profit In Cr INR looks like this from 2014 to 2018*

|          |   |            |
|----------|---|------------|
| Maruti   | : | 2783→ 7722 |
| TATA     | : | 335→ -1035 |
| Mahindra | : | 3758→ 4356 |

## Microeconomics of venture

### Demand for the product

The Indian auto industry became the 4th largest in the world with sales increasing 9.5 per cent year-on-year to 4.02 million units (excluding two wheelers) in 2017. It was the 7th largest manufacturer of commercial vehicles in 2017.

- Maruti Suzuki continues to be the market leader with its utility vehicle sales outpacing that of rivals
- Its sales crossed 1.5 million units for the first time in its over-three decade history
- At 1.65 million units, Maruti's sales were 14% more than the year before, and almost twice the pace of the passenger vehicles industry

### Factors affecting demand

Demand for cars in India is majorly linked to economic growth and rise in income levels. India being the fastest growing economy and rising levels of PPP has led to increase in overall demand for 4 wheelers. Further, it is inversely related to the interest rates and fuel prices as 85% of the total vehicles are bought on credit.

- Cost of ownership, highest number of service stations and cost-effective post car purchase services has led to high consumer satisfaction thereby increasing demand
- Growing income levels in Tier-2 and Tier-3 cities is also a major factor of increased demand for 4 wheelers

- Increase in usage of Maruti cars by Uber and Ola for taxi services has marginally increased demand of the product in past 6-8 years.
- Seasonality is also a vital factor owing to festive discounts and offers

### **Substitutes and complements**

- Primary complements: Fuel and Steel
- Secondary complements: Registration and Insurance cost, Tyre cost
- Substitutes: Pre-owned cars, Two wheelers, Public transport

### **Elasticity**

rice elasticity of demand is inelastic ( $e < 1$ ). An increase in its price does not impact demand negatively. Maruti Cars are a necessity/entry-level product. Income elasticity of Maruti Suzuki cars is also inelastic in nature., i.e. a product for which the quantity demanded increases when consumer income rises. Maruti's value for money products make it a preferred choice for consumers who are looking for a reliable and affordable option when their income increases. *Below example of number of units of Dzire model (basic petrol vxi) sold YoY along with price confirms inelasticity.*

| <b>Year</b>             | <b>2010-11</b> | <b>2011-12</b> | <b>2012-13</b> | <b>2013-14</b> |
|-------------------------|----------------|----------------|----------------|----------------|
| <b>No of units sold</b> | 69815          | 60787          | 101041         | 127436         |
| <b>Price (L)</b>        | 4.89           | 5.03           | 5.21           | 5.48           |

### **Production**

Maruti Suzuki manufactures multiple variants of the car from hatchback to SUV. With its corporate office in New Delhi and 16 regional offices across India, production facilities in Gurgaon and Manesar, Maruti employs more than 7,000 employees.

Maruti decreased TAT for production by automating die design tooling which led to reduction in time and cost hence enabling launch of new variants in a short span of time with lower production cost and better quality.

## Processes



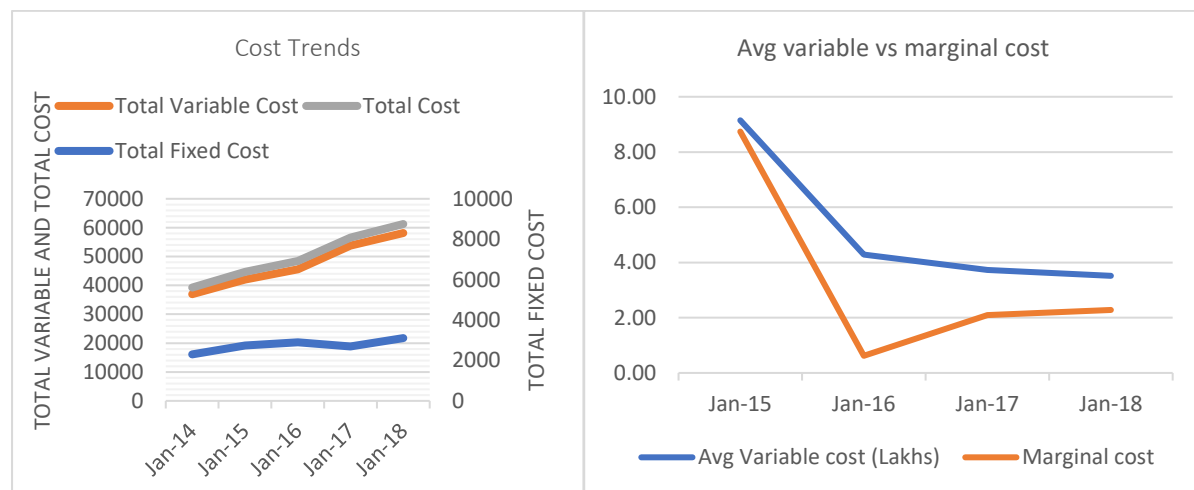
## Inputs

With 7000+ workers with robots 3,100 cars are produced per day – about 2.15 cars per minute. With less than 1.8 minutes of assembly line stoppage in an 8-hour shift, Maruti is able to clock 98% efficiency.

## Substitute and complement among inputs

Maruti's new press shop which presses sheets of metals into shapes form part of the chassis and door. The robotic weld shop uses 3D and 3K guiding principal reaching out in narrow gaps to do spot welding of different parts of chassis.

## Costs



Average variable and Marginal costs for Maruti has been consistently decreasing.

### Economies of scale and scope

Maruti initially followed *economies of scale* by producing more of few models like 800, Alto and Omni with which they were able to reduce variable cost. In the last decade Maruti has started to shift towards *economies of scope* wherein they have started manufacturing variations in different models which is helping them reduce variable costs further and increase profitability.

### Market Structure

#### Competing Firms

Passenger vehicle industry in India has doubled over past decade. This is followed with manufacturers flooding the market with models for all strata. Following are the factors for highly competitive automobile industry in India

- Liberalized policy regime
- Increase in domestic consumption due to rapid urbanization and rising per capita income
- Huge investments from the firms for capacity expansion, R&D
- Comparatively cheap and skilled workforce
- High expectation of consumers

The competitiveness of the firms can be determined by factors like production performance, customer satisfaction, sales and marketing strategy and financial performance.

| Company     | Market share 2010 | Market share 2017 | Target Group                  | USP  | Top selling model |
|-------------|-------------------|-------------------|-------------------------------|--|-------------------|
| Hyundai     | 16%               | 12.30%            | Upper middle class            | Design and performance                         | i20 elite         |
| Mahindra    | 8%                | 7.50%             | Commercial market             | Durable and efficient                          | Bolero            |
| TATA Motors | 15%               | 5.90%             | Middle and Upper middle class | Old brand and recall value                     | Tiago             |
| Honda       | 2.30%             | 5.10%             | Upper middle class            | Design, luxury and comfort at affordable price | Amaze             |

|               |     |        |  |  |       |
|---------------|-----|--------|--|--|-------|
| <b>Maruti</b> | 45% | 49.60% | Innovation in compact segment with launch of entry level sedan | Models for every pocket, strong legacy, accessible service and affordability | Dzire |
|---------------|-----|--------|--|--|-------|

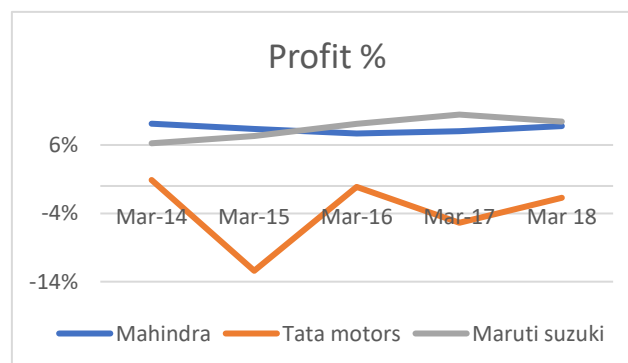
As clearly visible Maruti has not just maintained but increased its market share. It has further risen to 53% in 2018.

### Market Power

High profits and margins are the greatest evidence of market power. TATA Motors and Mahindra, the other big companies have struggled to increase margins whereas Maruti has shown clear evidence of market power.

**Maruti margin %: 6% (2014) → 10% (2018)**

### Evidence of market power



### Strategies for Competition

While other automobile giants have latest technologies, robust infrastructure and R&D facilities, best cost-effective solutions and very high quality six sigma standard manufacturing methodologies, Maruti continues to be the market leader in India amidst heavy competition

Maruti's key strength has been its brand loyalty as also their distribution network at ~2,500

- **Dealership Network:** Maruti Suzuki has a strong number when it comes to dealership network. It has 1820 sale outlets in 1471 locations compared to Hyundai's 718, Tata's 539 and

Mahindra's 436 dealership network. Dealership network is directly proportional to sales volumes.

- **Cost of Ownership/Maintenance:** Both the vehicle cost and the spare cost are cheaper compared to its rivals. It is an important factor specific to India which makes Maruti have an edge over its rivals.

- **Excellent mileage:** Mileage is one of the most important factors for consumers before making a purchase decision. Maruti Suzuki excels here by manufacturing efficient diesel engines with better mileage compared to its rivals.

- **Back end/Local Engineering:** Initially, Maruti used to import various parts from its parent Suzuki (Japan) and few other overseas vendors. But over the years ensured that almost everything from gear box to leather seats are manufactured locally which gives a huge competitive edge over its rivals in pricing. Today, Maruti has a remarkable back end system which supplies and supports it well.

- **Resale Value:** Another important factor which most of the Indians would consider before buying a vehicle. Maruti Suzuki excels again in this area where it has its own separate platform called Maruti True Value || Sell, Buy and Exchange

- **Product Portfolio:** Maruti Suzuki makes sure that it has a product for every Indian. Currently, it has 16 models across 6 segments (Hatchback, SUV, MUV, Sedan, Crossover, Mini Van) which is much higher than its rivals providing a plethora of options for every customer before they buy one.

- **Cannibalization (Marketing):** In marketing strategy, **cannibalization** refers to a reduction in sales volume, sales revenue, or market share of one product as a result of the introduction of a new product by the same producer. For instance, if the customer's budget is on a lower side, he or she may purchase an Alto instead of a Wagon-R or Wagon-R instead of Swift or Swift instead of Baleno. Although the volumes of Wagon-R, Swift, Baleno are hit, the sales still remain with Maruti. So Maruti ensures that the customer instead of going to a Tata motors or Hyundai Motors or any of its competitors stays with Maruti-Suzuki.

**- Focus on rural markets:** Maruti Suzuki started to focus on rural markets much before its rivals which is another important factor for its sales volumes. Currently, Maruti sales from rural markets are about 26% which is much higher compared to its rivals.

### Pricing Strategy

“Will provide car for every pocket, lifestyle and aspiration” – R S Kalsi, Senior director sales and marketing at Maruti Suzuki.

We can term pricing strategy of Maruti as penetrative and competitive. For Maruti it has always been about volume rather than prices. Lower prices clubbed with durability and service quality is the reason behind consistent double-digit YoY growth for Maruti. Most of the cars sold in India are in lower price segment and Maruti manufactures 90% of its product within this range.

But it is not just about the price. Maruti launched NEXA in 2015, a new dealership format for its premium cars. Within NEXA too, Maruti did not lose its “value for money tag”.

| Model   | Price Range          |
|---------|----------------------|
| Baleno  | 5.3 to 8.5 Lakh INR  |
| S Cross | 8.8 to 11.5 Lakh INR |
| Ignis   | 4.7 to 7 Lakh INR    |
| Ciaz    | 8 to 11 Lakh         |

Even premium models of NEXA have affordable variations. This led to NEXA clocking 3,00,000 car sales in 2017, only two years post launch. With NEXA Maruti increased its market share from 46% to 53% in 2018.

### Other strategies

- i. *Value added services (VAS)*  
Services such as Maruti finance, Maruti Insurance, Maruti True Value, Maruti Accessories and Maruti Driving School to promote the growth of its bottom line.
- ii. *Brand strategy*  
Having decades of consistent market leadership in India enables Maruti to leverage its position and cut down on promotional costs. Having targeted middle class population, the company comes up with innovative ideal to sell their value proposition.



iii. *Tagline*

Maruti changed their tagline from 'Count on Us' to 'Way of Life'. The earlier tag line was based on reliability and affordability, but with 'Way of Life', brand positioning has been joined by attributes of sporty and spirit to create more excitement.

**Strategic initiatives**

- i. Change your life (2003): Vehicle insurance at Rs 1
- ii. 2499 Campaign (2004): Maruti 800 at 2599 monthly EMI and 21,000 down payment
- iii. Teacher plus (2004): Tie up with SBI to offer discounted loans for teachers
- iv. IndusInd bank tie up (2009): Quicker and easier credit across India
- v. Rural India focus (2009): Promotions in Rural areas led to increase in revenue % coming from rural areas from 22% to 26%

**Recommendations**

**1. Market share in mid and high price segments**

Although Maruti is maintaining its market share on an overall level, it is losing out on share in urban areas where there is demand of mid/high end car segments. This might eventually lead to loss in market share on an overall level too. With increasing income levels and rising aspirations buyers are led to prefer mid-price segments where Maruti's hold is much less significant. Honda has been capitalizing on this development with Amaze and City. Maruti needs to start catering to this developing use case.

**2. EV market**

EV industry is a recent development in India and expected to grow multifold in upcoming decade. China and Indonesia already have scaled up EV industry massively in last 5 years. Under recent government, NitiAyog has started various projects which will boost manufacturing and subsidising of EV across the country.

33 Lakh cars are sold in India every year. Given that the government is targeting 5% of on road vehicles as EV, there is a chance to increase market share by 10% for

Maruti if they were to target 100% of the potential EV market share.

### 3. **Design and Features (R&D)**

India has the highest youth % in the world. With the cutthroat competition in automobile industry today it is not just about the price. Design, features, safety and the build quality are gaining importance as income level rises. Competitors are facing increased sales with costlier models because of better quality and driving experience (Ciaz vs verna/city, ertiga vs innova etc). We think Maruti should introduce/evolve automatic transmission, regenerative braking, radars/sensors and start focusing on customer centric R&D.

### 4. **Hybrid models**

While EV is the bigger picture, hybrid is the interim solution given the lack of present infrastructure for development of EV industry in India. Hybrid automobile runs on electrical as well as gasoline engine which increases fuel efficiency and lowers carbon footprint.

Hence Maruti should start production of hybrid models which would help them align with the emission norms and subsequently be a part of a cleaner India.

## **Group 4: Microeconomic Analysis of Tata Motors**

### ***Executive Summary***

*The Automobile Sector of today is one of the key sectors of the country contributing majorly to the economy of India. The automobile industry is one of India's most vibrant and growing industries. This industry accounts for 22 percent of the country's manufacturing Gross Domestic Product (GDP). The auto sector is one of the biggest job creators, both directly and indirectly. It is estimated that every job created in an auto company leads to three to five indirect ancillary jobs.*

*India is presently the world's third largest exporter of two-wheelers after China and Japan. According to a report by Standard Chartered Bank, India is likely to overtake Thailand in global auto-export market share by the year 2020. Strong growth in demand due to rising income, growing middle class, and a young population is likely to propel India among the world's top five auto manufacturers.*

*Tata Motors Limited is a leading global automobile manufacturer of cars, utility vehicles, buses, trucks and defense vehicles. As India's largest automobile company and part of the USD 100 billion Tata group, Tata Motors has operations in the UK, South Korea, Thailand, South Africa, and Indonesia through a strong global network of 76 subsidiary and associate companies, including Jaguar Land Rover in the UK and Tata Daewoo in South Korea.*

*In India, Tata Motors is a market leader in commercial vehicles and among the top passenger vehicles manufacturers with 9 million vehicles on Indian roads. With design and R&D centers located in India, the UK, Italy and Korea, Tata Motors strives to pioneer new products that fire the imagination of GenNext customers.*

*Abroad, Tata cars, buses, and trucks are being marketed in Europe, Africa, the Middle East, South Asia, South East Asia, South America, Australia, CIS and Russia. Tata Motors has a portfolio of automotive products, ranging from sub-1 ton to 49-ton gross vehicle weight (GVW) trucks (including pickup trucks) and from small, medium, and large buses and coaches to passenger cars. The company's segments include automotive, and others, which include information technology (IT) services, construction equipment manufacturing, machine tools*

*and factory automation solutions, high-precision tooling and plastic and electronic components for certain applications, and investment business. The company's passenger cars include the Indica, the Indica Vista, the Indigo and the Indigo Marina. Jaguar produces four car lines: XK, XF, XJ and X-Type. They manufacture a number of utility vehicles (UV), including the Sumo, and the sports utility vehicle (SUV), Tata Safari.*

*The company's manufacturing plants are situated at Jamshedpur (Jharkhand), Pune (Maharashtra), Lucknow (Uttar Pradesh), Pantnagar (Uttarakhand), Dharwad (Karnataka) and Sanand (Gujarat).*

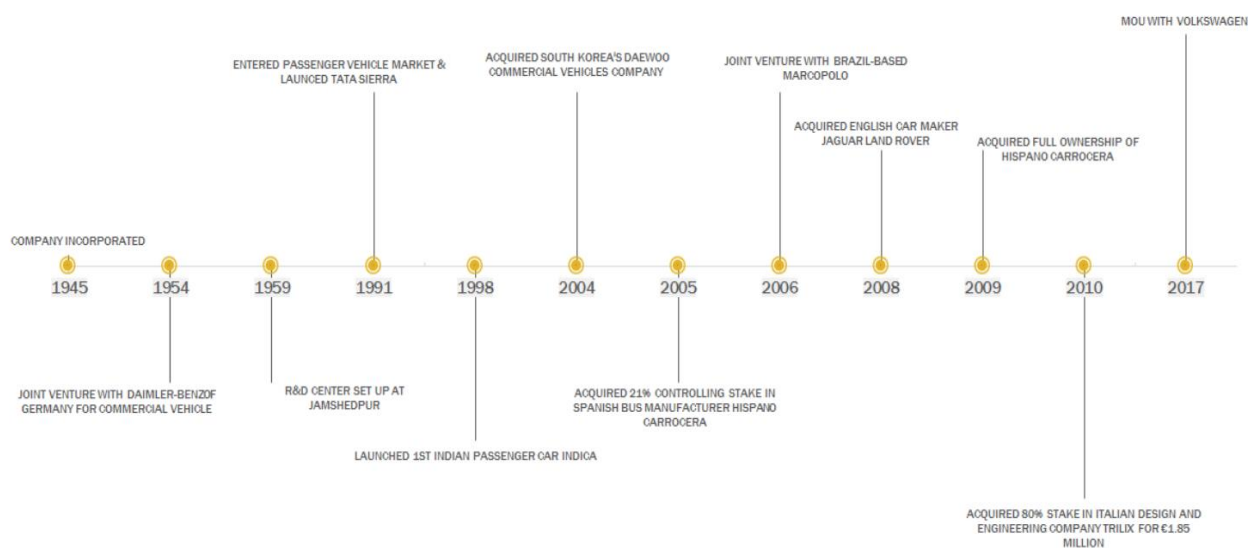
## **Introduction**

This project attempts to analyse the microeconomic factors of Tata Motors. Tata Motors has its headquarters in Mumbai, Maharashtra. It is known for its automotive manufacturing which includes passenger cars, trucks, vans, coaches, buses, sports cars, construction equipment and military vehicles. Tata Motors has auto manufacturing and assembly plants in Jamshedpur, Pantnagar, Lucknow, Sanand, Dharwad and Pune in India, as well as in Argentina, South Africa, Great Britain and Thailand. It has research and development centres in Pune, Jamshedpur, Lucknow, and Dharwad, India and in South Korea, Great Britain and Spain. Tata Motors' principal subsidiaries purchased the English premium car maker Jaguar Land Rover (the maker of Jaguar and Land Rover cars) and the South Korean commercial vehicle manufacturer Tata Daewoo. Tata Motors has a bus-manufacturing joint venture with Marcopolo S.A. (Tata Marcopolo), a construction-equipment manufacturing joint venture with Hitachi (Tata Hitachi Construction Machinery), and a joint venture with Fiat Chrysler which manufactures automotive components and Fiat Chrysler and Tata branded vehicles. Founded in 1945 as a manufacturer of locomotives, the company manufactured its first commercial vehicle in 1954 in collaboration with Daimler-Benz AG, which ended in 1969. Tata Motors entered the passenger vehicle market in 1988 with the launch of the Tata Mobile followed by the Tata Sierra in 1991, becoming the first Indian manufacturer to achieve the capability of developing a competitive indigenous automobile. In 1998, Tata launched the first fully indigenous Indian passenger car, the Indica; and in 2008 launched the Tata Nano, the world's cheapest car. Tata Motors acquired the South Korean truck manufacturer Daewoo Commercial Vehicles Company in 2004 and purchased Jaguar Land Rover from Ford in 2008. Tata Motors is listed on the (BSE) Bombay Stock Exchange, where it is a constituent of the BSE SENSEX index, the National Stock Exchange of India, and

the New York Stock Exchange. The company is ranked 226<sup>th</sup> on the Fortune Global 500 list of the world's biggest corporations as of 2016.

This project report represents the microeconomic factors like demand, pricing, competition analysis and strategies adopted by Tata Motors in brief, by critically analysing each segment with respect to the market.

### TATA MOTORS LTD BUSINESS GROWTH SINCE INCEPTION



### Methodology and Analysis:

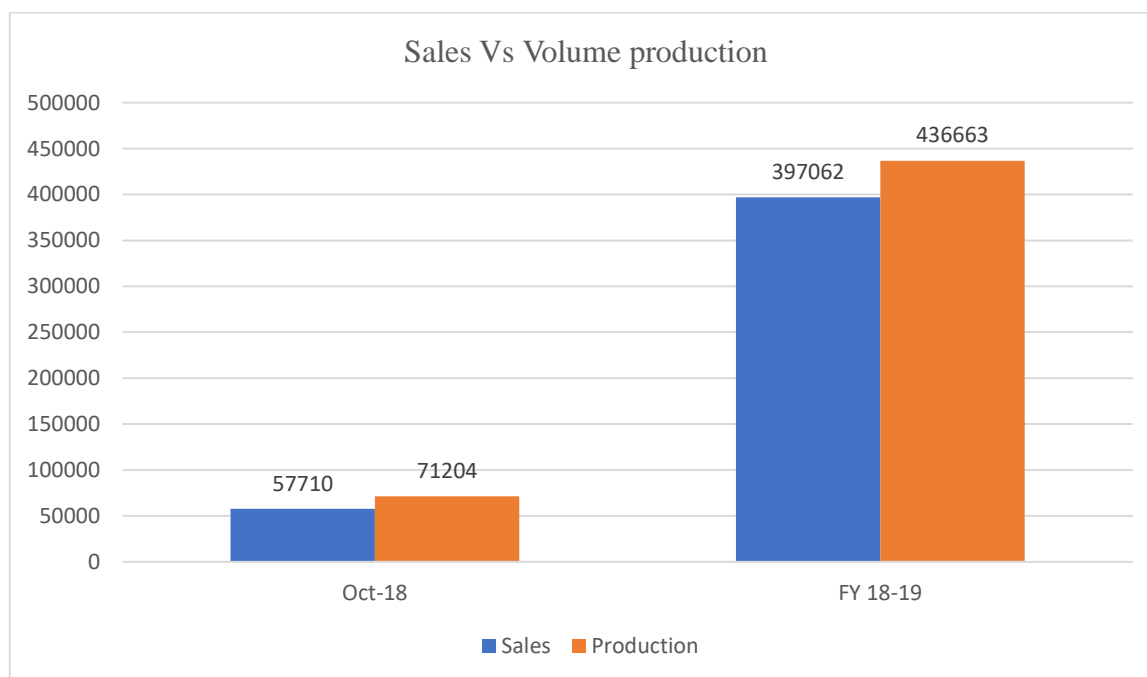
In this study, we have analyzed the Tata motors primary and secondary sales from March 2018 to Oct 2018 in comparison with the volume of units sold, we have further categorized the business into commercial and passenger vehicle sales. Commercial vehicles are further categorized into medium, heavy and light commercial vehicle, whereas passenger vehicle is categorized into utility and cars.

### Primary sales analysis:

In the month of Oct 2018, Tata Motors produced in total of 71,204 vehicles, which includes 22,567 of M&HCV, 29,298 of LCV, 6,376 of utility vehicles and 12,963 of cars, overall production is increased by 28% compared to Oct 2017. Increased Production does not correlate with the sales, because tata could able to sales only 57,710 vehicles, which comprises of 16,276 of M&HCV, 22,694 of LCV, 6,727 of utility and 11,563 of cars, there sales is significantly

reduced in M&HCV and LCV vehicles. In Oct 2017, Tata could able to sell 48,886 vehicles, So they have 15% growth over last year sales in Oct 2018, But concern is there is surplus of M&HCV and LCV vehicles with Tata motors, which might leads to increase in variable cost and ultimately affect the profitability. The summary of the Oct 2018 and 2018-19 sales vs production is mentioned in the table below.

| Vehicle Type | Oct 2018 Sales vs production |            | 2018-19 Sales vs production |            |
|--------------|------------------------------|------------|-----------------------------|------------|
|              | Sales                        | Production | Sales                       | Production |
| M&HCV        | 16276                        | 22567      | 114,271                     | 135,137    |
| LCV          | 22694                        | 29298      | 157,636                     | 172,080    |
| Utility      | 6727                         | 6376       | 43,447                      | 46,127     |
| Cars         | 11563                        | 12693      | 81,708                      | 83,319     |
| Total        | 57710                        | 71204      | 397,062                     | 436,663    |



Details sales analysis of Tata motors for Past 5 yeast is summarized in the below table:

|                     |         | Total India Automobile Production |         |         |         |         |
|---------------------|---------|-----------------------------------|---------|---------|---------|---------|
| Category            | 2011-12 | 2012-13                           | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
| Passenger Vehicles  | 3146069 | 3231058                           | 3087973 | 3221419 | 3465045 | 3691540 |
| Commercial Vehicles | 929136  | 832649                            | 699035  | 698298  | 786692  | 810286  |
| Total               | 4075205 | 4063707                           | 3787008 | 3919717 | 4251737 | 4501826 |

| TATA Motor Share in Total India Automobile Production |         |         |         |         |         |         |
|---|---------|---------|---------|---------|---------|---------|
| Category  | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
| Passenger Vehicles                                    | 6.9     | 2.1     | 1.2     | 0.8     | 0.5     | 0.3     |
| Commercial Vehicles                                   | 57.5    | 21      | 24.4    | 18.3    | 7.7     | 8.1     |
| Overall   | 18.4    | 6       | 5.5     | 3.9     | 1.8     | 1.7     |

|                     |         | Total India Automobile Sales |         |         |         |         |
|---------------------|---------|------------------------------|---------|---------|---------|---------|
| Category            | 2011-12 | 2012-13                      | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
| Passenger Vehicles  | 2629839 | 2665015                      | 2503509 | 2601236 | 2789208 | 3046727 |
| Commercial Vehicles | 809499  | 793211                       | 632851  | 614948  | 685704  | 714232  |
| Total               | 3439338 | 3458226                      | 3136360 | 3216184 | 3474912 | 3760959 |

| TML Share in Total India Automobile Sales |         |         |         |         |         |         |
|---|---------|---------|---------|---------|---------|---------|
| Category                                  | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 |
| Passenger Vehicles                        | 7.8     | 2.7     | 1.5     | 1       | 0.7     | 0.6     |
| Commercial Vehicles                       | 62.9    | 23.9    | 26.2    | 20.1    | 8.4     | 8.7     |
| Total                                     | 20.8    | 7.6     | 6.5     | 4.7     | 2.2     | 2.1     |

#### Microeconomics of venture:

Demand for the product: TATA Motors is a global organization and is therefore vulnerable to shifts in global trade and economic policies and outlook. Tata Motors begins FY18 registering 86% growth in domestic sales in April 2018 with CV business growing at an impressive 126%

Domestic/Commercial Vehicles: Tata Motors' Commercial Vehicles (CV) domestic sales in September 2018 grew by 26% at 46,169 units as against 36,578 units in September 2017. The cumulative sales for the period April-September 2018 was at 232,487 units as compared to 161,370 units for same period last year, a growth of 44%. This growth is led by the continued acceptance and superior performance of our full range of vehicles across all segments.

The M&HCV truck segment for Tata Motors continued to grow by 32% with 16,239 units compared to 12,259 units last year. This growth was led by the strong acceptance and superior performance of Signa and Prima trucks and tippers.

Exports: The company's sales from exports in September 2018 grew by 35% with 5,250 units compared to 3,887 units last year. The CV Exports have shown a strong growth owing to the increase in uptake in demand in Bangladesh post the Eid season supported by the festive buying in Nepal.

### **Factors influencing demand:**

1. Financing Options for consumers: Auto industry observers cite car loans as the biggest driving factor for the expansion of the Compact Car segment. At present, almost 85 per cent of all new car sales are backed by auto finance, compared to 65 per cent five years ago. Interest rates on car loans have come down drastically in the past 4 or 5 years, which helps prospective buyers take the plunge. The growth of the CC-segment in the past few years can be mainly credited to factors such as rise in income levels leading to increased affordability and simultaneous reduction in interest rates leading to lower EMIs. The drop in interest rates usually helps very few people to probably shift from the base model to a deluxe model. A larger shift happens if people are willing to take long-term loans, like five years instead of the earlier three-year loans

2. Increased fuel prices: Increases in fuel costs also pose a significant challenge, especially in the commercial and premium vehicle categories where increased fuel prices have an impact on demand.



3. Increase in price of input materials: Prices of commodity items used in manufacturing automobiles, including steel, aluminium, copper, zinc, rubber, platinum, palladium and rhodium, have become increasingly volatile in recent years.

An increase in price of input materials could severely impact the Company's profitability to the extent, such an increase is usually absorbed by the market through price increases thus having a negative impact on demand.

A deteriorating macroeconomic environment disproportionately reduces the demand for luxury vehicles.

4. Taxes and levies by government: Imposition of any additional taxes and levies (other than GST) may limit the use of automobiles thus adversely affecting the demand for the Company's vehicles and the Company's results of operations.

Substitutes and Complements: The TATA Motors at present have threats from new entrants in automobile industry as well as the existing competing rivalries. These rivalries are also substitutes to automobile from TATA Motors.

The major substitute manufacturers are MarutiSuzuki, Honda, Hyundai, Chevrolet, Bajaj auto, Bosch, Eicher motors, Hero MotoCorp, Ashok Leyland.

In spite of having substitutes in market the TATA Motors are still in demand due to their new reliable and strong engine Revotron (petrol) and Revotorq (Diesel), robust design and strong body, HARMAN designed ConnectNext Infotainment system, low maintenance, affordable and competitive price.

Market structure of TATA Motors:

TATA Motors has an oligopoly market structure. This industry has few sellers and few buyers. There is a restriction in entry and exit in this market area.

### **Production of TATA Motors:**

Processes: Tata motors follows the world class manufacturing in production, there manufacturing plants includes modern manufacturing practices and there focus mainly automation of the complete manufacturing process, they also have India's biggest engine development facility and owns the country's only facility for full climate and pedestrian test.

Inputs: Production inputs mainly categorised into capital, land and labour. Tata motors spent 160,147.12 crores on raw materials for manufacturing and currently they have Domestic plants in Jamshedpur, Pune, Lucknow, Pantnagar, Sanand and Dharwad. They have overseas production plants in UK, China and Brazil. Tata motors has a total of 79558 employees working which includes both India and Overseas employees and they spend 28,332.89 crores as employees wages per year.

Substitutes and complements among inputs:

There are several products that are complementary to the purchase of a car. Some of them are gasoline, insurance, and infrastructure. A complementary product is one for which the cross-price elasticity of demand is negative. In other words, we expect that if the price of gasoline increases, the quantity of cars purchased will decrease. An increase in the price of gasoline induces a move away from cars with low mileage per gallon to cars with higher mileage per gallon. This type of substitution is often seen after rapid increases in the price of gasoline.

A second complementary product is car insurance. In most countries, having car insurance is mandatory. Typically, drivers must at the very least purchase some liability coverage, meaning that your insurance company will pay out if you are responsible for an accident that injures or kills another person or causes damage to a car or property.

Gasoline and insurance are products that are complementary to automobiles. There is another significant complementary product—the roads on which you can drive your car. Without roads, cars have limited value. The same argument applies to bridges and highways and even to the police who enforce the laws of the road. These various kinds of infrastructure serve to increase the value of a car.

Economies of scale: The Economies of scale help producers to lower their cost by producing the next unit of output at lower costs. When new competitors enter the market, they will have a higher cost of production, because they have smaller economies of scale.

Tata Motors enjoys positive economies of scale and level of experience, thus challenging for the new entrants. Reaping this benefit of economies of scale, Tata Motors has been able to establish itself as a successful low-cost provider. Tata Motors' product line ranges from world's cheapest car to expensive models such as Jaguar and Land Rover to trucks passing the million-unit output mark reaping the benefits of economies of scale. Tata Motors is looking to widen its foreign campaign to more than just exports. The company split its previously independent

international business arm into commercial and passenger segments and, as part of its overall business strategy, merged them with its commercial and passenger vehicle business units.

Also TATA has 200+ dealers operating in 1,000 locations. Every dealer is Rs 150 crore in average size considering our annual revenue. Every year they have infusion of 8-10 dealers. Tata provide training, technology and other supports to dealers and have plan to grow the CV segment by a compounded annual growth rate (CAGR) of 15 per cent until 2020.

### **Market Structure:**

i) Competing firms, market power: The major competing manufacturers are Maruti Suzuki, Honda, Hyundai, Chevrolet, Bajaj auto, Bosch, Eicher motors, Hero MotoCorp, Ashok Leyland. In 2016-17 TML had 2.1% total sales in Indian.

ii) Strategies for competition:

Without a competitive strategy, any business will have a tough time attracting customers. Tata Motors has always focused on capitalizing their core competencies or competitive advantages for enhancing their market share according to their strategy. Few major strategies used by them can be listed as:

Product differentiation, Innovation and R&D:

The excellent innovation and research and development at TATA motors have created examples for the rivals. Tata Motors offers utility vehicles at every price point. The world's cheapest car, Nano, was their most talked about innovation. They aim to fulfill the emerging needs of the automobile industry by coming up with new range of products. These products are manufactured with purpose of providing comfort, reliability, safety, capacity and value to the end customers. Providing consumers with affordable products with best features is their USP and one of the main marketing strategies.

Product, Branding, and Advertising:

In today's competitive world, consumers have variety of options to choose from. Here advertising is used to create an image that consumers associate with a product, known as the brand image. The brand image goes far beyond the functional characteristics of the product. Whenever consumers think of products of Tata Motors, they not only think of its features, but they also associate it with quality, performance and high class. Consumers buy products not

only for its good features but also because they want to be identified with the image associated with the brand. Tata Motors have been successful in creating and maintaining a professional brand image.

Packaging, innovations, and quality control are another important marketing strategy. The R & D Department continuously strives to bring new innovations in their product. Tata's have an industrial experience of over 100 years and they are aware that customers desire more at less price. This has helped them to develop products which fulfill the expectations of consumers.

Promotion (Advertising, Sales Promotion, Public Relations):

Advertising is one of the best ways to promote the sale of a product or service. Tata Motors advertises its products via T.V., Newspapers, Magazines, Hoardings, Internet etc.

Sales promotions are designed to persuade consumers to purchase immediately by providing special incentives such as cash rebates, prizes, extra product, or gifts. The Co. conducts intensive sales promotion during festivals such as festive discounts during Diwali.

Tata Motors also maintain good public relations. They have ethics to ensure that the customer is satisfied and receives good service whenever and wherever he desires.

Location or place:

Place of dealership does play an important role. The distribution of vehicle must be in a very systematic way, from the plant to dealership and to end user. For the passenger vehicles are manufactured at Pune whereas commercial vehicles are usually manufactured at Jamshedpur. From the plant, the finished product is transported to the dealerships. The dealerships are strategically located in the target and potential markets to ensure efficient and timely availability of its products in the market.

After Sales Service:

After sales service or maintenance support is again very important for most of the vehicle buyers. They would not want to spend a lot of time to travel to a far place just to service the vehicle. Vehicle's Parts and accessories must also be easily accessible. Tata motors provide the best after sales service to keep their customers satisfied.

iii) Pricing Strategy

Prices always have to be at par with those of the competitors. Tata Motors give a relative price advantage as compared to its competitors. The various determinants of price are: Market conditions, Dealer profits, Cost incurred to build a car, Profit percentage set by the Company, etc

Another important pricing strategy is giving discount and special promotion for certain type of vehicles. Discount can be made from Company's profit or from dealer's profit at certain range.

### **Recommendations:**

India is the third largest automobile industry in the world and second largest two-wheeler manufacturer with a CAGR of 15.97%. Currently the automobile industry is showing a strong growth in demand due to rising income of middle class & a young population. Currently more than 35 market players are there in the industry and some of the Indian companies like Tata gaining global acceptance due to acquisition of overseas companies. In this brief report, we tried to summarise the micro-economic analysis of Tata motors and suggested the following recommendations to Tata motors to improve their overall efficiency and capability.

1. TATA Motors is a global organization and is therefore vulnerable to shifts in global trade and economic policies and outlook, Tata Motors has showed a strong growth of 86% in domestic sales in April 2018, but overall the production versus actual sales is seen with a variance of 9%, the majority of variance of 15% seen in M&HCV vehicles and 8% of variance seen in LCV segments. Tata also facing fierce competition from Mahindra motors, Ashok Leyland and Bharath Benz in commercial segment, which might have led to perfect competition market, which further led to decrease in the demand for the same. If the same sales trend continues it will increase the inventory and affects the overall profitability. Hence tata motors need to focus on increase the demand generation especially in commercial vehicle segments.
2. In cars segment, Tata motors have intense competition in domestic market, they did address that by with modern and advance design and efficiency. But in car segment, post-sale of the car, the service facility is very crucial, and tata needs to effectively manage the adequate service centres like their rival Maruti Suzuki, which can help in building trust in customers, which will help in demand generation of Tata Vehicles.
3. In terms of Branding the cars segment, especially the budgeted cars, they need to completely rebrand the image of tata, because most of the middle class group of

population recognize tata with brand like Nano and Indica/ Indigo, they need to either re do the logo which is common for even HCV, utility and prime cars or start the premium showrooms for there elite cars, similarly in line with Maruti Suzuki, where they created Nexa showrooms for premium cars.

## **Group 5: Microeconomic Analysis on IKEA**

### ***Executive summary***

*IKEA is one of the largest furniture retail organizations in the world founded in 1943 by Ingvar Kamprad. The privately held company employs over 100,000 employees that offers ready-to-assemble furniture. In India, IKEA currently has 48 suppliers with about 45,000 direct employees and about 400,000 people in the extended supply chain. IKEA has launched their first store in Hyderabad, India.*

***Ideology:*** *IKEA puts a price on their product first and then decides on the production of each product. The designer takes price into account to come up with the design of the product which makes profit.*

***Production:*** *The major raw material input for IKEA products are Cotton and Wood. They have been using wood in most sustainable way having reduced its consumption by using chipboards and have been using recyclable plastics in most products. IKEA's manufacturing is outsourced to countries where the costs are lesser, their product costs are also cheaper compared to substitutes in market.*

***Economies of Scale(EOS):*** *IKEA achieves economies of scale in various areas with the help of the following:*

- *Technology by increased specialization, R&D.*
- *Marketing by bulk buying advertisements in various media.*
- *Finance by borrowing at lower rate of interest.*

***Market:*** *India's Furniture market is approximately 90% unorganized with the presence of only few big local players such as Home Centre, @home, Hometown, Urban Ladder and Pepper fry. Most of the furniture goods in India are custom made by unorganized players. To make inroads into India and to compete with the unorganized players, IKEA is Offering home delivery and assembly services which is not usually the case in other countries. They have been sourcing more products locally to keep the cost at a minimum apart from having tailor made stores and products. IKEA has studied the Indian economy and buying capacities well before pricing and offering the products well to the Indian customer. IKEA understands lower income levels in India, to which around 11% of its products are less than Rs.200.*

***Recommendation:*** To quickly gain a positive outreach to Indian consumers and have a good market share, we would like to recommend IKEA to publicize its global brand identity and highlight its Indian supplier success stories which would help create an Indian identity for the company. Also, IKEA can use the Geographical diversity of India to its advantage and setup multiple IKEA stores across country and products suitable to those regions.

## **Introduction**

Microeconomic analysis attempts to explain the behavior of individuals and organizations in a given economy. Microeconomic analysis functions through modeling and by emphasizing interests. Microeconomic models are necessarily simplistic; although real-world markets are complex, with many different variables and competing firms, a microeconomic model may assume only two competing companies selling a solitary product, for example. Such simplification allows the us to use microeconomics to better understand economic decision-making on a small scale for an organization like IKEA who is in the furniture industry competing with multiple other companies within India.

About IKEA:

IKEA is one of the largest furniture retail organizations in the world founded in 1943 by Ingvar Kamrad. The privately held company employs over 100,000 employees that offers ready-to-assemble furniture. The company targets the working class there are 326 IKEA stores spread over 38 countries and produce over 100,000 products in their stores and online. IKEA has been present in India for the last 30 years, sourcing for its stores around the world. In India, IKEA currently has 48 suppliers with about 45,000 direct employees and about 400,000 people in the extended supply chain [1].

## **DATA:**

For the microanalysis of the global Furniture giant IKEA, different data and references were used to get to the inferences and conclusions. The inferences compiled are result of a primary online survey, excerpts from business magazines, interior design journals/ newsletters, online market information, advertisements and marketing strategies employed by the organization and most importantly the companies own website and announcements of recent past.



**Primary Data:**

The primary data includes an online survey with questions whose responses were influential in inferences of areas including the following:

- Factors influencing demand
- Market Structure - General understanding of Indian Furniture and accessories Market

The survey was shared among different friends of the project participants and responses from who have visited an IKEA store in India/ outside India were taken into analysis.

The inferences of the primary data have been shared in the respective sections however, mentioned below are some interesting extracts from the analysis:

- Maximum responses to expectations from IKEA was to look forward to reduction in prices and at the same time almost all the responses to whether they would visit IKEA again was a ‘YES’
- As it was largely a younger generation attendee of the survey, most of them knew about IKEA even before any sort of advertisements/ marketing initiatives
- Most of them were of the impression that IKEA did meet their expectations
- There were varied responses on the area that is most likely to improve with prices topping the list with 32% responses

**Secondary Data:**

The secondary data primarily has been influential to understand IKEA’s:

- Production & pricing strategies
- Strategies for competition
- Costs and source of materials

Most of the secondary data has been from IKEA website, press announcements since 2015-16 and their branding & marketing tools such as advertisements and some information from recent business/ interior design journals.

**Microeconomics of Venture**

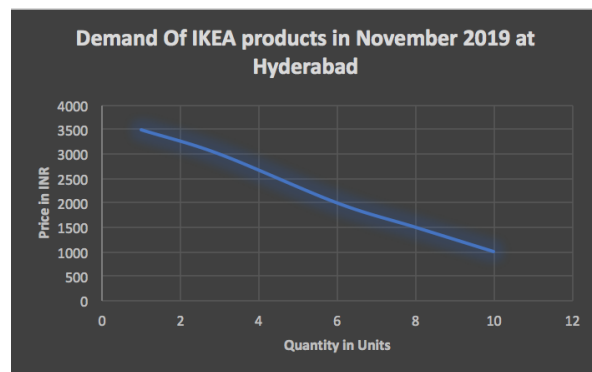
In this section, we will look at different microeconomics principles that drive IKEA’s demand for its products, factors influencing its demand, the substitutes and complements available in

the market for its products, the different elasticities of demand and finally the production aspects of the microeconomic principles.

## Demand

For an article to be demanded the following three criteria must be satisfied: The buyer must desire, afford and have a definite plan to buy the item. Sometimes the quantity demanded, which for example is measured in articles per week, is greater than the amount of goods available. This means that the quantity bought will be less than the actual quantity demanded.

Demand Curve (Figure below): The below demand curve is an indicative of any normal product sold at IKEA's store. As IKEA's products are normal good, their demand increases with decrease in prices.



### Factors Influencing the demand:

**Income:** If the quantity demanded increases with change in income, then the good is normal good and if it decreases then the good is inferior. IKEA products are normal goods, as their demand increases with increase in income.

**Price of the good:** If the price of original good increases and substitutes remain same, the demand of the original good decreases. This is called substitution effect. Whereas, a decrease in the price of the good increases the demand as the buyer's income increases. If the buyer buys same quantity of good at reduced price, then he will have extra income left. He can buy more of the normal good. If the product is inferior, then the demand decreases with decrease in price. This is called Income effect. As IKEA's products are normal goods, their demand increases with decrease in price of the good and demand decreases with increase in price of the good.

**Prices of related goods:** IKEA's products have both substitutes and compliments. The increase in price of substitutes increases the demand of original product. Whereas, increase in price of

original product would decrease the demand of compliments. IKEA's unique offering of compliments makes with effective pricing has the positive cross elasticity of demand.

**Population:** With the ever-increasing population size, the demand for normal good increases. The age and cultural differences also affects the demand. IKEA caters to different kinds of population's size and age.

**Preferences:** IKEA has unique offerings at each of its locations across geographies. The taste and attitude towards the good differs across the globe and hence the demand as well.

**Others:** Unique factor that makes IKEA's demand more is the way they present the products at their studios. It provides different perspective to individuals in their buying needs which directly affects their demand.

### **Substitutes and Compliments**

IKEA offers products in Furniture's, Home Décor, Stationers, Cutlery etc. IKEA offers wide range of compliments along with their products. Their offering of complete set of furniture's with multiple compliments makes their demand better. Also, there are lot of substitutes in the market, it does impact demand on IKEA's products.

### **Elasticities of Demand**

**Price Elasticity of Demand:** The demand for a product is a function of the related price. Hence, change in price affects the sales turnover. To measure this effect, we define Price elasticity of demand. It is given by Percentage change in quantity demanded over percentage change in price.

**Point Elasticity of Demand:** The absolute value of price elasticity at any given point on demand curve gives the point elasticity of demand. At a given point, If the value is greater than 1, indicating price has greater effect on demand, the demand is Elastic. And if the value is less than 1, the demand is Inelastic. If the value is equal to 1, the demand is Unit elastic, indicating equal proportional changes in magnitude of price and quantity of the demand curve. The price of each product purely depends on the production costs, processes and economies of scale. We will look at these in the next section.

### **Production**

IKEA is a privately held company and has most intricate corporate structure. Most of the operations, management, design and manufacture of products are held by trust in Holland.

While most of the designs of IKEA products are made in Sweden, manufacturing has been outsourced to China and other Asian countries.

### **Processes and Inputs**

**Processes:** IKEA puts price on their product first and then decides on the production of each product. The designer takes price into account to come up with the design of the product which makes profit. IKEA gives utmost importance to sustainable processes in production. Being it cultivation of cotton, usage of chemicals, water, recycled materials. This has largely reduced the costs of production and increased sustainable products in market. The production processes vary for every product but uses similar machines for each product. Production function here is given by quantity of goods produced with the given amounts of inputs.

**Inputs:** The major inputs for IKEA products are Cotton and Wood. IKEA has teamed up with WWF to cultivate cotton in most sustainable way. IKEA has their own forest specialists who trace back their timber to its origins. They source their timber from only 5 countries including Poland, Russia, China, Romania and Sweden.

**Substitutes and Compliments in inputs:** Using the wood in most sustainable way they have reduced its consumption by using chipboards and recyclable plastics in most products. Their product LACK side table is made from strong and rigid wood-based frames filled with recycled, honeycombed paper. LACK uses less raw material than particleboard, is more lightweight and thus easier to handle both in [their] transport chain and for [their] customers. IKEA believes in using substitutes and compliments in their inputs for production.

### **Costs**

As IKEA's manufacturing is outsourced to countries where the costs are lesser, their product costs are also cheaper compared to substitutes in market. Fixed Costs include: Cost of Land, Machines, Electricity, Salaries, Rent and many more. Variable Costs include: Cost of raw materials, transportation, R&D Costs etc. The production costs also include other Explicit costs like repairs etc. All these costs put together determine the total cost of production of goods.

### **Economies of Scale (EOS) and Scope**

The term 'economies of scale' refers to the cost advantages that can be exploited by an enterprise by expanding the long run scale of production. IKEA, being a large company benefits from many internal economies of scale. IKEA achieves internal EOS in Technology

by increased specialization, R&D. Achieves EOS in Marketing by bulk buying and advertising, achieves EOS in Finance as it is a large firm and can borrow at lower rate of interest, achieves EOS by diversifying into other markets, and employing specialists in each division to help building more specifically designed product which will help in forecasting the sales accurately as they are specialized for different locations. IKEA consistently produces different products. They currently have 9800 different product offerings. Their long run Average and marginal costs have been relatively lower than major competitors because they cater to different locations, better waste management and easy to install products requiring less training, sustainable processes and presence in diverse markets. All these factors help IKEA achieve Economies of Scope.

### **Market Structure**

India's consumer class is growing economically with the availability of cheap credit and rising disposable incomes; yet the furniture market in India is approximately 90% unorganized with the presence of only few big local players such as Home Centre, @home, Hometown, Urban Ladder and Pepper fry. Most of the furniture goods in India are custom made in small outlets who offer free assembly and delivery. IKEA, world's largest furniture giant has analyzed the Indian Organized Furniture market throughout the course of 5 years till its launch. This oligopoly market targets the young generation who is brand and price conscious. During its initial research in the Indian Households, IKEA established the following

1. Indians prefer heavy and sturdy furniture at affordable prices.
2. A piece of furniture needs to have multipurpose functionality.
3. As the average height of Indian Men and Women is lower than the West, the height of the furniture needs to be aligned accordingly.
4. Indian weather does not allow certain materials to be used.

IKEA's competitors are also struggling to get this Price, Material, Cost and Design ratio right since the past decade, to capture the limited market share of the furniture market available to them.

### **Competing firms and market power**

On an average, the growing middle class in India buys \$30 million worth of furniture. Only 10% of the same is part of organized retail. The firms competing for market shares in this market include Home Centre, @home, Hometown, Urban Ladder and Pepper Fry and now IKEA. For

the past decade, all these players have been trying to experiment with formats that satisfies the Indian Consumer base- to get to a standardized structure and shape.

Home Centre with its huge varied offering at affordable prices is the market leader in this segment. Home Centre follows an omnichannel business model where Online and Offline both platforms deliver the same touch and feel experience. @home and Hometown are smaller players offering cheaper products but with limited presence across the market. Urban Ladder and Pepper fry trade in the Online model missing out on the personalized experience but ensuring wider consumer grasp. This leaves a gap of opportunity for entry of IKEA with city customized stores which shall be available in small and large formats both. Small retailers believe that IKEA is no competition to them when it comes to personalization and customization. This however is none of IKEA's concerns as it has decided to offer the best possible price maintaining the aesthetic experience of the Indian market.

In March 2017, Indian furniture market is estimated to be a \$400 million approximately, \$280 million is dominated by players like Godrej and other small players. The remaining Organized Retail is shared by the following. The Hirschman Herfindahl Index of the total market indicates the concentration of Large Format Organized Retail indicating that this is a highly concentrated industry with limited players and restrictive entry.

| <b>Large Format Furniture retailers</b> |   |                     |              |
|---|---|---------------------|--------------|
| <b>Company name</b>                     | <b>Estimated GMV, March 2017, in \$ Million</b> | <b>Market Share</b> | <b>HHI</b>   |
| Home Centre                             | 38  | 31%                 | 986          |
| Pepper fry                              | 28  | 23%                 | 535          |
| Urban Ladder                            | 21  | 17%                 | 301          |
| @home                                   | 8   | 7%                  | 44           |
| Hometown                                | 5   | 4%                  | 17           |
| Other Online Channels                   | 21  | 17%                 | 301          |
| <b>TOTAL</b>                            |   |                     | <b>2,185</b> |

## **Strategies for competition**

IKEA has been using a well-planned penetration strategy to launch in this price sensitive market with a bang. India is the second most populated country and IKEA sees it as a potential to grow its revenues. The following strategies are employed by IKEA to get a better hand of the market than its competition:

1. Offering delivering and home assembly services by partnering with Urban Clap and other local carpenters. This is against IKEA's standard policies which is followed across the world. IKEA, by offer these services ensures customer confidence and satisfaction.
2. To offer the lowest prices and maintain the Indian aesthetic values, Ikea has approached local manufacturers and suppliers. By ensuring local production of about 30% of its products, IKEA will also achieve the Make in India protocol of the Indian Government.
3. From few months before its launch, IKEA put up few pop-up shops in Hyderabad malls to introduce and lure the potential customers.
4. For its upcoming stores in Tier 1 cities, IKEA aims to open not only the big blue box stores on the outskirts but also smaller stores within the city to ensure maximum penetration.
5. With ensuring tailored stores to cities based on the average home size, IKEA has been testing and developing products and materials which can face Indian weather specially humidity.
6. IKEA will be launching online retail by next year end in India, faster than it ever did in any other market.

## **Pricing and other strategies**

IKEA's target in India is to reach the bargain- hunting Indian shopper. IKEA follows a simple price strategy- "Decide cost first and develop products to fit into it". It has always been succeeding by following the basic deliverables of apt functionality, superior quality and low price. IKEA targets to minimalize waste and reduce costs at all stages of production. In India, IKEA aims to deliver aesthetically apt, lightweight and lean products- as compared to bulky furniture in Indian households which are very difficult to move around. IKEA has studied the Indian economy and buying capacities well before pricing and offering the products well to the Indian customer. IKEA understands lower income levels in India, to which around 11% of its products are less than Rs.200. IKEA in its initial years has claimed to reduce to prices further by the help of local manufacturing and supply, which are comparatively higher than its competitors

due to import duties and other taxes. Make in India products intend to drive the prices and costs lower, ensuring the volume goes up.

To get maximum customer attention, IKEA has launched huge marketing campaigns involving TV Ads, Radio Promotions, Credit Cards and partnering with Autorickshaw drivers in Hyderabad. Apart from these activities, IKEA has ensured maximum support is provided to the shoppers within the store- in terms of design advices and technical details. IKEA store contains real life home setting for better visualization of the shoppers. There is a restaurant and child care center within the store for the ease of its shoppers. IKEA also intends to extend its CSR initiatives capture better government and political support and broaden its to operations in Tier 2 cities by 2025.

### **Recommendations**

1. IKEA can use its international firm card very well in India and project itself as Globally accepted company for its wide product range and affordable prices.
2. It can use the Geographical diversity of India to its advantage and setup multiple IKEA stores across country and products suitable to those regions.
3. The competitors like home center, @home etc. are majorly present in big tier 1 cities. IKEA can capture the tier 2 and tier 3 cities market where the possibility of scale is humongous.
4. As India is adopting e-commerce space positively, IKEA can start selling the products online too along with its stores.
5. Being a global company IKEA can sell international products in India at affordable prices. It can easily capture the market by selling foreign goods.



## Group 6: Microeconomic Analysis of Starbucks



1

## **Executive Summary**

*Today we stand witness to a new coffee era, one made up of Caffé Lattes, Espresso Macchiatos, Cappuccinos and Frappuccinos. Specialty Coffee is here to stay and no one will be more eager to tell you that than Howard Schultz, CEO of Starbucks, the world's largest specialty coffee bar.*

*In this microeconomic report we have made an attempt to analyse Starbucks Corporation, it leads in a multifaceted journey through an organization's insinuation into today's coffee culture, its dominance of a market and its creation of a brand synonymous with loyalty, integrity and longevity. We have made an attempt to understand Starbucks' journey into an international giant and the strategic approach they took to get there begins with the origins of coffee itself. The project dives into the insights of supply - demand for the product, market share of Starbucks in India & USA, it's competition with other players in the same segment, the effect on substitutes and complements, elasticity analysis of Starbucks products among others. The project also does an analysis of pricing & promotional strategies used by Starbucks establishing the company as a premium market player in this segment. Starbucks Corporation, started in 1985, is a major coffee store and one of the popular known brands today. All along its history, Starbucks has been known for its aggressive store expansion, as it seemed impossible to open new stores quickly enough to keep up with demand. Besides, as other specialty coffee retailers such as Peet's Coffee and Tea and Caribou Coffee have opened their stores, and as market competition from fast food chains such as Dunkin' Donuts and McDonald's has expanded, Starbucks lost its market share in the USA. Undeterred by these conditions, Starbucks remained the strongest business in the industry and it has many opportunities to improve its profits. The important issues faced by the company include maintaining the Starbucks Experience for customers, store expansion and real estate issues, competition from fast-food chains and other specialty coffee retailers.*

*Howard Schultz's leadership has caused Starbucks to become the most successful coffee company in the world. By making a commitment to employee satisfaction, environmental awareness and innovative products, Starbucks continues its dominance of the industry. Schultz empowers the workforce through the implementation of various leadership tactics. Starbucks holds a positive work climate in numerous stores throughout the world. Employees are motivated to perform consistently as Schultz strives for perfection. By putting employees first,*

*Schultz has gained their trust and created a cohesive workforce that maintains each employees identity.*

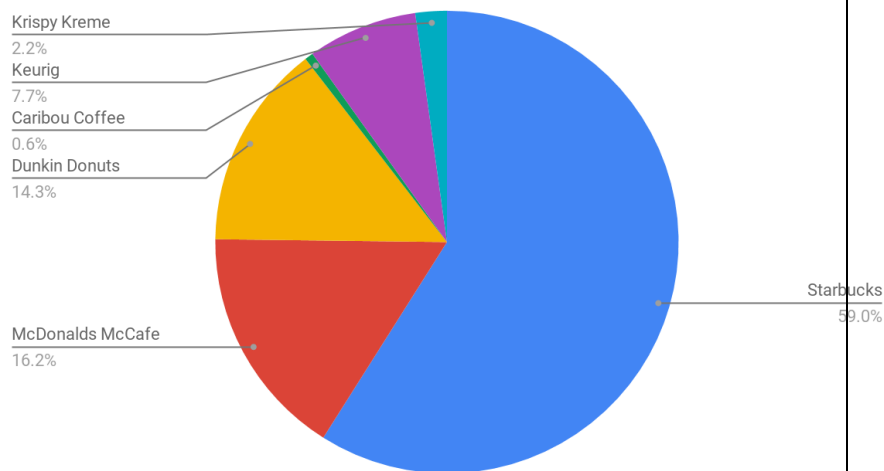
**Company Introduction & Industry Overview** Starbucks is the premier roaster, marketer and retailer of speciality coffee in the world, operating in 75 countries. Founded in 1985, Starbucks Corporation’s common stock trades on the NASDAQ Global Select Market under the symbol SBUX. Starbucks purchases and roasts high-quality coffee, handcrafted coffee, tea and other beverages and a variety of high-quality food items, including snack offerings, through company-operated stores. They also

sell a variety of coffee and tea products and license our trademarks through other channels such as licensed stores, grocery and foodservice accounts.

In addition to the flagship Starbucks Coffee brand, Starbucks also sells goods and services under the following brands: Teavana, Tazo, Seattle’s Best Coffee, Evolution

Fresh, La Boulange and Ethos. Their objective is to maintain Starbucks standing as one of the most recognized and respected brands in the world. To achieve this, they are pursuing a disciplined expansion of our global store base, adding stores in both existing, developed markets such as the U.S., and in newer, higher growth markets such as China, as well as optimizing the mix of company-operated and licensed stores in each market. In addition, by leveraging the experience gained through the traditional brick and mortar store models, they offer consumers new coffee and other products in a variety of forms, across new categories, diverse channels and alternative store formats. They also believe in a Starbucks Global Social Impact strategy, which are commitments related to ethically sourcing high-quality coffee, contributing positively to the communities they do business in and being an employer of choice are contributors to their objective.

Market Share - US



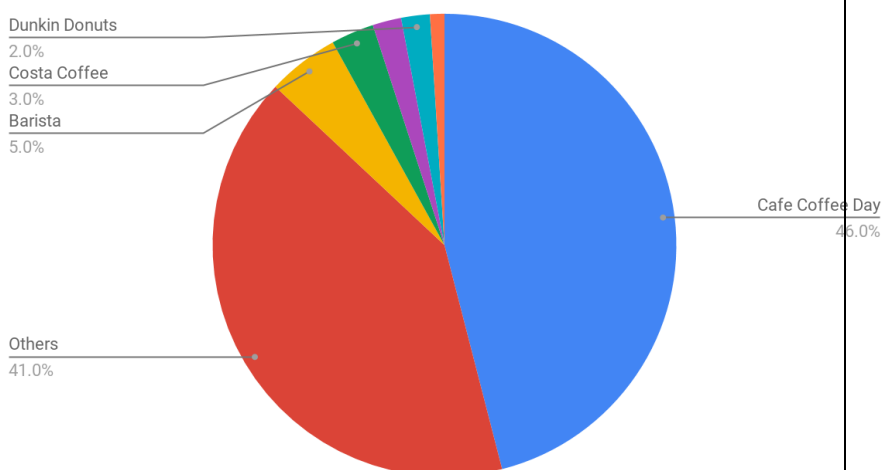
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<sup>2</sup> Market Share India: 2017-18 Figures from Statistica

India retail coffee chains market was valued at USD 128.6 million in 2018 and is expected to grow further over the forecast period as shown in Fig 3. Increasing global exposure, western culture and penetration of established coffee brands are anticipated to be the key trend driving the growth of India retail

coffee chain market. The market is ever growing than ever in India with the entry of international coffee brands such as Starbucks in 2012 with a joint venture with the TATA group. The Indian coffee retail chain industry has a decent mix of international as well as majority of Indian brands surging upwards in the market. The local coffee retail giant Café coffee Day has 1682 outlets in the country and more than 500 kiosks in 2016-17. The other Indian coffee retail brand Barista is also in the expansion with respect to its outlets and coffee shops along with some other retailers.

Market Share - India

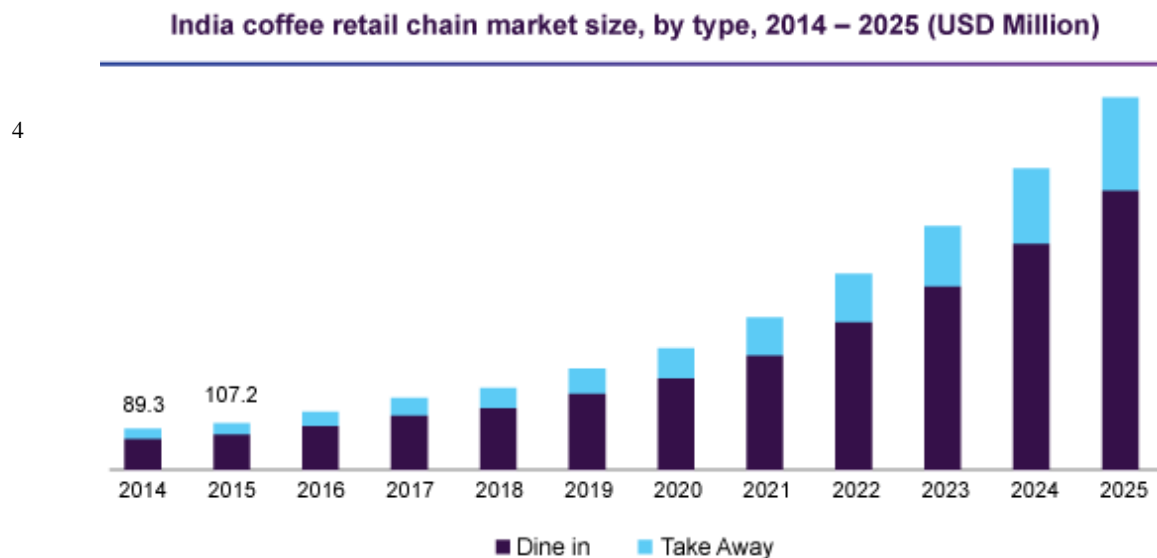


In the recent past, Indian coffee retail chain witness tremendous growth as outlets are gaining popularity of hangout zones with friends, family, colleagues, and business associate, among others. The increased acceptance of coffee is attributed to the emergence of premium stores from companies such as Coffee Day Enterprises Ltd, Starbucks Corporation, and Barista Coffee Co Ltd., among others thereby fueling the market growth. Moreover, these outlets have ushered in the experiential proposition to coffee drinking, with an ambience that's attractive and relaxing

Increasing disposable income and influence of western culture amid youth and other population witnessed shift owing to the global exposure of foreign brands in the Indian market. The increasing acceptance of coffee/premium coffee as a beverage, across states, has encouraged the prominent participated in the industry to launch retail coffee chains offering exotic range products to the urban population. In the recent past, the retail coffee chain has scaled up its

<sup>3</sup> Market Share USA: 2017-18 Figures from Forbes

coffee standardization as a differentiation strategy and provide refined ambiance with the assortment of food



## Microeconomic Methodology & Analysis

### Microeconomic Analysis A. Microeconomics of Venture

1 Production The industry's demand for premium coffee and snack products are mainly driven by a number of factors which include disposable income, per capita coffee consumption, attitudes towards health, world pricing of coffee and demographics.

2 Process Quality of their products is of utmost importance and standardization is avoided even for higher production output. They follow critical steps in processing the bean: sifting & sorting, roasting and blending. They get the best coffee beans from 20 developing countries. They have 6 Roasting plants, 17000+ retail stores and over 70000 deliveries per week. They have a fair-trade certification which ensures that farmers receive an equitable price for their coffee and strengthen their farms for future.

3 Inputs As main inputs into the value chain of Starbucks is coffee beans, premium Arabica coffee grown in select regions which are standard inputs.

4 Substitutes There are many reasonable substitute beverages to coffee, which are mainly tea, fruit juices, water, aerated and energy drink. Bars and Pubs with non/alcoholic beverages could also substitute for the social experience of Starbucks. To gain control on tea fronts, Starbucks sells tea with

<sup>4</sup> India Coffee Retail Chain Market Size <https://www.grandviewresearch.com/industry-analysis/india-coffee-retail-chains-market>

its own brand Tazo Tea and also as alcoholic Beverages can be considered as a substitute due to the social aspect of drinking coffee, it is bringing the aforementioned “Starbucks Evening” to many stores.

5 Complements Food selection exists to complement its coffee and include pastries, confections, and premade food (i.e sandwiches and salads). It also offers retail complements like mugs, tumblers and coffee makers.

6 Costs Coffee beans are primary inputs which make the cost of switching between substitute suppliers, moderately low. The prevailing volatile prices of coffee beans determines market costs and profitability margins. The world price of coffee has risen sharply in recent years due to growing demand in other countries and the resulting supply shortages. During the five years to 2018, coffee bean prices are projected to decrease, which will likely translate into lower market costs and higher profitability.

7 Economies of Scale Due to its large size, Starbucks is able to take advantage of economies of scale. It pays less for input costs because it is able to buy products in bulk. Economical Inputs complemented with specialty drinks and many additional options allows Starbucks to benefit with high margins, since there is no price cooperation in the coffee industry

## **B. Microeconomics of Venture**

Price alone does not determine the quantity of a good or service that people consume. Coffee consumption, for example, will be affected by such variables as income, preferences and demographics. We also expect other prices to affect coffee consumption. People often eat doughnuts or bagels with their coffee, so a reduction in the price of doughnuts or bagels might induce people to drink more coffee. An alternative to coffee is tea (supplement), so a reduction in the price of tea might result in the consumption of more tea and less coffee. Thus, a change in any one of the variables held constant in constructing a demand schedule will change the quantities demanded at each price. The result will be a shift in the entire demand curve rather than a movement along the demand curve. If there is an increase the quantity of coffee demanded at each price. Several events could produce such a change: an increase in incomes, an increase in population, or an increase in the price of tea would each be likely to increase the quantity of coffee demanded at each price. Illustration above shows how demand affects price of per pound of Coffee: The original curve, labeled D1, shifts to the right to D2. Example: In the USA, at a price of \$6 per pound, for example, the quantity demanded rises from 25 million pounds per month (point A) to 35 million pounds per month (point A')

The same holds true for demand decrease. Demand might fall as a result of events such as a reduction in population, a reduction in the price of tea, or a change in preferences. For example, a definitive finding that the caffeine in coffee contributes to heart disease, which is currently being debated in the scientific community, could change preferences and reduce the demand for coffee. The reduction shifts the demand curve for coffee to D3 from D1. The quantity demanded at a price of \$6 per pound, for

example, falls from 25 million pounds per month (point A) to 15 million pounds of coffee per month (point A") Increasing disposable income and influence of western culture amid youth, young adults and adults resulted in a shift owing to the global exposure of foreign brands in urban India.

### C. Market Structure of Starbucks

Starbucks operates in a Monopolistic Competitive market - relatively low barrier of entry, many different suppliers and essentially homogeneous product (with varying product attributes).

1

Competing Firms, Market power.

**Competitors**

Cafe Coffee Day, Jubilant Foodworks (Dominos & Dunkin Donuts), Barista, Costa Coffee, McDonalds McCafe

What makes Starbucks a market power?

**Right market segmentation** The company has stayed with the upper-scale of the coffee market, competing on comfort rather than convenience, which is not the case with its closest competitors, McDonald's and Dunkin Donuts.

**Execution** The company continues to focus on its original product bundle that includes good coffee, quality service, and a nice environment to hang around.

Comparison of Revenues and Market Penetration (2017-18):

| Entity             | Revenue (in cr. INR) | No. of stores in India | Average per store Revenue (in cr. INR) | Inception Year in India | No. of year in operation |
|--------------------|----------------------|------------------------|--|-------------------------|--------------------------|
| Tata Starbucks     | 348                  | 116                    | 3.00                                   | 2012                    | 6                        |
| Café Coffee Day    | 1,590                | 1,722                  | 0.92                                   | 1996                    | 22                       |
| Jubilant Foodworks | 2,980                | 1,145                  | 2.60                                   | 1995                    | 23                       |

|   |   |   |
|---|---|---|
| 2 | <b>Strategies<br/>for<br/>Competition</b> | <p style="text-align: center;"><b><u>I. Product Innovation</u></b></p> <p>Starbucks has always maintained its competitive advantage by being the leader in product innovation. Some of the most unique and popular products of Starbucks are- Iced White Chocolate Mocha, Pumpkin Spice Latte, Cinnamon Roll Frappuccino Blended Coffee, Java Chip Frappuccino, Green Tea Creme Frappuccino Blended Creme.</p> <p style="text-align: center;"><b><u>II.Capitalizing on changing consumer preferences</u></b></p> <p>Starbucks has maintained its popularity through time by being flexible. It has been open to adapting to changing consumer tastes and preferences. Its flexibility is also a part of the reason that allowed it to succeed in the tough and primarily tea-drinking market of China and India.</p> <p style="text-align: center;"><b><u>III. No franchising in a 100% franchisee world</u></b></p> <p>Starbucks opposes the strategy of Franchising as it believes that the company's value and culture are what continuously drive it forward, ahead of its peers. The CEO, Howard Schultz, has mentioned in his book "Pour Your Heart Into It," "To me, franchisees are middlemen who would stand between us and our customer."</p> <p style="text-align: center;"><b><u>IV. Ethical Sourcing</u></b></p> <p>Starbucks made their relationships with farmers all over the world strong, long-term relationships that make them able to buy the coffee their customers expect from them.</p> |
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| <p><b>3 Pricing strategies, other strategies</b></p> | <p><b>Pricing Strategy:-</b></p> <p><b>I. <u>High value moderate price</u></b></p> <p>Starbucks sets its prices on a simple idea: high value at a moderate cost. When people feel like they are getting a good deal for their money, they are more likely to pay a higher cost. Quality is key. Starbucks has to maintain strict quality controls in its coffee sourcing as well as in its customer service and peripheral products to justify its costs.</p> <p><b>II. <u>Differentiation</u></b></p> <p>Starbucks also spends a lot of time and energy differentiating itself from the competition. You can see this in the design of its coffee shops, the music played there and the types of products it sells, such as coffee-brewing equipment and jazz CDs. Starbucks makes sure to keep current on the latest technology, often times being the first to introduce the newest advancements to its customers. For example, Starbucks was one of the first companies to adopt location-based promotions and mobile payments.</p> <p><b>III. <u>The Value of Authority</u></b></p> <p>Starbucks' pricing strategy has a lot to do with how it positions itself as an authority on coffee, allowing the company to charge premium prices. Thus, when Starbucks introduces new products at higher prices, consumers are willing to pay extra without even having tried the products because they associate the Starbucks name with high quality.</p> <p><b>IV. <u>Relative Value</u></b></p> <p>Starbucks also uses relative pricing. It offers premium items, like its espresso drinks or its Starbucks brand whole-bean coffees sold in grocery stores, alongside lower-cost items, like its drip coffees or its Seattle's Best line. While the risk exists that more customers will choose the lower-priced items, by offering higher-priced items alongside lower-cost alternatives, Starbucks is justifying the higher price through comparison.</p> <p><b>Promotional &amp; Pricing Strategy:</b></p> |
|--|---|

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|  | <p>I. Starbucks has implemented numerous promotions to reach its targeted market. One of the promotions that Starbucks has used is the Starbucks Card. Starbucks Card is a technique that gives customers the opportunity to promote Starbucks's products through a referral system. When a customer purchases a gift card, it not only shows brand loyalty, but it also provides the company with free advertising, and brings in new customers. Starbucks also provides a card for corporate sales, which are used for extrinsic rewards to show employee appreciation for a job well done, or a gift to a client.</p> <p>II. Another promotional implementation is that they deliver coffees to offices or workplaces without any coffee size restrictions. There are very few or rare coffee outlets that are willing to deliver without placing any conditions or restrictions.</p> <p>III. Thirdly, they appeal to a diverse customer base by offering international teas and coffees to accommodate those customers that want a taste from home or for locals that enjoy tea.</p> <p>IV. Lastly, using the aid of performing a 'good deed' as a means of promotion – Starbucks contributes to several non-profit organizations as a way to improve brand image and awareness in local communities.</p> |
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## Recommendations

In conclusion, our Group has collectively evaluated given all insights and findings in mind and propose the following recommendations:

1. Starbucks has great growth opportunities in the untapped Tea market in India. They should build up these products along the same line of their core coffee products. Although they have launched a Teavana product line, they would need to market it more aggressively since Starbucks has high top of mind recall & is brand synonymous with only coffee. Starbucks should grow in these emerging markets by winning locally Starbucks must remain relevant to the customer in order to grow in these markets, and its management teams should have the freedom to operate within their overall framework to tailor store format, introduce local product mix and price points to the needs, lifestyles and tastes of each individual market/community.

2. Starbucks drive-thru store formats with selected menu would help cater to more customers, decrease wait time in stores, add more revenue and increase efficiency.
3. Their mobile apps business drove 10% of the sales in the US, so it would be recommended for further building to streamline ease of use and payment process which Integrating Starbucks loyalty program
4. Roll out designer alcoholic beverages product line in limited test locations. We recommend that Starbucks expand the program this program to the rest of its customer base depending on the response of alcoholic beverages. Starbucks can start serving beer and wine, as well as evening snacks that compliments alcoholic beverages to attract additional customers looking for more than just coffee.
5. Introduce 'Mini Starbucks' in highways, airports, metro stations, train stations for people on the go to for driving takeaways in a quick service format type of stores.

To conclude, the Team believes that these recommendations will keep Starbucks as a trailblazer and a leader in its market segment.

## **Group 7: Microeconomic Analysis of ITC Limited (Tobacco Sector)**

### ***Executive Summary***

*This report is all about the ITC Limited Company. ITC deals majorly in goods comprising Food, personal care, Cigarettes and Cigars, Branded Apparels, Education and Stationery products, Hotels, Paperboards and speciality papers packaging, Agri-Business and Information Technology. ITC is the sixth largest Company of FMCG in the world.*

### ***Project:***

- ✓ *Provides information regarding demand for Tobacco, factors influencing demand, substitutes and compliments.*
- ✓ *Contains information regarding the process flow, Manufacturing divisions and inputs for production, Economics of scale and Economics of scope.*
- ✓ *Incorporates the Market structure information competing firms, market power, strategies for the competition, pricing strategies.*
- ✓ *SWOT analysis for the ITC – Tobacco Sector*

*With this project we have tried to understand the microeconomics analysis for the tobacco sector, analysed its strength and weakness as compared to other companies. Our project is mainly focussed on comparative analysis on ITC. The source of information is secondary that is through the internet and different articles and sites of ITC, VST and Godfrey Phillips as well as some of the journals to arrive at some key recommendations.*

### **Introduction**

Tobacco & Tobacco Products are a large contributor to the Government's Tax Revenue, in India. The total tax revenue collected from tobacco products is more than INR 34,000 crores annually. Cigarettes which bear the brunt of taxation in India are the major revenue contributor from the Tobacco sector.

With the involvement of secondary data, it was interesting to analyse, how almost a monopolistic kind of industry had relatively inelastic price elasticity of demand, which excited the whole team to dig a bit more deeper. The idea here was to find out the competitors in the market and it was traced that ITC is the major contributor with a market share of 75%, followed

by Godfrey Phillips with 14% and VST with 4% share of the market, which clearly indicates that a monopolistic competition is going on in the cigarette segment of tobacco industry.

It was found from the demand structure and the factors influencing price elasticity of demand that the effect of price change does not affect the consumption much as because, it depends mostly on the taste and preferences of consumer, the substitutes are tobacco chew and cigars, which people do not prefer much, and hence the substitutes of cigarettes are cigarettes with lower prices and suitable complements for cigarettes does not appear.

ITC has the state of the art technology, and hence the production process is efficient and the cost's in the market is competitive due to the economies of scale, the company is even able to shift the tax liability on to the consumer's and it deals with the economies of scope with a lot of varieties in different price ranges, as a result, it has got an upper hand on other competitors. On the pricing part, penetrative pricing strategy (low pricing) for repelling competitors and introducing a range of products helps capturing the market share and sales volume, hence higher inventory turnover can be achieved and this is what ITC is using well.

## **Methodology and Analysis**

### **a) Microeconomics of venture:**

#### **1. Demand for the Products, factors influencing demand, substitutes and complements, different elasticities**

##### **Demand for the Product**

Smoking is a habit so hard to kick, demand for cigarettes is relatively inelastic – meaning that large price changes induce only small changes in the quantity demanded. Equivalently, only large price increases (decreases) will shrink (stretch) demand because the demand is inelastic to price changes. Social factors and education are often significant determinants of which people start smoking, but for those who do smoke the number of cigarettes smoked is not highly sensitive to price.

As Mark Twain once commented: “Quitting smoking is easy. I’ve done it a thousand times.” Even though the demand for cigarettes had been rising up until the 70’s

## **Factors Influencing Demand**

There are several different influences on a consumers' buying plan that can change the demand for a good. These include the **prices of related goods or substitutes**, **income of the buyers**, **buyers' expectations**, the **number of buyers**, and **buyers' preferences**.

### **Substitutes**

One might think that it is easy to identify a substitute for cigarettes. Take tobacco chew and cigars, for example. These products differ for several reasons, however. The **first**, and perhaps most important, is that these other forms of using tobacco are not as socially acceptable as cigarettes. Take for instance tobacco chew. The places where people work, or where people dine, do not regularly have a spittoon where one can spit their juice into. Also, take cigars for example. In today's fast-paced world, people do not have the time to smoke cigars. Cigars also produce much more air pollution than do cigarettes, so people will be less inclined to smoke them around other people. The **second** reason these other forms of using tobacco are not good substitutes for cigarettes is because they differ in their nicotine content.

### **Complements**

Complements are another type of good related to cigarettes that might affect the demand for cigarettes. However, again, there does not appear to be a suitable complement to cigarettes. One could argue that alcohol is a complement to cigarettes, as for some people, the tendency, or the urge, to smoke increases with alcohol consumption, but this is not really a complement as much as it is a preference. For example, a change in the price of alcohol would not bring about a change in the demand for cigarettes of a buyer. The buyer most likely would consume the same amount as routinely necessary.

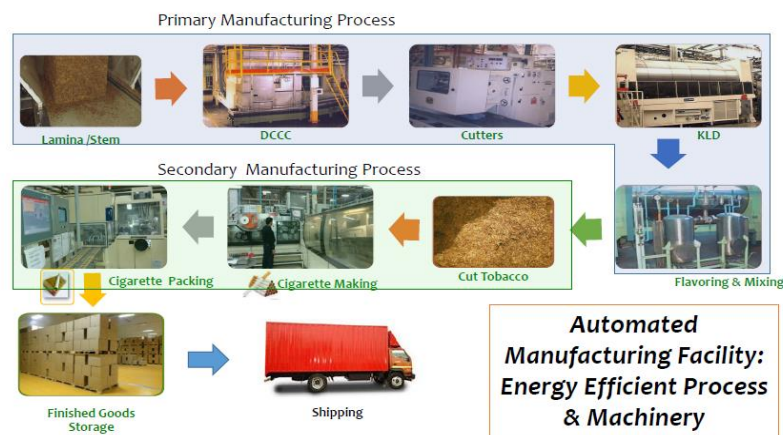
### **Different Elasticities**

The gradient of price elasticity can be translated into similar gradient for price elasticity by price bands for economy, mid-price and premium brands of cigarettes for example. The underlying assumption is that high income smokers purchase premium brands, middle income smokers purchase mid-price brands and low-income smokers purchase economy brands. Thus, the consumption of economy

brands is most price sensitive and the consumption of premium brands is the least price sensitive

## 2. Production: Processes, inputs, substitutes and complements among inputs, costs, economics of scale and scope

### Production: Process Flow



The production process can be broadly classified into 2 divisions.

### 1. Primary manufacturing Division:

Cigarette manufacturing process involves processing of tobacco leaf and stem to different tobacco blends, which is called, cut tobacco. In this stage, the Lamina bales are sliced, conditioned, cut, expanded and dried. The final cut tobacco is churned and flavoured as per the Product mix.

### 2. Secondary manufacturing Division:

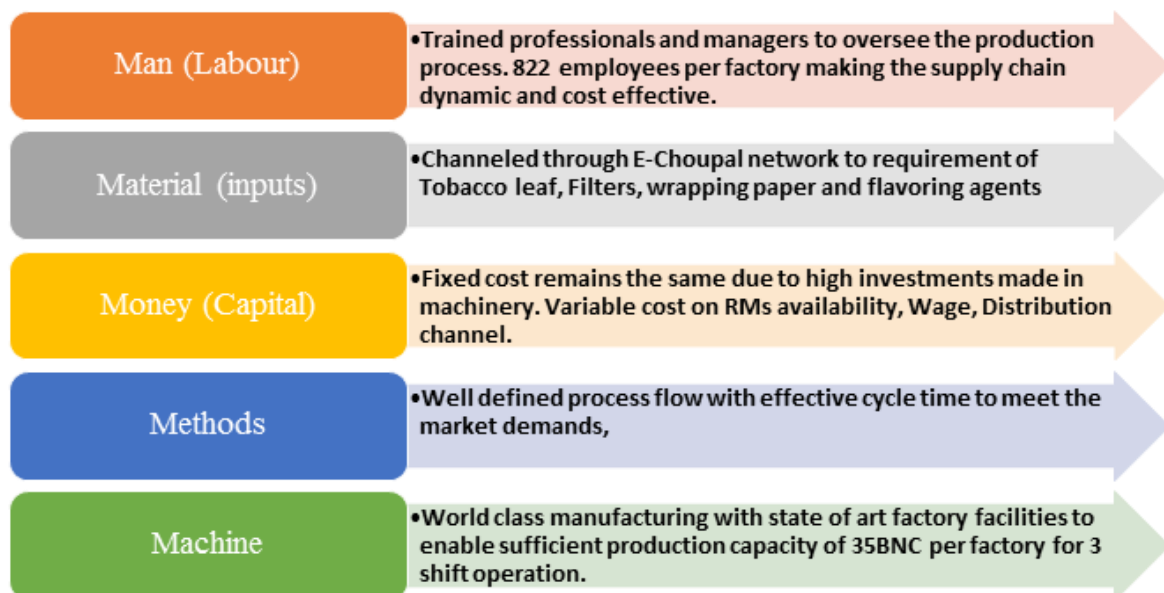
Then cut tobacco is sent to SMD for making & packing. Cut tobacco is then converted into cigarettes using other raw materials for making cigarettes & packing them in different forms as per trading requirements.

At SMD, there are two processes: Making and Packing.

- Making process is the rolling of cigarette sticks.

- Packing process is the packing of these cigar.

### Inputs for Production:



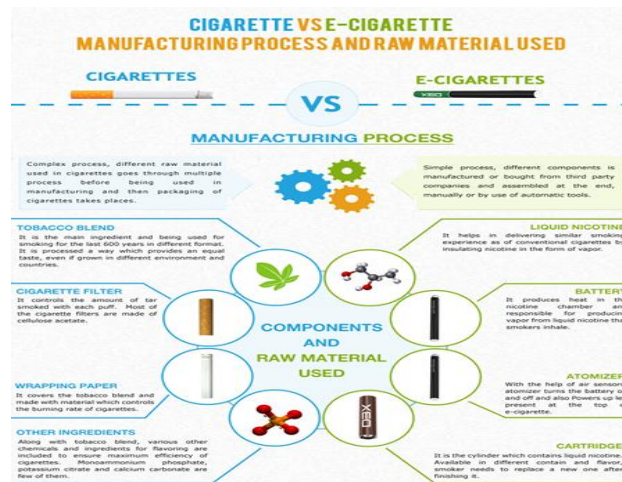
### Substitutes among Inputs

Among cigarettes itself there are multiple substitutes basis prices, tastes and preference of users. The inputs remain the same just that the composition or the method in which the input used will change.

1. Length of the filter
2. Roasting of the tobacco leaf

The substitutes for inputs change when a substitute product is taken, which in this case could be an e-cigarette.





## Costs

India's government has raised taxes, required graphic warnings on packages, and barred smoking scenes in films as it seeks to reduce tobacco use and fight related illnesses that kill a million Indians annually. Duties on cigarettes have more than doubled in the past four years and there's signs that smokers are becoming more price-conscious.

India's smokers are favouring cheaper options such as chewing and leaf-wrapped tobacco over cigarettes, as rising taxes prompt ITC Ltd to sell shorter sticks with lower duties. ITC has begun to cut the size of some products to preserve margins as sales volume slumps, taking advantage of a quirk in India's tax system that hits longer cigarettes with higher rates.

Even though the taxes have increase, the company is able to shift the tax liability on the consumer. Currently 80% of the capital employed and 90% of ITC's workforce deployed are in their non-cigarette's businesses. So, the production will continue to be at the same level or reduce but there is no expectation that there will be a rise in the same.

ITC is India's largest Buyer, Processor, Consumer and Exporter of cigarette tobaccos[Symbol] 5th largest leaf tobacco exporter in the world. Tobacco farmers in India are unlikely to get better remuneration for their produce despite low production as demand from global and domestic players have declined due to high taxation in domestic market and availability of better tobacco at competitive rates in other global markets. Due to rise in input costs since last year, farmers are anticipating a 15% increase in the remuneration per kg of tobacco leaf.

## **Economies of Scale**

- Blends diverse core competencies residing in various businesses to enhance the competitive power of the portfolio.  
E.g. ITC have their own packaging business which provides high-quality, cost-effective, and innovative packaging.
- ITC enjoys cost advantages over its competitors owing to its electronic procurement system called e-Choupal, which ensures that ITC doesn't have to depend on any third party for the raw material required.
- ITC's cigarettes are manufactured in state-of-the-art factories at Bengaluru, Munger, Saharanpur, Kolkata and Pune, with cutting-edge technology & excellent work practices benchmarked to the best globally. This reduces their fixed cost by producing them in large quantities.
- An efficient supply chain & distribution network across the length & breadth of the country.
- Though different flavours of cigarettes are manufactured, dedicated facilities are provided for cigarette manufacturing and hence we do not find Economies of Scope in spite of ITC being a diversified FCCG company.

## **Economies of Scope**

Economy of scope theory states the average total cost of a company's production decreases when there is an increasing variety of goods produced. Economy of scope gives a cost advantage to a company when it produces a complementary range of products while focusing on its core competencies. ITC has this advantage as it has multiple brands in cigarettes itself.

ITC's major cigarette brands include Wills Navy Cut, Gold Flake Kings, Gold Flake Premium lights, Gold Flake Super Star, Insignia, India Kings, Classic (Verve, Menthol, Menthol Rush, Regular, Citric Twist, Ice Burst, Mild & Ultra Mild), 555, Silk Cut, Scissors, Capstan, Berkeley, Bristol, Lucky Strike, Players, Flake and Duke & Royal.

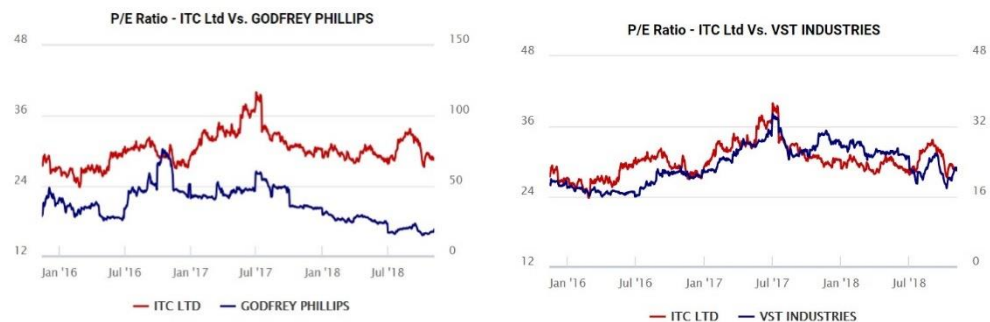
### **b) Market Structure:**

#### **1. Competing firms, market power**

Godfrey Phillips and VST Industries are the leading competitors to ITC's Tobacco segment. These three major cigarette players dominate the Indian market, primarily ITC with 75% market share, Godfrey Phillips with 14% and VST with 4% share of

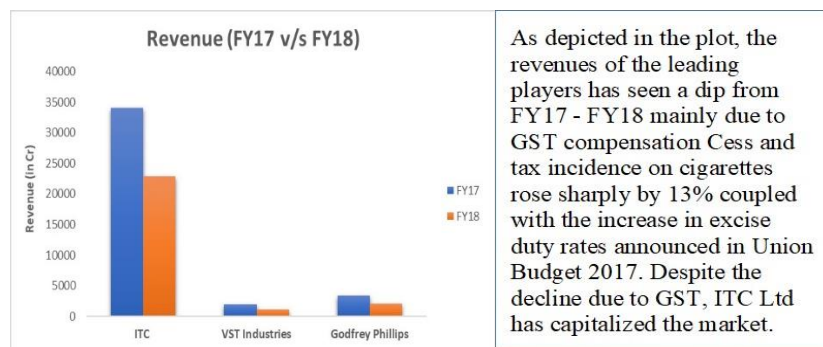
the market. The manufacturing set-up of ITC is in the state-of -the-art factories across India with cutting-edge technologies and broad and tight linked Supply Chain Management.

West Asia is one of the key targets for exports mainly because of ITCs high standards of international quality and competitiveness. Release of flavour on demand (capsule) product in the economy industry segment in West Asia, cemented ITC's power in this region. ITC has also established a strong network of their Business in Bahrain and Qatar (3<sup>rd</sup> largest players in these regions).



The above figures capture the Price to earning ratio (or P/E ratio) for the 3 dominant industries in the tobacco business. This P/E ratio can give potential investors an idea regarding the overall growth. A low P/E indicates undervaluation and a high P/E indicates higher future earnings. Over the last 30 days, the ITC LTD share price is up by 3.3%. And over the last one year, ITC LTD share price is up by 6.6%.

### Market Power:



## 2. Strategies for Competition:

ITC Ltd. focuses on crop development to enhance quality and farm productivity. Company has nurtured a pool of trained manpower for this purpose. Investments of Rs. 375 crores have been

planned for leaf processing plants and modern storage facilities to improve quality, reduce waste and enhance productivity. Modernisation of cigarette plants by inducting contemporary technology, involving investments to the tune of Rs. 900 crores over the next five years. A new, greenfield, state-of-the-art factory is being established outside Bengaluru to match globally benchmarked standards.

Brands at the upper end of the market are being strengthened in anticipation of consumer aspirations. This is an important area of investment as it takes several years to build sustainable brand equity. Threats for new entrant is low because New product differentiation is very tough- already cigarettes at different price points, flavors and brand image is available. Access to distribution channel is tough- big and established players are present. Capital requirement is very high for a PAN India Launching.

Bargaining power of supplier is low. Many inputs are required but in small amounts- paper tobacco filter. There is many small scale, unorganized suppliers. ITC has dominant market player in cigarette and have direct access to distribution channel and addicted buyers. Supplier don't have much control over smokers. Threat to substitute products (Herbal Cigarette, Nicotine patches, Nicotine chewing gums, e-Cigarette) is low.

### **3. Pricing strategies, other strategies**

On an average, ITC has adopted a penetrative pricing strategy (low pricing) for repelling competitors and introducing their new products. This was also proof to ITC's high market shares and sales volumes. Additionally, there can be a higher inventory turnover in cases of higher amount of sales. However, after the introduction of GST, ITC will tend to move away from the penetrative pricing strategy as low pricing will tear away profits as cost increases due to taxation.

ITC has majorly followed a triple – bottom – line strategy that indirectly contributes to the Nation's capital. On a global comparison, ITC does seem to be able to take further price hikes given that the price increase for the most popular brand in India (Gold Flake) has been just an average 11% CAGR as compared to the global average of 10%.

After the Successive Excise duty came into effect, ICT aggressively hiked their prices by passing on the effect to the consumers. Volume growth took a back seat though profitability increased sharply. ITC's recent strategy shows that, it would be difficult for the company to

incrementally hike prices at the same pace as it has been doing for the last three-four years. Experts also believe, cost controls cannot help to drive EBIT margin improvement for the company on an ongoing basis.

| SWOT ANALYSIS ITC's TOBACCO SECTOR  |   |
|---|---|
| <p><b><u>Strength</u></b></p> <p>(1) Effective Social Business Initiatives - ITC has developed a triple-bottom-line strategy through which concentrates on developing the nation's economic, social and environmental capital.</p> <p>(2) High Proportion of revenues from Tobacco products - Tobacco products remain to be the major source of the revenue contributing more than 60% of the total revenue from FMCG businesses.</p> | <p><b><u>Weakness</u></b></p> <p>(1) Association with Tobacco Products affects the image: ITC has made a lot of efforts to improve its corporate image but the fact that ITC has many tobacco products in its portfolio impacts its corporate image.</p> <p>(2) An increase in Tax on Tobacco affects revenue</p>   |
| <p><b><u>Opportunities</u></b></p> <p>(1) Tap rural markets and increase penetration in urban areas</p> <p>(2) Mergers and acquisitions to strengthen the brand "ITC"</p> <p>(3) Increasing purchasing power (value of INR expressed in terms of cigarettes that one unit of money can buy) of people thereby increasing demand</p>   | <p><b><u>Threats</u></b></p> <p>(1) Strict govt regulations and policies regarding cigarettes (such as increase in taxes and excise duty)</p> <p>(2) FDI in retail thereby allowing international brands.</p> <p>(3) Introduction of Graphic Health Warning (GHW) and an increase in the health consciousness which has resulted in the decrease in demand for tobacco products in India. Also, anti-smoking campaigns throughout the country affect the sales of cigarettes.</p> |

## Recommendations

- (1) Create multiple drivers of growth by developing a portfolio of world class businesses that best matches organizational capability with opportunities in domestic and export markets.
- (2) Benchmark the health of business comprehensively across the criteria of Market Standing, Profitability and internal vitality.

- (3) Continuously strengthen and refine Corporate Governance processes and systems to catalyze the entrepreneurial energies of management by striking the golden balance between executive freedom and the need for effective control and accountability

## **Group 8: Microeconomic Analysis of Patanjali Ayurved Limited**

### ***Executive Summary***

*Patanjali, founded in 2007 by Baba Ramdev and his aide Swami Acharya Balakrishan and has now grown into a multifarious 10,000 crore company. It has disrupted the entire FMCG market with its unconventional growth story. The credit goes to Baba Ramdev who has very meticulously decided the timeline for each action and delivered unprecedented success. Patanjali's vision is to provide herbal/ayurvedic/natural solutions to all the problems and in this pursuit it is also elevating the livelihoods of local farmers. It has leveraged the emotional route by bringing in the 'Swadeshi' angle to market its products.*

*This report aims to complete a microeconomic analysis of Patanjali Ayurved Limited. An analysis of the demand for the product, factors influencing demand and substitutes and complements is done. The analysis of the process of production in light of inputs and costs highlights the status of Patanjali in the FMCG industry. The market structure of Patanjali and its competing firms in light of strategies adopted for competition, pricing strategies and other strategies is analyzed as well. Lastly, recommendations regarding how Patanjali can optimize its market stature are stated.*

### **Introduction**

Patanjali Ayurveda Limited produces herbo-mineral health care products, dental care products, food products, cosmetics, toiletries, hair care products and so on. It also offers food and beverages, such as flour, ghee, confectionary, oil, honey, spices and sharbats; personal care products which include soaps, baby creams, hand washes, toothpaste and body oils and well as ayurvedic products, which include general-digestives and chyawanpras. It is the fastest growing FMCG Company in the country.<sup>5</sup>

### **Methodology and Analysis**

This study will be based on theoretical research methods. Reliance will be placed on secondary resources such as books, print and electronic media, articles and reports of authorities to determine the market position of Patanjali Ayurveda Limited in the Indian market.

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<sup>5</sup> <https://www.ibef.org/industry/fmcg/showcase/patanjali-ayurved-limited>

## **Demand for The Product, Factors Influencing Demand, Substitutes And Complements, Different Elasticity**

Patanjali's demand relies mainly on its **affordability** which accounts for 37.77% of all the other factors.<sup>6</sup> **Quality** is the second reason for the increase in Patanjali's demand.

### **Factors influencing demand**

1. **Innovation Strategy** - With the launch of herbal and ayurvedic products the complete FMCG industry is changing. Beyond Patanjali's flagship ayurvedic range of products, their strategy is to simply create products that people are already using and not try to innovate with the core positioning of the product (cereals, biscuits etc) whilst adding a natural element to it. This is a strategic move, as this requires no change in their behaviour if they opt for Patanjali products.
2. **Pricing** - Priced anywhere between 10%-30% cheaper than competitors, Patanjali poses serious challenge to flagship products of many companies. The company is set to eat market share of some of the FMCG majors in oral care, hair care and OTC products with its economical pricing across its brand portfolio.
3. **Marketing strategy** - Patanjali has the advantage of being associated with a personality, Baba Ramdev, a yoga guru with a following of millions who popularises this brand through his camps. Patanjali succeeded to read people's increasing awareness & concern for presence of harmful chemicals in products they use; and used it as a marketing strategy to increase demand for its products.
4. **Reputation and Loyal customer base** - Last but not the least, over years, Baba Ramdev has built a reputation and trust even among his non followers. When it comes to choosing between the likes of Unilever, P&G, Nestle etc and Patanjali, most would trust the latter more than the former.<sup>7</sup>

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<sup>6</sup> A Study on Factors Affecting Sales of Patanjali, Himalaya, Dabur and Zhandu Products: Consumers Point of View by Priyanka K. Shinde

<sup>7</sup> A Study on Factors Affecting Sales of Patanjali, Himalaya, Dabur and Zhandu Products: Consumers Point of View by Priyanka K. Shinde



## Substitutes and Complements

Here we take the price of related goods under consideration. This plays an important role in determining the Demand for a product. Related goods can be of two types, namely, substitutes and complementary goods, which are explained as follows:

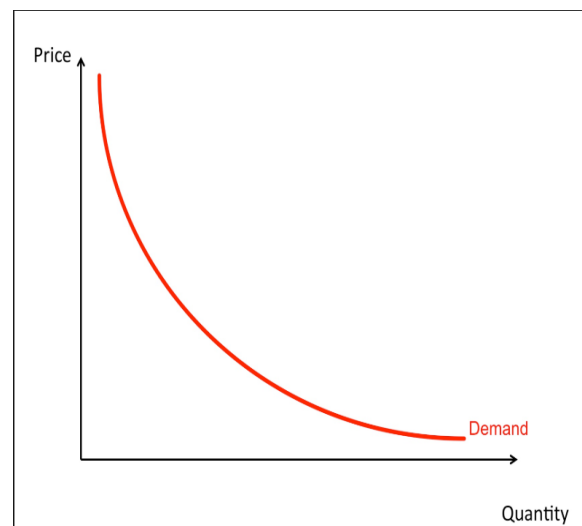
- a. **Substitutes:** This refers to goods that satisfy the same need of consumers but at a different price. Typically the substitutes would be Patanjali's success acted as a catalyst for herbal, ayurvedic and natural products, which now account for about 10% of the consumer goods market. Between FY13 and FY18, these products grew at a CAGR of 21% compared with 11% for the overall FMCG sector.<sup>8</sup> Certain examples of substitutes can be that of Sri Sri Ayurveda's products such as toothpaste, hair oil and so on.
- b. **Complementary Goods:** Refers to goods that are consumed simultaneously or in combination. In other words, complementary goods are consumed together. For instance, when the demand for Patanjali shampoo increases, the demand for the associated Patanjali conditioner increases as well.

## Price-Demand Elasticity

The demand for Patanjali Products is increasing exponentially.

Quality of Patanjali products played a key role in consumer purchasing behaviour and the price was given a little lesser importance. Offers and discounts on the products attracted customers towards the brand as well.

Typically the price demand elasticity curve would look something like the figure here for Patanjali products.



**Production: Processes, Inputs,**

## Substitutes and Complements Among Inputs, Costs, Economics Of Scale And Scope

Patanjali Ayurveda Limited has managed to cross Rs.10,000 crore revenue in the year 2017 leaving behind well - established companies like ITC, Nestle, Godrej etc... with a producing of

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<sup>8</sup> *supra*

almost 1000 range of products<sup>9</sup>. We have seen that the production process depends on Technology and the Input Process. The following are the attributes that has assisted in the ease of production process;

1. **Social Media Marketing:** Baba Ramdev who got Yoga culture back, is the face of Patanjali Ayurveda Limited. He brought about a cultural angle associated to the marketing which makes the consumers want to stay close to their roots.
2. **Quality of the product at the first stage of production:** While producing, the raw material is directly procured from the farmers and there is no trader in between and this helps Patanjali Ayurveda Limited maintain the quality of products at a cheaper price. While other substitutes of Patanjali Ayurveda Limited products have chemicals, Patanjali Ayurveda Limited has always focussed on minimal use of chemicals in their products.
3. **Supply chain network:** With almost 5000 retail outlets, Patanjali Ayurveda Limited has built a robust supply chain network. With so many franchises open, Patanjali Ayurveda Limited has eased out its inventory management.
4. **Using e-commerce:** Patanjali Ayurveda Limited products are easily available online on various ecommerce platforms. Patanjali Ayurveda Limited has leveraged the technology and has left no stone unturned in order to make sure that their products reach every nook and corner of the country. It adopts very low advertisement and promotional expenses as compared to industry standards.
5. The **recruitment policy** of Patanjali Ayurveda Limited prefers skilled professionals in Ayurveda rather than highly paid managers, which increases the productivity.
6. Patanjali Ayurveda Limited has pulled up the **packaging market** that was slowing in India. As Patanjali Ayurveda Limited came up with wide range of products, it attracted the packaging companies and they offered packaging at a lower price because of the market situation and hence Patanjali Ayurveda Limited has saved a lot on packaging.

### **Substitutes and Complements amongst inputs**

Patanjali Ayurveda Limited gets raw material like milk directly from the dairy farmers, other medicinal herbs from local farmers. They are already using the best substitutes available in the

market.<sup>10</sup> We can see the comparison of raw materials used as substitute and complements in different firms in FMCG.

| <b>Patanjali Ayurveda Limited</b>  | <b>Other companies</b>  |
|--|---|
| Toothpaste: Neem, Babool, Pudina, other herbs, Calcium carbonate and Sodium Benzoate as preservative | Colgate: Triclosan, Fluoride, sodium bicarbonate, enzymes and Xylitol   |
| Shampoo: Amla, Bhringraj, Mehndi, other herbs, no chemicals  | Shampoo: Sodium Laureth Sulfate, Sodium Chloride, Glycerin, Dimethiconol, Chloride, Citric Acid and various other chemicals |
| Noodles: Wheat, oil, minerals, ginger, cardamom, fenugreek, cumin, turmeric                          | Maggi: Maltodextrin, chemicals that are flavour enhancers, lead, monosodium glucomate(MSG)                                  |

### **Costs:**

Patanjali Ayurveda Limited aims to keep the production cost low to provide cheaper products to the customers in the market. Patanjali Ayurveda Limited sells the product on an average 15 percent cheaper than other competitors. The following points highlight how Patanjali Ayurveda Limited is reducing its costs;

1. No middlemen, direct interaction with farmers
2. Very less promotional and advertisement cost
3. Cost of raw material is low
4. Productive labour with interest in Ayurveda
5. Better inventory management and wide network of suppliers

## Economies of Scale and Scope:

### Economies of scale

For example, Kesh Kanti with sale of Rs. 825 crores and Dant Kanti has 15% of market share. 100% growth rate in food industry and 51% growth rate in hair products<sup>11</sup> implies that as the consumers are increasing Patanjali Ayurveda Limited is gaining profit as its cost of production is very less. As Patanjali Ayurveda Limited is growing and increasing its consumer base its cost per unit of production is going down.

### Economies of Scope

Patanjali Ayurveda Limited boomed in the ayurvedic product market. It not only produced variety of Ayurveda products but also created a demand for the same in consumers. Now Patanjali Ayurveda Limited has forced other big brands to come into herbal space. Patanjali Ayurveda Limited has just started and there is a huge scope. Patanjali Ayurveda Limited is already in food, Ayurveda, cosmetic and juice market. Patanjali Ayurveda Limited is also going to enter the textile business. Huge employment opportunity, making in India and using in India and sticking to the culture is what makes Patanjali Ayurveda Limited easy to enter into new markets.

## Competing Firms and Market Power

Patanjali Ayurveda Limited is one of the fastest growing Indian FMCG company which was established in 2006 by Baba Ramdev along with Acharya Balkrishna. Its manufacturing unit and headquarters are located in industrial area of Haridwar and the registered office is located in Delhi.<sup>12</sup>

Below is the list of major Patanjali Ayurveda Limited competitors:

1. Dabur India
2. Procter and Gamble
3. Nestle Ltd
4. HUL ( Hindustan Unilever Limited)

| Competitors for Patanjali Products |              |                            |
|------------------------------------|--------------|----------------------------|
| Category                           | PAL Discount | Key Competitors            |
| Balm                               | 41%          | Amrutanjan , Zandu , Vicks |
| Biscuits                           | 0-33%        | Britannia, ITC, Oreo       |
| Cereals                            | 9-20%        | Kellogs                    |
| Chywanprash                        | 15%          | Dabur, Zandu               |
| Detergents                         | 2-41%        | HUL, P&G                   |
| Dishwash                           | 4-21%        | HUL, P&G                   |
| Facewash                           | 17-62%       | Lakme , HUL                |
| Noodles                            | 36%          | Nestle, ITC                |
| Skin Care                          | 7%           | Nivea                      |
| Wheat Flour                        | 5%           | ITC                        |

<sup>11</sup> <https://economictimes.indiatimes.com>

<sup>12</sup> <http://patanjaliayurved.org/>

5. Himalaya Herbal Healthcare
6. Sri Sri Ayurveda

Currently, HUL is planning to fight tooth and nail rival Patanjali, whose co-founder Baba Ramdev has said that he plans to beat HUL's topline in the year ending March 2019.<sup>13</sup>

Some of the main products of Patanjali Ayurveda Limited are; herbal moisturizer cream, Multani-mitti face pack, Aloe vera juice, Yoga Sutra, Coconut hair wash, Sheetal Oil Drishti eye drop and so on. Patanjali Ayurveda Limited is leading over its competitors due to following reasons;

- **Innovation** – Patanjali Ayurveda Limited being a major competitor, FMCG companies are expected to introduce innovative Herbal and Ayurvedic products over the forecast period.
- **Pricing** – Patanjali Ayurveda Limited sells its product at a lower price to meet consumer demands. Patanjali Ayurveda Limited is able to sell its best quality product at a price which is 10% to 30% less than its competitors who spend 12% to 18% on advertising and promotion.
- **Brand Marketing** – Patanjali Ayurveda Limited has given a tough competition to some of the FMCG majors in the area of hair care, oral care and OTC products across its brand portfolio through impressive brand marketing by Baba Ramdev.
- **Revenue Market Share** – According to IIFL, Patanjali Ayurveda Limited could attain a net turnover of Rs 20,000 crore by FY20.<sup>14</sup>

| Category         | Patanjali Price (Rs.) | Competitor Price (Rs.) |
|------------------|-----------------------|------------------------|
| Chyawanprash     | 115                   | 160 (Dabur)            |
| Pineapple Juice  | 80                    | 99 (Real)              |
| Honey            | 135                   | 199 (Dabur)            |
| Facewash         | 60                    | 80 (Pears)             |
| Dishwash Bar     | 10                    | 15 (Vim)               |
| Detergent Powder | 13                    | 19 (Rin)               |

### Strengths in the competitive field

1. Extensive marketing has pulled people into accepting its products as a healthier and safer option
2. Strong brand ambassador with Baba Ramdev as its face helped boost the business for Patanjali Ayurveda Limited

<sup>13</sup> <http://www.forbesindia.com/article/leaderboard/hul-revs-up-amid-stiff-competition-from-patanjali/49235/1>

<sup>14</sup> <http://stellarix.com/fusce/comparative-study-of-patanjali-high-grossing-products-with-competitors/>

3. The venture has generated tremendous revenues, which are comparable to existing players
4. More than 200,000+ employees with Patanjali Ayurveda Limited
5. Excellent word of mouth marketing has helped the brand grow

### **Unique Selling Point**

Patanjali Ayurveda Limited sells only Ayurveda based products in food, cosmetics and FMCG at low prices.

### **Weaknesses in the competitive field**

1. Launched too many products in a short time
2. Patanjali Ayurveda Limited faced issues with Advertising Council of India

### **Strategies for Competition**

Competition plays a pivotal role in productivity, price stability, maintaining the balance between the market forces of demand and supply and so on. A company's growth in the market can be attributed to the level of competition in the market, rise in income level, increase in purchasing power, increased awareness and exposure and change in consumption patterns of the Indian population. Baba Ramdev, entered this opportune market with his threefold strategy based on the pillars of Yog, Ayurveda and Nationalism.

### **Strategic Brand Management of Patanjali Ayurveda Limited**

Patanjali Ayurveda Limited followed a very unique strategy of promoting their products in the market. They did not follow the practice of blindly barraging the consumers with the advertisements highlighting the ways in which their product was better than the others. The name clearly signifies the Indian-ness of the brand. The logo of the brand which comprises of the colours of the Indian flag underlying the name Patanjali Ayurveda Limited also further underlines the proximity of the brand to India and invokes patriotism. The symbol of the brand which is composed of a "OM", Tusli leaves, a traditional Indian pot for mixing herbs and a figure in Yogic position, once again builds around the traditional and cultural image the brand seems to build for itself.

Its tagline “Prakriti ka Aashirwaad” highlights the pure and natural aspect of its products. Also the brand tries to create strong health association in the minds of the consumer due to its association with Yoga Guru Baba Ramdev and Acharya Balkrishna.

### **Strategies Employed;**

1. Strategy which highlighted the concerns of Patanjali Ayurveda Limited is the exploitation of farmers at the hands of MNCs, health hazards of chemicals and fertilizers being used and most importantly the virtues of Indian products.
2. Patanjali Ayurveda Limited while designing its positioning strategy has tried to target the health conscious middle and upper middle-class families who prefer ayurvedic products.
3. Patanjali Ayurveda Limited provides the consumers with a reason to believe for their economical prices by claiming that they source directly from farmers.
4. Patanjali Ayurveda Limited further asserts that they seek minimum profits as they do not believe in earning profits for their health products which are for the benefit of their patients. The brand apparently believes in the philosophy of “*vyapar nahi upkaar*”.
5. The brand clarifies its intent to promote Ayurveda instead of only making profits and competing with other corporations, by taking initiatives like the cultivation of saplings of medicinal herbs like Tinospora, Amla, seeds of Tulsi and plants of Aloe Vera. It also provides farmers with necessary technical aid and information in order to help increase their income. Such endeavors help Patanjali Ayurveda Limited to build and further accentuate the image of authenticity and social responsibility.<sup>15</sup>

Patanjali has followed a two-stage distribution strategy in general trade;

- Stage 1: Create a strong alternative distribution system for demand creation and building word-of-mouth advocates
- Stage 2: Move to general trade once a sizeable consumer base is generated from Stage 1<sup>16</sup>

The responses and reactions of the giants in the FMCG sector confirm that Patanjali Ayurveda Limited is proving to be a threat for these organizations and if not checked may eat up their place in the market. Various statistics further confirm the growth potential of Patanjali

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<sup>15</sup> <https://www.ciim.in/baba-ramdevs-patanjali-marketing-strategy-case-study>

<sup>16</sup> <https://www.thehindubusinessline.com/catalyst/the-secret-behind-patanjalis-rise-and-rise/article9300591.ece>

Ayurveda Limited. According to Baba Ramdev, the brand has been registering 100% growth for the last four years and is expected to reach the target of one lakh crore by the year 2020.

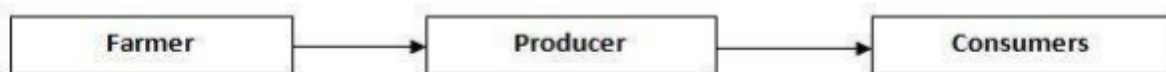
### **Pricing Strategies & Other Strategies**

Today Baba Ramdev's Patanjali Ayurveda Limited is sweeping away everything in its path. From local stores to Amazon, Patanjali Ayurveda Limited products are everywhere. The product quality is best in breed, the competitive pricing and the distribution chain is probably the first that is rivalling even the cola majors.

### **What makes Patanjali Ayurveda Limited market strategy different?**

*"Marketing through spirituality"* is the key here. Baba Ramdev's unique pricing approach towards the country of middle class people was a major advantage.

An enormous amount (20-30%) of the sales goes to the marketing, packaging & advertisements in the case of typical FMCGs. But in the case of Patanjali Ayurveda Limited, these costs are low since they do not market or advertise their products as the competitors to other available brands in the market nor they spend on fancy packaging. Also, they either directly source the raw materials from the farmers or grow them in their farms and then goes to the producers and then Consumers (refer to the supply chain image below). This helps them significantly to keep the costs low. Moreover, their manufacturing plants are nearby the sourcing locations. Patanjali Ayurveda Limited does not spend on extensive market research like other FMCG companies. Also they don't have neither hire high paying officials in their company. As claimed by Ramdev, he does not even take anything home, while most of the promotions are carried out



by him. This is one of the main reasons why Patanjali Ayurveda Limited can offer products at such a low price. The lesser price for each product in each category has created a Cost Advantage for Patanjali Ayurveda Limited. Middle class people find it good reason to switch to these products. Even it urges the first time users to purchase it and give it a try. <sup>17</sup>

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<sup>17</sup> A Research Report on Patanjali by Paldeep Das (IIMB)



Current Market Insight - Patanjali Ayurveda Limited now has more than 450 products ranging from soap to toothpaste, oats to health drinks. The revenue of Patanjali Ayurveda Limited in 2017-2018 has crossed more than 10,000 cr.

**Offline availability** - Big Bazaar As a part of tie up with Future group, Patanjali products are made available in Big Bazaar retail outlets. Patanjali products are made available in various post offices all over the country. This is an extremely break through strategy, something which is less explored and almost not done by the other FMCG companies.

**E-Commerce selling of products happens in 2 ways:**

1. Selling through their e-commerce website (.net)
2. Selling through their corporate site (.org) which is directly linked to the stores.

The key marketing strategies to Patanjali Ayurveda Limited's success are;

1. Health benefits
2. Low price
3. Strong distribution channels
4. Baba Ramdev because of health and strong brand association
5. Looks natural in a simple package
6. Media Promotion
7. Word of mouth
8. Celebrity endorsement

**Recommendations**

1. Patanjali Ayurveda Limited can tap overseas market as Ayurveda is increasingly getting awareness.
2. Patanjali Ayurveda Limited can enter more segments in personal hygiene and can also diversify in apparels.
3. As we know the company is rapidly growing, it is natural that it will have ambitious plans throughout the growth strategy. We recommend that in the light of such plans, it should always think in the long term goal and do not suddenly increase the price of its products since most of customers are still in adoption stage and are yet to completely bond with the core message of the organization and diffusion needs time. Increasing

the price to bear the cost of promotions and other activities may prove fatal to the company and the customers may switch back to the commonly available FMCG goods.

4. Patanjali Ayurveda Limited spends very less on advertisements. It should use both the offline and digital space to advertise apart from word of mouth publicity. This space can be used to promote those products which are not contributing majorly to the revenue. Ghee, Shampoo, herbal soap, honey and mustard oil contribute almost 50% to the revenue and rest 895 products contribute 50%. Patanjali Ayurveda Limited should use advertisement space and promote their potential products like Awla candy, aloe vera gel etc.
5. Patanjali Ayurveda Limited IPO: Patanjali Ayurveda Limited has got that consumer base and revenue that it can get listed on IPO. If Patanjali Ayurveda Limited wants to scale and expand at a faster pace, it should go public. Because of the brand value and outstanding performance in business it is the right time to go public.

## **Group 9: Micro-Economic Analysis of Maruti Suzuki**

### ***Executive Summary***

*India's projected growth rate in terms of GDP to 7% by the end 2020 has put India on a prominent position on the stage of global economy. Indian Government has been working towards urbanization, supportive regulations and policies to enhance the Indian economy. With the growth in population and exponential increase in the young working class in India, the demand of consumable FMCG, as well as automobile segment in India has reached its zenith. India is expected to emerge as one among the top 3 global leaders in the field of passenger vehicle market. Maruti- Suzuki emerged as a nation's bestselling vehicle for decades in the mid cap segment. With increase in the competition, of more companies expanding their local presence, Maruti- Suzuki had to work on their strategies in the below mentioned ways to sustain lead over the market:*

- 1. Up-gradation of the manufacturing plant*
- 2. Expanding portfolio*
- 3. Expanding presence*
- 4. Expanding reach in the local markets*
- 5. Standardizing and Benchmarking work methodology*
- 6. Business segments expansion*
- 7. Value added services*
- 8. Determination to upgrade the best sellers*
- 9. Enhancing benefits for customers*
- 10. Use of Information and Technology for efficient production*

*On the pricing point the Maruti- Suzuki played with the below mentioned:*

- 1. Market penetrating and competitive pricing*
- 2. Affordability*
- 3. Belief on the volume game*
- 4. Efficient post-sales support*

*However the automotive mission plan 2026, the government and industry is targeting to triple the revenue and expand exports to \$80 Billion. Looking into the scenario, Indian automobile industry has been dominated by few key players in the past decades such as, Maruti, Maruti*

*Suzuki, Toyota, Honda, Hyudai, Nissan, Fiat, Mitsubishi, etc. Also, it is very evitable from the records that Mini and Hatch Back cars ruled the past decades and still holds their grip over the Indian Market. Maruti Suzuki Swift, Alto, 800 being the few bestselling models in Indian Automotive Industry, in the financial year 2017-18 Maruti Suzuki holds 49.98% of the Indian Automotive market gross share.*

## **Introduction**

The automobile Industry is an important global driver of growth, income, innovation and employment. It plays an important role in country's Economic and Industrial development. The industry have a strong and positive multiplier effect that propels progress of a nation. Maruti Suzuki India Limited is a subsidiary of Suzuki Motor Corporation of Japan.

It was 1897, when the first car ran on an Indian road and till 1930 it's remained imported only. The first automotive industry emerged in 1940. Hindustan Motors pioneered its launch in 1942, followed by Premier in 1944 which gave Chrysler, Dodge and Fiat products. Mahindra and Mahindra launched in the year 1945 followed by the Jeep utility vehicles. Passenger cars were flagged by Hindustan Motors, Premier and Vanguard, to name a few of their ages. It was only post liberalization in 1992, multinational automakers such as, Suzuki, Toyota and Hyundai were allowed to Invest in the Indian markets. As a result to Government policies in favour of promoting the automotive industry, in 1981, Maruti-Suzuki established its presence in Indian market and became the first and only most successful automotive company. In 90's the market further expanded and we got 12 large automotive companies in India.

Starting the production in 1983, Maruti 800 was the flag bearer in 80's and 90's in the affordable segment cars in India. This was 796 cc hatchbacks that was based on the SS80 Suzuki and was India's first affordable car. The Maruti 1000 was introduced and the 970 cc was India's first contemporary Sedan. In 1993, the Zen a 993 cc, hatchback was launched and in 1994 the 1298 cc Esteem was introduced, later came Baleno, Wagon R, followed by Alto, Versa and Esteem Diesel, Ertiga, S-Cross, [Vitara](#), [Brezza](#), [Ignis](#) and [Eeco](#). In 2012 Maruti Suzuki sold its ten millionth vehicle in India. Maruti Suzuki advanced its production and adopted as per the changing India standards and its needs. The company holds its largest manufacturing unit in Manesar (India) and is growing bigger day by day.

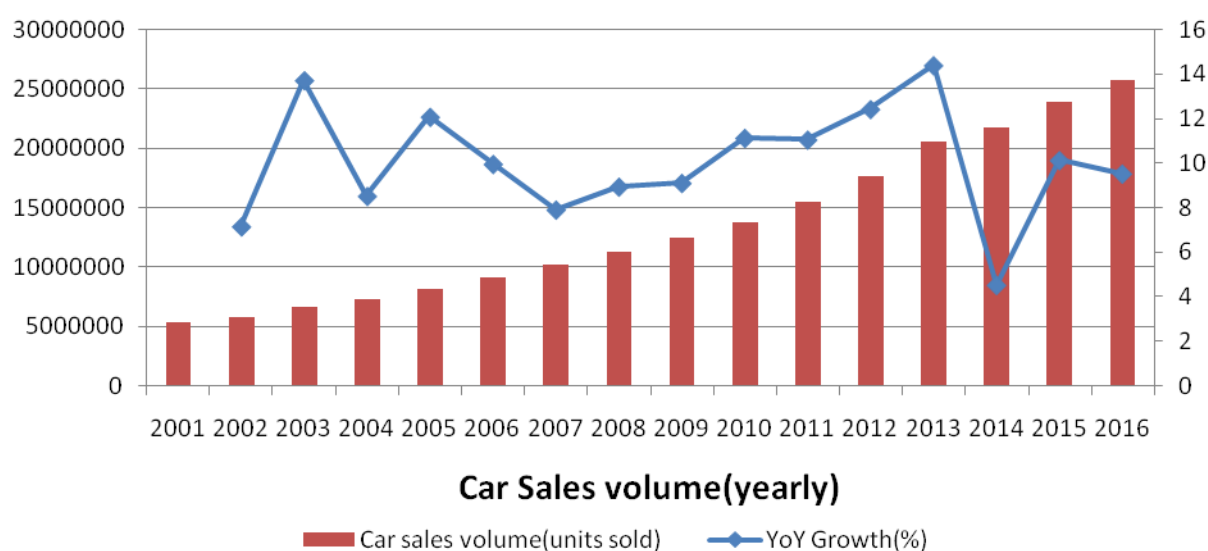
Maruti created history by going into production in a record 13 months. Maruti is the highest volume car manufacturer in Asia, outside Japan and Korea, having produced over 5 million

vehicles by May 2005. Maruti is one of the most successful automobile joint ventures, and has made profits every year since inception till 2000-01.

## Methodology and Analysis

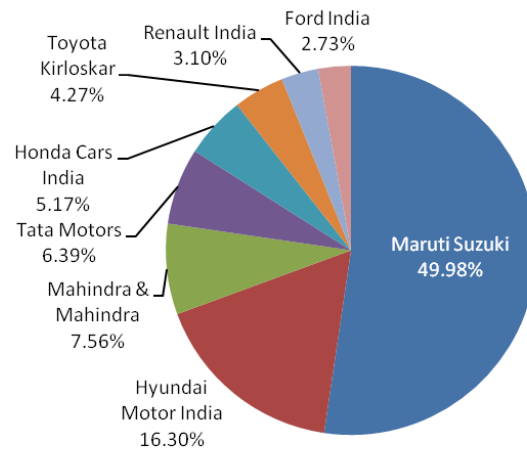
### Market Demand

India is expected to emerge as the third largest passenger vehicle market by 2021. Rapid urbanization and raising income play a pivotal role in increasing the demand for passenger vehicles. More women and youth entering the working class are pushing the demand for mobility. Hatchbacks, sedans, SUVs and luxury cars form the major segments in the automobile industry. Mini cars and hatchbacks are major sellers although new growth is expected to come from sedans, SUVs and premium cars.



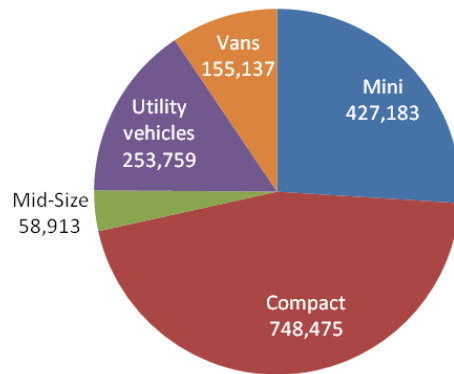
Source : Transport Research Wing, Ministry of Surface Transport

### Market Share 2017 - 2018



Source: <http://www.financialexpress.com>

### Segment wise Sales 2017 - 18



Source: <http://www.marutisuzuki.com>

### Factors affecting demand

#### 1. Fuel economy

Maruti Suzuki is able to offer products with best fuel economy rates. This performance expectation will only increase in the future. Better fuel consumption reduces cost per Km and reduces the impact on the environment.

#### 2. Affordability

The income of consumer is a crucial factor affecting demand in the automobile industry. India being a growing population, mostly working age professionals with high levels of disposable income will provide a healthy demand for passenger automobiles. The law of demand states that an increase in price drives down demand for the product and

vice-versa. Hence, Maruti Suzuki offers high quality automobiles in all segments at reasonable prices in spite of stiff price competition.

### **3. Demographic factors**

With large, young Indian population moving into urban areas, a significant amount of people with high aspirations and changing lifestyle are moving away from buying two-wheelers to buying an automobile.

Cars are becoming more of a necessity than luxury for comfortable and safe commute.

### **4. Finance options**

High availability of car loans at cheap interest rates, lower EMIs and excellent exchange offers are making prospective customers buy automobiles.

### **5. Marketing & Advertising**

Maruti Suzuki uses multiple channels to target consumers including social media. Maruti Suzuki offers specific discount to cater to people with different earning capacities. Attractive incentives like free insurance, extended warranty and free after sale services boosts demand.

### **6. After sales service and brand value**

Maruti Suzuki is an undisputed leader in automobile market for over three decades offering unparalleled after sales service across the country.

### **7. New offerings & value added features**

Automobile firms routinely launch special variants and newer models on existing frameworks luring more customers. Segment first features affect demand positively.

## **Substitutes and Complements**

Maruti Suzuki has many competitors across all segments, thereby increasing the elasticity of demand for Maruti products. Increased connectivity through infrastructure development (metro), last mile connectivity and economical options (app based cabs/autos) reduces the demand for self owned cars. Growing environmental concerns to shift to eco-friendly options like electric and electric hybrids have impacted the demand for gasoline powered automobiles. Increasing fuel costs or steel prices shifts the demand curve to the left. If the cost of steel or fuel rises, the demand falls.

|                           | 2017   |            | 2018   |            |
|---------------------------|--------|------------|--------|------------|
|                           | Price* | Units Sold | Price* | Units Sold |
| <b>Swift (Compact)</b>    | 7.47   | 584,850    | 8.29   | 748,475    |
| <b>Ciaz (Sedan)</b>       | 11.51  | 58,913     | 10.79  | 64,448     |
| *Price in Lakhs of Rupees |        |            |        |            |

The law of demand applies to most products of Maruti Suzuki where the price of its products increases, the demand decreases, exception would be Maruti Suzuki's Swift which has seen increase in demand with the increase in price. Price elasticity of demand ( $>1$ ) is relatively elastic as an increase in price will lead to decrease in demand. Maruti Suzuki products are priced lower than its segment rivals in the automobile market, so cost conscious consumers opt for lower priced Maruti Suzuki's automobiles. Income elasticity is elastic, meaning more income leads to more demand for Maruti Suzuki's automobiles.

The demand for all cars across segments was good except for Maruti Suzuki's Ciaz where the demand reduced in spite of fall in price. The swift has showed an increased in demand irrespective of price increase, this could be due to Maruti Suzuki's reputation in compact car segment.

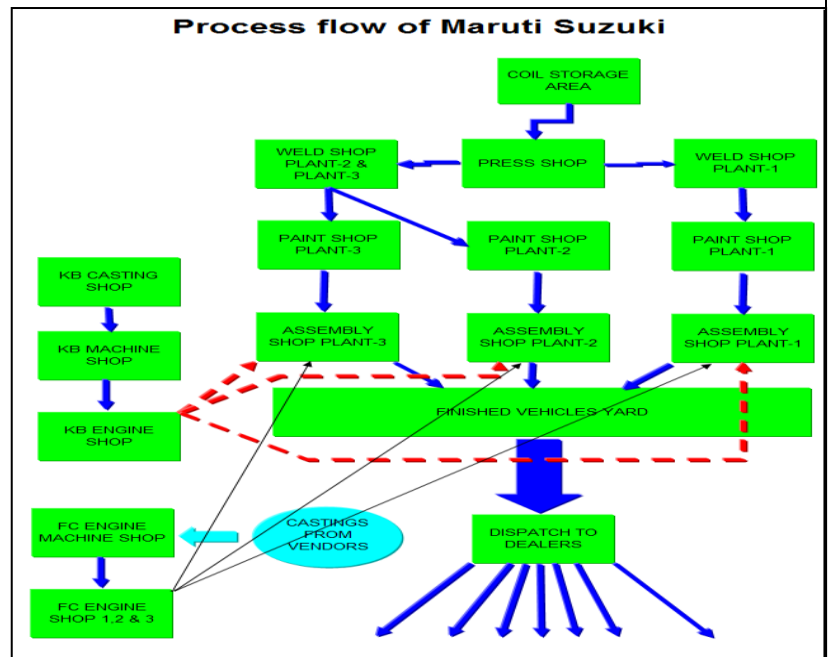
### **Production Business Vertical of Maruti Suzuki**

Production Division in Maruti Suzuki India Limited has been renamed as Production Business Vertical (PBV) after inclusion of Projects, Production Engineering, Vehicle Inspection & Supplier Quality Assurance divisions in it.



## Processes:

- Press Shop and Blanking Line
- Weld Shop
- Paint Shop
- Engine Assembly
- Assembly Shop
- Machine Shop, Materials
- Plant maintenance
- KB Casting
- KB Engine
- KB Machine Shop
- Shop, Production facility
- SQA (Supplier Quality Assurance)
- Production Engineering
- Projects, Vehicle Inspection



## Inputs: Substitutes and Compliments

- **Press Machine:** Mass production presses are continuous flow transfer presses.
- **SMED:** “Single Minute Exchange of Dies” new concept being adopted . This concept helps in changing of die set up within single digit minute (below 9 minutes) This helps us in improving machine utilization & operating efficiency.
- **Yield improvement** (Ratio of output panel to input coil in weight) is Best amongst the SMC group Companies. ( Presently at 63.2% )
- **Steel Coils:** raw material used to make body sheet metal parts. These are CRS coils made of mild steel having thickness from 0.65 mm to 0.8 mm & weight from 1 ton to 4 tons.
- **Blank:** Coils are fed to blanking line & continuous supply of sheet to cutting dies result in shaping of coils to plan blanks.
- **Panel:** Blanks are supplied to press lines for pressing. Blanks are converted to body panels by this process. Panels are stored in pallets which are supplied to Weld Shops for making White Bodies.

**Costs:**

- The total project Finance, priority, completion time and personnel's required was estimated. Initial plans were drawn up as to how the project would proceed to its final implementation
- The negative factors are the potential trade war between the USA and China. This could lead to other countries also being drawn into this unfortunate course of events. Oil prices, and the Iran problem, create a great deal of uncertainty about energy costs this year.
- Efforts to reduce the impact of inflation and rising material costs are another area where the Company has been making efforts to protect customer interests.
- The soft option of passing on rising costs to the customer has not been adopted by company Instead; hedging activities have helped in reducing the impact of a weakening Rupee.
- The Company continued its energy conservation drive with main focus on reducing energy cost and improving efficiency through adoption of new technology and optimization of processes thereby reducing operational costs
- Cost of inventories also includes all other costs incurred in bringing the inventories to their present location and condition.

**Economics of scale and scope:**

For the automotive part of the research, the scope was finalised as follows:

- The study was conducted for the products designed and launched after 2005
- Category of the vehicles: Light Commercial Vehicle: Maruti Suzuki:

Features of the vehicles: Documentation of Design and Styling of the three vehicles under study

- Consumer Study: Carried out by the auto companies as part of their design process
- Consumer feedbacks on the vehicles launched in the market, and their perception about the products.
- The researcher limited scope of his study only to the physical features, ergonomics and comfort of the three vehicles. This did not cover vehicle performance, engine, electronic and software.
- Studying Product Design Process used in the Indian automobile industry
- Suggestions for Future: The research offered this researcher a good opportunity to “Study Impact of New Product Design Process in Automobile

## **Market Structure**

### **Competing Firms:**

Maruti Suzuki has been one of the most popular brands in the Indian market; however, it faces stern competition when it comes to the demand of cars in the market.

1. Honda Motors
2. Toyota Motor Corporation
3. Nissan Motors
4. Hyundai Motors
5. Fiat
6. Mitsubishi Motors
7. Chevrolet
8. Tata Motors
9. Skoda Motors
10. Volkswagen
11. Ford Motor Company
12. Volvo

As per a recent report published, even after facing stiff competition Maruti Suzuki still grabs 50% market share in the passenger vehicle segment. They were able to sell 14% more than the previous year and the car sales stood at 1.65 million. An interesting thing to note is that in the fiscal year 2018, Maruti Suzuki was able to grab the top spot in utility vehicles as well. This was new since the company was lagging behind in this particular car segment.

### **Strategies for Competition:**

Looking at the competition from the local as well and foreign markets, Maruti Suzuki had to rethink its strategy quick and effectively.

- It started restructuring its operations as a whole. First and foremost, they upgraded all their manufacturing facilities to meet the foreign challenge with its claim of high end technology.
- Maruti Suzuki widened its product portfolio to improve the sales numbers and entered the utility vehicle industry which they had previously not got into.
- Expanded sales and service networks all over the country to improve serviceability.

- Increasing capacity using information technology in manufacturing
- Improving operational efficiency by cross training employees and building efficient training models.
- Venturing into other businesses like car finance, insurance, buying and selling used cars.
- Implementing and promoting more value-added services.
- Maintaining Market Dominance and leadership by continuing manufacturing of top end models like Maruti 800, Alto, Wagon R
- The customers also benefitted from newly launched fuel-efficient cars, low maintenance and also easy availability of genuine parts.
- Efficient manufacturing, just in time inventory systems, extensive after sale support, realization of economies of scale.
- As per a report published, the differentiation strategy is put into action by providing options to a customer by offering a car at each price point difference of ₹ 25,000. Essentially this means that a car with a marginal price difference would be available to a customer looking for upgradation.

#### **Pricing & Other Strategies:**

- Present pricing strategy imposed by Maruti Suzuki is both penetrative and competitive.
- A proper pricing is set only after extensive marketing research of the consumer needs and how much can a common man afford to pay for a car.
- Factors considered while setting up a pricing strategy include factors set by the government, cost of raw materials, competitive advantages, distribution rates, dealer profits and profits as a whole of the company.
- Emphasis of Maruti is always on volume of cars rather than pricing and this has helped the company achieve the largest market share when compared to other competitors in the market.
- Another aspect of pricing strategy which has helped Maruti Suzuki outperform every time is setting up percentages lesser than its competitors of the market and thus increasing the sales effectively year on year.
- An effective strategy which keeps Maruti Suzuki ahead in the race is a strong after sale part replacement policies. The genuine parts Maruti makes available for the customers

in case something goes wrong with the car are relatively at a very lower cost and the service cost over the years is also extremely cheap. Hence, majority of the people opt for this brand.

### **Recommendations**

- Indian rural market has a huge untapped market. Maruti Suzuki strategy of reaching out to rural markets should be supported by products catering to their demands. Also, Maruti Suzuki should market their products more aggressively conducting road shows, car mela with attractive discounts and finance options that reaches rural audiences. This will further increase their market share and maintain it for the long term.
- Maruti Suzuki associated banks and financial institutions should provide loans at cheaper interest rates to the burgeoning middle class.
- Consumers prefer fuel efficient cars. Maruti Suzuki can improve their technology to produce better fuel-efficient cars and also diversify to include CNG, LPG and electric cars at affordable prices.
- Maruti Suzuki should introduce Innovative designs and premium interiors to their existing models and come up with more variants in future that are technologically advanced.
- Maruti Suzuki should have a strong buyer-seller relationship with its existing customers to enhance the reputation of the firm. This creates value and helps in customer retention.
- Customer care and after sales service should be made more user friendly and less time consuming to increase customer satisfaction.
- Regular and periodic feedback should be collected from existing customers. This helps not only in improving its performance but also in understanding the customer's needs leading to innovation.
- Maruti Suzuki can cater to the youth and women drivers by offering advanced features such as automatic and 4x4 versions.
- In order to meet the demand and supply of cars, Maruti Suzuki should reduce the lead time of their vehicles and widen their dealer distribution network.
- Maruti Suzuki should conduct more frequent meetings with marketing and sales managers, Production department and Customer care officers to formulate innovative strategies to increase and hold the market share.

- Maruti Suzuki should improve the dealer distribution system. Dealer plays a vital role and is the connecting point between the customer and company. Hence a strong relationship and effective collaboration must be maintained by the company with the dealers and conduct meetings more often and involve the dealers in their decision-making process.

## **Group 10: Microeconomic Analysis of Edge Verve (an Infosys Company)**

### ***Executive Summary***

*The IT industry has emerged as one of the leading contributors to the Indian economy over the last 2 decades. Along with changing trends in technology usage, the Financial Sector has seen major disruptions over the years with the increasing usage of Financial Software to manage front-end and back-end offices and meet the increasing number of online banking customers. The core banking software platforms used in these transactions are critical to both users and banking staff.*

*Infosys defines, designs and delivers technology-enabled business solutions, but its primary strength relies on its Financial Software and Services, particularly, it's software application suite Finacle, by its wholly owned subsidiary - EdgeVerve.*

*Infosys EdgeVerve is a company that has been on the leading front of these technologies and developed its core banking software suite - Finacle.*

*Infosys Finacle is a Enterprise banking suite that offers several software suites for the Financial Sector to better manage their daily activities. With the use of technologies such as robotic process automation, the banking sector have seen substantial improvement in transaction times along with ease of operability and cost-effective systems.*

*This Microeconomic analysis aims at understanding the strategic positioning of Infosys - EdgeVerve and its main product - Finacle, in the Financial Software Sector. It covers all aspects of demand, production, market structure and ends with recommendations for EdgeVerve to retain its position in the market and expand capabilities to address growing markets, which consist of new technologies in the banking space.*

## Company Overview

Infosys Technologies Ltd. is a global information technology and consulting company headquartered in Bangalore, India. The company is a global leader in “next-generation” IT and consulting and booked revenues of more than US \$4.8 billion in FY 2010.

It’s subsidiary, **EdgeVerve**, which is wholly owned by Infosys, contributes to in revenues and is one of its largest subsidiaries both in capacity and market presence. It develops on all three fronts of Financial services, i.e People, Processes and Tools. **Finacle**, developed by Infosys, was first developed in 1999 and had major Indian customers like SBI, DBC, Punjab National Bank, Kotak Mahindra, etc as Customers, before going global with Emirates NBD, and Qantas.

Finacle was identified as a long-term leader by Forrester for offering a complete omnichannel banking solution which offered a customer centric and complete solution.

Infosys-Finacle has been a leader in the Gartner Magic Quadrant for many years in a row (2014-2018) and the solution was rated to have the best strategic vision and execution ability. It has been able to deliver this solution to clients across the globe and even meet new regulatory compliances put in by the European Union, like the GDPR (Global Data Protection Regulation), which has set it apart from its competitors.

Currently, the company has more than 50 offices around the world, along with development centers in India, China, Australia, the Czech Republic, Poland, the U.K., Canada and Japan. Infosys as a company employs over 200,000 people worldwide, with EdgeVerve ecosystem constituting at least one-third of this workforce. The company does about 40 percent of its business in EMEAR, 53 percent in APAC and 10 percent in the Americas., and has more than 200 banking customers in more than 65 countries.



## **Methodology**

This report was created by a five-member team from information compiled over a ten-day period using a variety online sources as mentioned in the glossary.

## **Microeconomics of Venture**

The banking customers mainly have Business outcomes that drive their demand for bleeding-edge software systems. They rate the efficacy of a software with the speed of customer transactions, quickness in updating customer-facing records, increasing back-office productivity, requiring more detailed reporting of financial transactions and faster time to market for new product introductions (i.e. outbound marketing campaigns) and the ability to scale, i.e. support millions of customers worldwide. However, along with product features being a primary driver, there are several other microeconomic drivers that affect the demand of their Finacle Software suite.

### ***Income of Banks***

Without comprehending on the generated business income, the customer would fail to select the number of processes within an organization that could be automated using Finacle Software designed for a specific task. Low business income customers (with higher NPAs, lower interest rates) would adopt process automation for only the core processes within the organization. High business income customers would adopt process automation covering all processes, with primary focus on those processes that could lead to generation of higher revenue and efficiency.

### ***Price of Other Technologies***

The Price of other software systems that integrate into the Finacle software suite does affect demand. For example, if the cost of procuring hardware for building a datacenter, cost of storage systems increases, it would directly impact the demand of Finacle systems deployed on the premise (with interoperability between other systems), and the banking customers would choose to go for a vendor that uses different backend technologies.

While factoring in the process automation cost, these customers (other organizations, since it is a B2B market) assess the cost of running the process using current technologies and labour.

### ***Customer Taste***

Different banking customers have different needs and tastes. Some rely highly on technology enabled services (such as HDFC, CitiBank) and others that cater to legacy customers prefer

branches (like SBI and Union Bank) and rely less on bleeding edge tech. Taste of the customers highly affect demand of this product and it is important for the Product Management team to cater to all different customer types and segments.

### ***Population and Composition***

Based on the count of targeted end users, customers are obliged to scale their services with reliable and efficient processes. The demographic of population leads to deployment of Finacle interoperability services, international consolidation databases and services with country specific customization.

### ***Government Regulations***

Based on the government regulations or inflation, banks tend to either increase or decrease the interest rates for money deposited, money-lending rates to end users etc. Also, end users decide to opt to use the banking services (like NEFT, RTGS etc.) lesser or more based on the service charges levied by the government.

### ***Customer Expectations***

Customers require a Software platform like Finacle to be agile, scalable with rapid transition and implementation based on the current market trends. For example, ability to be reliable along with efficient for process automation. Also based on each customer's requirements, Finacle should cater with out-of-the-box solutions and design for process re-engineering systems and greenfield systems.

### ***Derived Demand***

Given the stringent deadlines, it is necessary to undertake a prioritization exercise to decide the numerous features to be implemented and in what sequence. A key requirement was that all features must be able to handle the enormous volume of data gathered on real time basis.

### ***Others – After sales support***

Periodic software updates or maintenance activities are crucial and are to be performed during non - banking service time.

### ***Substitutes and Complements***

Due to fluctuation in costs associated with RPA (robotic process automation) such as increase in back-end technologies prices, or if huge storage space are unavailable easily, bank customers

would prefer to deploy more physical branches or end customers would prefer to adopt 3rd party payment systems. Additionally, with more technological advancements like block chain, cryptocurrencies, Finacle software needs to be adaptable and robust with cloud computing feasibility.

When we look at complementary products, Infosys Finacle has other firms that integrate with the platform by offering complementary software that helps with customer care software, customer relationship management (CRM), credit management systems along with complementing hardware and software which encompass traditional on-premises servers, cloud computing systems (like Amazon AWS etc.) without which the banking cycle would be incomplete.

### **Elasticity of Demand**

Financial Software systems are integral to the changing landscape (More and more users are adopting online payment gateway options, for example, people are using 3rd party Payment systems like PayTM, ZetaPay, AmazonPay, Google Wallet, etc) and the product (a Financial or Banking system) is now a necessity more than a value-added feature of a Banking business.

Financial systems have shifted from an Elastic demand (with several players offering similar software applications, while banks were relying more on legacy systems) to a more Inelastic demand, where businesses are unable to operate efficiently without the existence of a Financial Software suite that manages their end-to-end operations.

This shift in the demand curve and elasticity can be seen below, with the demand curve becoming steeper, with the quantity demanded of Software, almost unchanging in the recent years.

### **Production Function**

The output quantity of Financial software and services produced  $Q$  can be described as a function of the three main input types which are Capital ( $K$ ), Labour ( $L$ ) and Technology ( $T$ )

$$Q = f(K, L, T)$$

Where,

$L$  = Labour which is the Skillset of Software Engineers developing the product, along with Implementation Engineers who provide consultancy services and other supporting managerial functions

K = Capital required to startup and sustain this software endeavor, which includes both Monetary capital (for System and server infrastructure, licenses, etc.) and Intellectual Capital (Patents, Expertise in the Banking domain.)

Technology = Technologies include infrastructure servers, databases, cloud computing, Artificial Intelligence, Speed in cloud computing and scalability of internet connectivity etc.

### **Cost Structure**

The Finacle cost structure resembles a generic Software and Services company, comprising of Fixed, Variable and mixed components.

#### **Fixed Costs**

The cost of maintaining the infrastructure to support software on a premise-based system would have fixed components, especially database management systems, server farms, data warehouses.

#### **Variable Costs**

Variable cost includes the labour, software consulting engineers and support staff who help maintain and develop the software along with the leased component (such as cloud infrastructure which has pure variable components for usage based costs). Engineers (Consulting and Implementation) who are charged per hour also need to take into consideration the deployment time for every project and customer.

#### **Economies of Scale**

Finacle Software can be deployed across various continents with higher interoperable, reliable and robust systems. Infosys accommodate skilled manpower to cater to end customer urgent requirement by ensuring lesser turn-around time for system downtime or failure.

#### **Economies of Scope**

Infosys EdgeVerve have benefited from Economies of Scope by covering the entire lifecycle of a Banking employee (back office) and a Banking user (end user) requesting for Financial Services.

The product consists mainly of Payments (An ISO 20022 based advanced payment service hub and payment gateway), but has added multi-channel capabilities (Banks can use multiple channels without losing context of the transactions), Outbound Campaigns (Offers and Catalogs for Bank marketing), Liquidity Management (Banking Customers can manage their

internal front and back offices to manage and optimize liquidity), Loan management (Helps banks manage their credit lifecycle and retail, commercial loans) and also aids in Credit rating and Credit quality assurance. This is nothing but an application of the Economies of Scope to capture the entire market.

### **Market Structure**

The Financial Software sector is an Oligopolistic playing field with few major players (both Leaders and Visionaries) Source: Gartner Magic quadrant. This makes the market concentrated to a few players, namely Infosys (Finacle), Accenture (Alnova), Oracle (FlexCube), SAP (Transactional Banking), TCS (BANCS), Temenos (T24). The segmentation of the market is mainly on Home Country (Tier 1 and Tier 2) banks, and International Software operations. Although primarily Oligopolistic in nature, the firms in the smaller segments are slowly trying to convert this into a Monopolistic competition by offering key differentiation in the products. This is seen in the key product differentiations with the types and number of Integrations offered by each of the vendors, along with support for Automation using machine learning and artificial intelligence to detect fraudulent transactions, along with the end to end automation of key tasks.

This differentiation is making the market a monopolistic competition and since the total addressable market (for core banking services) is fixed, customers are starting to favor these differentiated services offered by EdgeVerve, bolstering their current market position as leaders in the quadrant.

### **Competing Firms, Market Power**

Using the Porter's five forces model to understand the market forces and its various sources, we can classify the forces and sources of Market Power as follows:

1. **Threat of New Entrants:** Barrier of entry for new entrants is pretty high due to which companies have low threats. The barriers include:
  - patents required for dealing with banking sector
  - it's considered as a niche market
  - the payment gateway is hard to replicate
  - significant amount of capital to start along with skilled labour required to design and implement the technology
  - Knowledge and technologies for banking domain needs to be reliable, secure and agile

Also, moving ahead a lot of startups are trying to enter blockchain and cryptocurrencies domain, due to which Finacle software has lesser threat from smaller companies.

2. **Rivalry Among Players:** A recent study showed that there are around 10+ players who earn between 45-50% of the software exports and employing approximately 35% of the employees in the IT Industry. These 10+ players offer almost all the IT services across 60+ countries and also have the state-of-the-art infrastructure. Infosys has a workforce of 200,000. Low cost and very little differentiation is possible. This just goes to say that rivalry in this industry is inevitable and there is a change in technology every day.
3. **Bargaining Power of Buyers:** Since the switching costs (rip-and-replace) in case of Finacle software and services is very high, the bargaining power of buyers is very low. Contracts are large and long drawn, and implementations are tedious since they take time to customize and integrate. On the contrary, their BPO segment that offers services only, has a very low switching cost and therefore the bargaining power is very high.
4. **Bargaining Power of Suppliers:** The suppliers can be classified into two:
  - **Knowledge Professionals:** Knowledge professionals have a high bargaining power in the IT-ITeS industry as the roles and responsibilities to be performed require high level of skills and expertise. On the contrary the BPO industry has less bargaining powers and the skills required to perform the roles are relatively lower and easier compared to the IT-ITeS.
  - **Hardware:** A support of infrastructure and hardware is required for every IT company, the bargaining power for hardware is high and players such as Dell, Intel and IBM play a very important role in the IT industry.
5. **Threat of Substitutes:** This Industry is ever evolving and with the entry of new disruptive technologies like Cloud Computing, Blockchain, Data Analytics & Social Media. Infosys must constantly work on R&D to launch new services to its clients.

### **Strategies for Competition**

1. **Focus on Niche Services:** Some Medium segment players have adopted to provide end to end niche services, which differentiates them from the others. The IT industry revolves around the expertise for services, the more the service the higher the demand.
2. **Mergers & Acquisitions:** Infosys has acquired over 11 Firms since 2009. In comparison to TCS which has acquired only 4 firms since 2008. Cognizant has acquired over 30+ firms since 2008. This goes to say that mergers and acquisitions help in

acquiring new talent, infrastructure and new technologies which would give a competitive edge.

- 3. Product Differentiation:** According to a report published by Mc Kinsey & Co only 20% of the technical graduates are competent to work on Offshore development. The BPO industry has just over 12% who are competent. Managing Attrition levels is a key competitive strategy.
- 4. Reduction in Attrition Levels:** According to a report published by Mc Kinsey & Co only 20% of the technical graduates are competent to work on Offshore development. The BPO industry has just over 12% who are competent. Managing Attrition levels is a key competitive strategy.

### **Pricing Strategies**

Infosys EdgeVerve deploys projects on large, one-time contracts of 3-5 year duration, and mainly rely on renewals of the software and services for recurring revenue from existing customers. This pricing strategy ensures that rip-and-replace is not possible using another vendor. They also charge for customized integrations which are tailored to the bank's needs, further tightening the coupling of the business operations with the software system. The pricing of the entire project takes into account the personnel, hardware, software, and consulting charges which cover Software Licensing, Implementation & Consulting and Maintenance and Support.

The ROI payback period for customers is guaranteed at 2 years where the banking customers recover the cost of the system deployed from the upfront and annual payments in the contract. This industry's pricing is highly dependent on the demand of the software along with other cost factors like hardware or infrastructure services used to deploy the software, and the cost of skilled manpower to support, develop and deploy this software for different types of customers and use cases.

Indian Software and Services sector has a major advantage with pricing owing to macroeconomic factors (i.e. the weaker currency, dollar strengthening) since all the products are priced in USD. Renewals in many European theaters are large, and in the magnitude of 100 Million in some cases.

## Other Strategies

The Infosys EdgeVerve vision works on 4 strategic pillars

1. **Scale Agile Digital:** Invest in digital capabilities & priority services
2. **Energize the Core:** Infuse AI and automation into the products by leveraging NIA
3. **Expand Skilling:** Re-skill talent at scale using knowledge management
4. **Drive Localization:** Hire locally in markets, provide local delivery & training

Infosys' corporate level strategy includes

1. **Global delivery Model:** Producing where it is most cost effective and selling it where it is most profitable
2. **Moving up the value chain:** Investing in the research and development of software in the earliest stages of life cycle. This includes their recent acquisition of Blockchain and Cryptocurrency companies in February 2018.
3. **PSPD Model:** "Predictability of Revenues, sustainability of revenues, Profitability, De-Risking" for Risk Management by converting more contracts into recurring revenues and renewals.
4. **Low cost Global delivery 24/7:** Outsourcing their delivery centers to low cost centers.
5. **Costing & product differentiation:** Little differentiation with low-end services of value chain and high differentiation in high end services of value chain like software products and packaging solution.

## Recommendations

The key recommendations for Infosys EdgeVerve covers keeping relevancy in the market, increasing market presence and expanding to other countries which are currently blue ocean markets for Financial Software Systems.

**Technology Innovation:** With Blockchain and cryptocurrency spurring tremendous interest in the financial sector, EdgeVerve would benefit from making key strategic acquisitions of Blockchain companies and other firms specializing in the handling of cryptocurrency transactions. Since the traditional banking systems and monetary system are wary of crypto based systems which are unregulated, Infosys EdgeVerve would benefit immensely from Technology Innovations in Blockchain and Cryptocurrency integration and support on their existing product portfolio.



**Quality Control:** EdgeVerve systems have lost a few major deals in the US market owing to quality concerns on their products. The recommendation is to have a strict Quality Control in place to re-establish confidence in their products and increase customer confidence.

**Knowledge Management:** The key to business growth is in its people and knowledge management has gained importance over the last few years. Managing the Explicit and Tacit knowledge in an IT industry on the edge of changes induced by AI and robotic process automation is crucial. Retaining Knowledgeable talent is a key recommendation for Infosys Technologies.

**Moving to a SaaS model:** Traditional Banking systems have stayed away from cloud enabled technologies owing to security concerns and data privacy issues. Moving to a Software-as-a-service model would not only make their recurring revenue predictable, but it would also improve their customers' existing cost structures by eliminating large, unpredictable capital expenditures. As their banking customers start dealing with more NPAs (non-performing assets), they will face a financial crunch in renewing these large contracts. Changing the cost structure through flexible pay-as-you-go licensing and integrating their customer CRMs through integration would both help retain their customers and also prevent customer attrition (through strong interlocking of customized integrations).

## **Group 11: Microeconomic analysis of Nestle**

### ***Executive Summary***

*This report consists of a detailed microeconomics analysis of “Nestle India”. The purpose of this report is to study the microeconomic factors impact on an organization. The Industry chosen for the study was Food & Beverage Industry and the company selected is “Nestle India”.*

*Nestlé S.A. is a Swiss transnational food and drink company headquartered in Vevey, Vaud, Switzerland. It is one of the largest food company in the world. Nestlé has over 2000 brands with a wide range of products across a number of markets, including coffee, bottled water, milkshakes and other beverages, breakfast cereals, infant foods, performance and healthcare nutrition, seasonings, soups and sauces, frozen and refrigerated foods, and pet food.*

*The first section of this report consist of a brief introduction on the company profile which includes the history of the company and detail on current operation including both geography & product offering. It also has a small note on the Food & Beverage industry as whole.*

*The report than in brief contains the analysis done on few of the variables with a view to do the microeconomics analysis of the company. The study is based on qualitative analysis with secondary source of data available.*

*The study of the microeconomics variables considered are to understand the behaviour on the demand for Nestle India. The study in brief contains factors impacting the demand which includes the current state, composition of population, substitute products, price of related goods, price & income elasticity of demand as well as understanding production side variables such as process, input cost, availability of substitute/compliments product and scope related to economies of scale which has an impact on the organisational performance.*

*The later section of the reports contains a brief study on the market structure for Nestle India. This is done with a view to understand the market/industry in which Nestle operates. The market condition and competition plays a very crucial role in an organisations performance hence we have tried to cover the competition dynamics for Nestle and relative market power.*

*There is also a detailed section on understanding the pricing strategy of Nestle India related to it's product offerings and related variables impact. Pricing play's a very crucial role for*

*any organisations performance and the relative power based on the market condition helps an organisation put their strategies in place accordingly.*

*Based on the study and the analysis done for the company selected, we also have come up with few recommendations from our side which in our view would help Nestle improve it's market competitiveness and hold the market leader position.*

## **Introduction**

### **Need of The Study**

This study was done with a view to do an microeconomic analysis i.e. study the factors which impact an organizational performance operational in a market which consist of buyers and sellers.

### **Objective of The Study**

The main objective of the study includes –

- Understand the demand side variables for Nestle India
- Understand the production side variables for nestle India
- Study the market structure for Nestle India
- Study the Competition and related strategy
- Study the pricing strategies
- Recommendations basis the microeconomic analysis done

### **Industry Overview**

India is expected to become the fifth largest consumer market in the world by 2025, according to a paper prepared by the Confederation of Indian Industry (CII) and Grant Thornton. Food and beverages is the biggest of the consumption categories. The F&B sector is supported by the vast agriculture sector: India is the biggest producer of pulses, and the second biggest producer of rice, wheat, sugarcane, and fruits and vegetables. The Food processing sector is the key link between Agriculture and Manufacturing. In a developing economy like India, it contributes as much as 9 to 10 % of GDP, in Agriculture and Manufacturing sector.

## **Company Overview**

Nestle was founded in 1866 by Henri Nestle in Vevey, Switzerland. Today it is the world's leading nutrition, health and wellness company with factories and companies worldwide.

Nestle company is health, nutrition and wellness firm that supplies, manufactures and produces ready dishes and cooking aids, pharmaceuticals and ophthalmic goods, milk based products cereals and baby foods. The company operates across six zones that include zone America, zone Oceania, zone Africa and Asia. The company aims to be the leader in the food industry more specifically health, wellness and nutrition.

## **Research Methodology**

This study is based on qualitative data analysis mainly dependent of secondary sourced of data available for the study.

## **Microeconomic Study**

### **Demand for the product, Factors Influencing Demand**

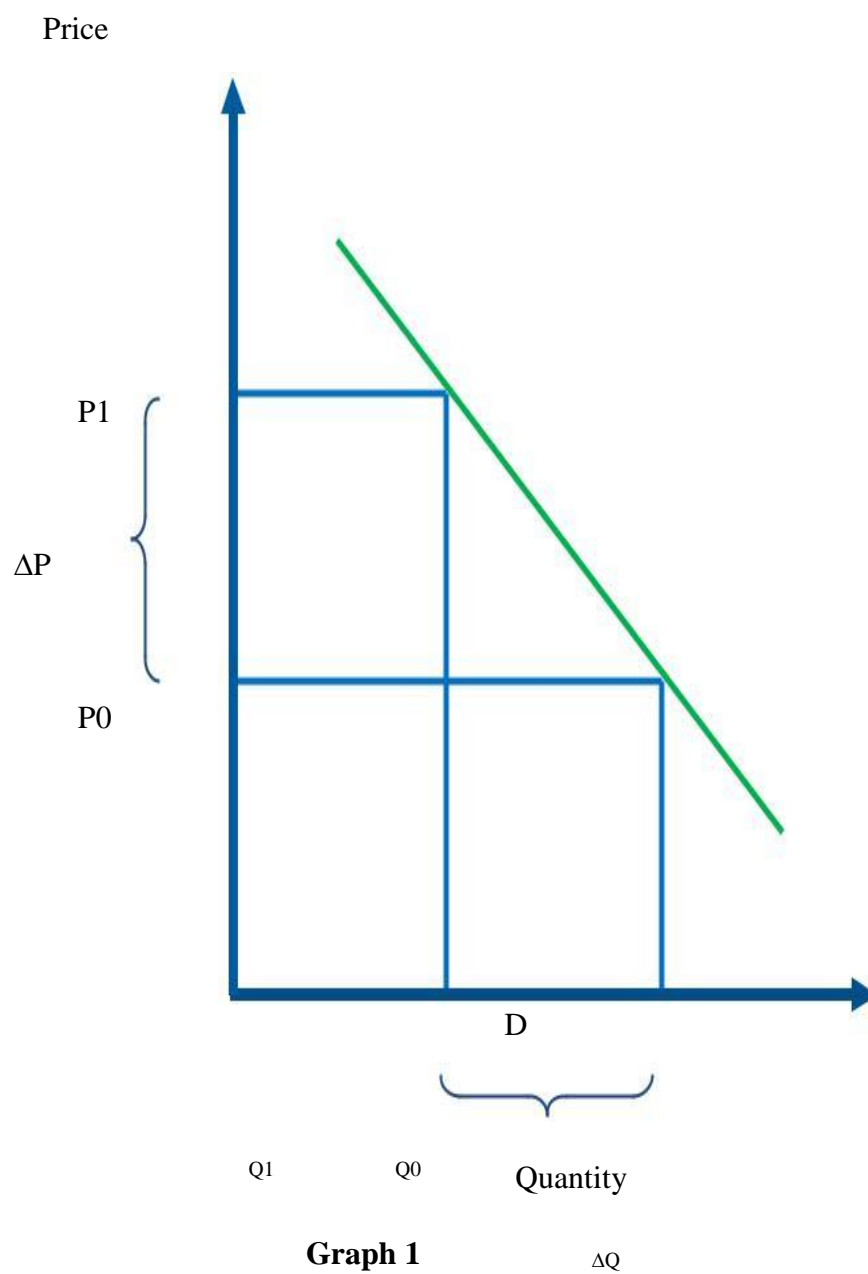
Nestlé's Maggi is the market leader in the noodles market with market share of around 70%. Nestlé has good presence in coffee and chocolate category as well. The demand of these consumer goods is largely affected by price, price of related goods, Taste, Composition of Population, Consumer perception (the case of Maggi failure in 2015 is an example), competition in market.

Nestlé India lost almost 60% of its revenue compared to previous year in 2015, when FSSAI declared that its product Maggi noodles was detected with higher lead content. The long-standing trust on the brand was affected and production was halt. The demand of the product dropped significantly due to change in consumer perception on the product, even though it was a market leader earlier. Maggi started to regain its lost market by introducing Maggi noodles in more flavors and varieties, including that of Oats noodles, supported by aggressive

communication strategies (new ads and commercials) thus, slowly picking up the demand by end of 2016.

- **The Price of related goods:** this relates to the price and demand for the substitute product, if Nestlé Chocolates prices are higher in the market, then consumers might start buying substitute goods such as ice cream, cakes etc. But since chocolate market is itself a big market with lot of brands (Market competition is high), consumer has lot more to choose. There is a major role for competitors, if Nestlé chocolates prices are higher, consumers can go for Cadbury chocolates. The price increase in the complementary products such as milk, sugar, Choco powder will affect the price of the product, thereby affecting the demand. So, the price of related good plays an important role in determining the demand of Nestlé's products.
- **Composition of population:** Nestlé's Maggi noodles have highest market hold in urban cities like, Bangalore, Chennai, and Mumbai etc. Maggi has moved from being a mother's aid towards a necessity for young men & women. Nestlé has been successful in transforming this consumer perception through strong communication strategies. Clearly, demand for Maggi is higher in population where there are higher percentage of young people and working women. While, this may not be the same for other products, like Chocolates which is consumed by people of different age groups

**Price elasticity of demand** is a unit-free measure of the responsiveness of the quantity of a good or service demanded to change in its price when all other factors on buying remain the same.



Consider the graph above (Graph 1) depicting the price of Maggi risen from P0 to P1. If the coefficient of price elasticity of demand is between 0 and 1, then the demand is elastic. For example, a 20% rise in price of Maggi might cause the demand for Maggi to decrease by 10%. \*Price Elasticity of Demand =  $(\Delta Q) \% \text{ Change in Quantity demanded} / (\Delta P) \% \text{ Change in Price}$ . Price Elasticity of Demand =  $10\%/20\% = 0.5$

If price elasticity of demand is lesser than 1, the demand responds more to a change of price.

Therefore, the demand for Maggi is elastic.

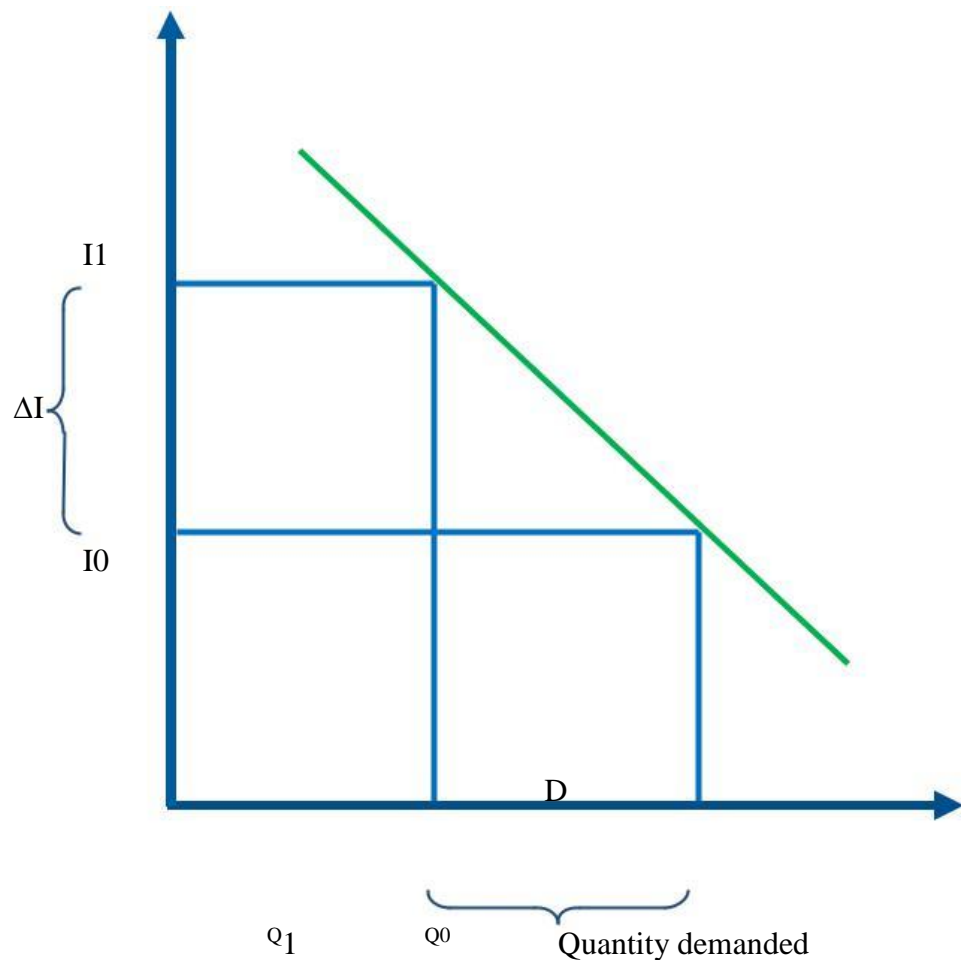
There are a few determinants of elasticity for these FMCG food products.

- The availability of substitutes. The more substitutes a product has, the more elastic the demand. For example, Maggi noodles can be substituted with oatmeal.
- Level of income: People with higher incomes tend to have an inelastic demand. For example, people with high income don't have a problem in the rise of price for KitKat (KitKat has now introduced new variants with higher prices doing well).
- Price of the product itself. The more expensive (comparatively) a product, the more elastic it is.

### **Income Elasticity of Demand**

Income elasticity impacts change in demand curve. When income increases, the quantity of demand increases and when income decrease, quantity of demand decreases. As income increases, people tend to purchase more products. On the other hand, Nestlé products might become “inferior” good for some people as it is sold at low price. For example, Nestlé chocolates are sold at low or comparative prices. When income increases some consumers rather switch to more expensive or more-prestigious chocolate products such as Ferrero Roche rather than purchasing Nestlé products (As depicted in the graph below, Graph 2). When income decreases, the demand for normal goods will fall. Consumers will switch back to Nestlé as they are bought at an affordable price.

Consumer's Income



**Graph 2  $\Delta Q$**

### **Production Variable**

Nestle' is using standard costing as a base for input measurement. Standard costs are usually associated with a company's costs of direct material, direct labor, and manufacturing overhead. Rather than assigning the actual costs of direct material, direct labor, and manufacturing overhead to a product, nestle' like many manufacturers assigns the expected or standard cost. As a result, there are almost always differences between the actual costs and the standard costs, and those differences are known as variances.



If actual costs are greater than standard costs the variance is unfavorable. An unfavorable variance tells nestle' management that if everything else stays constant, the company's actual profit will be less than planned. If actual costs are less than standard costs the variance is favorable. A favorable variance tells management that if everything else stays constant the actual profit will likely exceed the planned profit.

- **Direct Materials Usage:** Variance Under a standard costing system, production and inventories are reported at the standard cost—including the standard quantity of direct materials. If the manufacturer uses more direct materials than the standard quantity of materials for the products manufactured, the company will have an unfavorable direct materials usage variance. If the quantity of direct materials used is less than the standard quantity for the products produced, the company will have a favorable usage variance.

- **Direct Labor:** Standard Cost, Rate Variance, Efficiency Variance "Direct labor" refers to the work done by those employees who make the product on the production line. ("Indirect labor" is work done by employees who work in the production area, but do not work on the production line. Examples include employees who set up or maintain the equipment.)

### **Substitutes & Complements:**

Thereafter, manufacture follows two different paths to produce either cocoa powder (used in chocolate drinks, pastries, ice creams and desserts) or solid chocolate. Because cocoa powder requires a low-fat content, the paste is pressed to remove most of the cocoa butter. It is then crushed, pulverized and finely sieved. Making solid chocolate requires combinations of four basic ingredients: cocoa paste, cocoa butter, sugar and milk. The mixture depends on the type of chocolate being produced.

### **Costs:**

For all short run average cost curve for Nestle will create a long run average cost curve. Also, marginal cost for Nestle will depend on lot many inputs as it is a global company. Revenue for a particular region will depend upon sales in the region.

### **Economies of Scale and Scope:**

Typically, chocolates are produced using a continuous flow method along a production line dedicated to producing large quantities of a single product. A continuous flow method is far

more economical than producing in batches, for example, because once the equipment settings have been established the line can run cost efficiently. This production advantage is known as a technical economy of scale. By producing very large quantities at very low costs per unit, a company like Nestlé is able to offer consumers good value for money and so remain competitive.

## **Market Structure**

### **Competitors Analysis**

Nestle-India has very small number of competitors. Its a oligopoly structure wherein there are small number of large competitors. Nestle-India competitors include FMCG companies which includes Britannia, Cadbury, Hindustan Unilever, Parle Agro, and the very new Patanjali Ayurveda. With the net Market Cap of almost 100000 Crores and sales turnover of almost 10000Cr it is the largest FMCG firm in the market.

- **Market Power**

Over the years it has built a very strong brand identity in the industries and in heart of its consumer. Maggie instant 2 min noodles being one of its most favorite brands in young and old population alike. Though in 2016, due to controversial ban on Maggi by Indian Govt due to alleged presence of excess lead in some of its packaging, the market share fell to 40% from a record 70% a year before that, it has recovered from the crisis already. As of August 2018, its market share stands at 60%.

This shows market power and brand value for Nestle-India. It's another product Nescafe with its instant coffee product is used in almost all small stores offering coffee which has built a good value. Nescafe is common among youths who stays in hostels and away from home due to its instant nature. In all we can say that Nestle-India has a good market power over other brands.

### **Strategy for Competition:**

Nestlé's success is built on its Nutrition, Health and Wellness strategy. Nestlé's portfolio is well-positioned for growth. The key to long-term success continues to be understanding and serving the consumer. By identifying consumer trends early and acting quickly to capture them, we remain at the forefront of the fast-moving consumer goods industry.

Nestlé has the largest research and development network in the food and beverages industry, continually innovating and renovating its portfolio to meet changing consumer demands. The Chocolate and confectionary business worked on improving consumer insights and has been working with Nestle R&D to innovate and renovate products that will strengthen its portfolio. Nestle 'Start Healthy Stay Healthy' reached out to the supporting eco system of mothers to emphasize the importance of their role in continued breastfeeding with the objective to build great awareness and advocacy for a better connect with the customers.

Nestle in 2015 continued to upgrade its warehousing infrastructure with key distribution centers ready to operate in the future with proper infrastructures, systems, processes. Nestlé is committed to margin expansion. We have set an underlying trading operating profit margin target of 17.5% to 18.5% by 2020, up from 16% in 2016. The primary driver is to reduce structural costs in non-consumer facing areas. Well-identified projects in manufacturing, procurement and general administration are expected to deliver total savings of CHF 2.0 to 2.5 billion by 2020. Nestlé regularly revisits its capital structure to reflect changing market conditions and strategic priorities.

### **Pricing strategies:**

We see that Nestle adopts different strategies of pricing for various products. The products like Maggi and Nescafe are now used in almost every household and are priced marginally higher than the competitors as the company believes that people will still buy these products irrespective of slightly higher price because they don't want to compromise on good quality which company offers. The company relies heavily on two products Maggi and Nescafe which are in great demand and offer discounts when bought in bulk. However, we see the prices are competitive in chocolate segment as they face very stiff competition from Cadbury. So, we see that pricing strategy of Nestle is a mix depending on the product and competition.

- **Other strategies**

Nestle focuses extensively on advertising and marketing its products. The supply chain network is very strong, and the products are available through groceries, supermarkets and online market. They strive hard to get the consumer base. Maggi was introduced as snacks which could readily be prepared in 2 minutes and this attracted many of the mothers and kids. The

company have always come up with many innovative ads like “take a break and have a kit-kat”, Nescafe tunes and many more that promoted its sales. Also, they pay special attention to the quality and nutrition aspects of the products. The company has adopted a mix product strategy in food industry as they offer dairy products, beverages, chocolates, ready to cook foods, baby food products etc.

## **Recommendations**

Basis on the study our recommendation is as below -

1. For Nestlé to maintain its competitiveness in the market it needs to ensure that, when proceeding with the segmentation of a market, its segments are identifiable, sizeable, stable, and accessible and coincide with the company’s goals and resources. It must be identifiable in that it shouldn’t be difficult for the marketer to recognize the chosen segment. Ex - KitKat dates to 1936 (Nestlé Professional, 2013). For this reason, it could be seen by younger generations as an old brand and therefore does not appeal to them. Nestlé should aim at changing this perception by focusing its demographic segmentation onto 18-24-year-old, who is in tertiary education or graduates. They are thus a perfect target for KitKat’s tagline ‘Have a break, Have a KitKat’. With a growing interest in the health segment by younger generations (Marano, 2011) it would be of recommendation to Nestlé to consider its involvement in this segment.
2. Invest on R&D -Nestle should concentrate on that in order to come up with new products. Since the company started out to serve infants in need for nutrition, nestle should enhance and find way to enrich their product with substances and vitamins that will provide children their daily needs of calcium and even mothers. Because they should start from mothers’ health in order to provide infants’ health. Especially now when children suffer diabetes amongst other things, they need more care than before.
3. Joint ventures - Nestle should carry on with their partnership activities that will increase their competitive advantage more. However, they shouldn’t venture their business with companies that can’t sustain the pressure of the market and in which waver under the scrutiny of competitors. They should choose qualified companies and companies that show promising performance. Even though the future can’t be told by looking at numbers and financial performance, companies should extrapolate what might happen and look at all the angles of matters in both ways, positively or negatively.

## **Group 12: Microeconomic Analysis of Maruti Suzuki India Limited**

### ***Executive Summary***

*Maruti Suzuki India Limited is a widely listed automaker in India. It is the biggest automobile manufacturer in Southern Asia. Suzuki Motor Corporation of Japan holds a major stake in the company.*

*It is the first company in India to mass produce and sell more than a million cars and is credited to having brought in an automobile revolution to India.*

*On 17<sup>th</sup> September 2007, Maruti Udyog Limited was renamed Maruti Suzuki India Limited and has its headquarters located in Delhi.*

#### ***Vision:***

*As MUL is started by Governmental initiatives, it tends to be more consumer oriented and hence cost effective.*

*Hence, MUL declared its vision as “The Leader in the Indian Automobile Industry, creating Customer Delight and Shareholder’s Wealth; eventually become a pride of India”.*

*MUL understands that “Customer is King”, he can change the fortune of any company, hence goes Company’s brand line “COUNT ON US!”.*

#### ***Mission:***

- *Modernization of the India Automobile Industry.*
- *Manufacturing the cars quickly and selling them for a low rate.*
- *Production of large number of motor vehicles necessary for economic growth.*
- *Producing Fuel efficient vehicles to conserve scarce resources.*
- *Market Penetration, Market Development and similarly, Product Development and Diversification.*
- *Partner relationship management, value chain and value delivery network.*

*Maruti Suzuki India Limited (Maruti Suzuki), a market leader in consumer automobile segment is studied and analysed with regard to multiple microeconomic factors including demand, production and market structure.*

*Growing middle class population in India, large dealership network and competitive pricing strongly contributes to the market leader status in oligopoly market structure.*

*However, the company remains balanced on price taker and price setter due to tight competition.*

### **Introduction of Maruti Suzuki India Limited**

Maruti Suzuki India Limited (Maruti Suzuki), formerly known as Maruti Udyog Limited, is an automobile manufacturer in India. It is a 56.21% owned subsidiary of the Japanese car and motorcycle manufacturer Suzuki Motor Corporation. As of 1<sup>st</sup> July 2018, it had a market share of 50.10% of the Indian passenger car market.

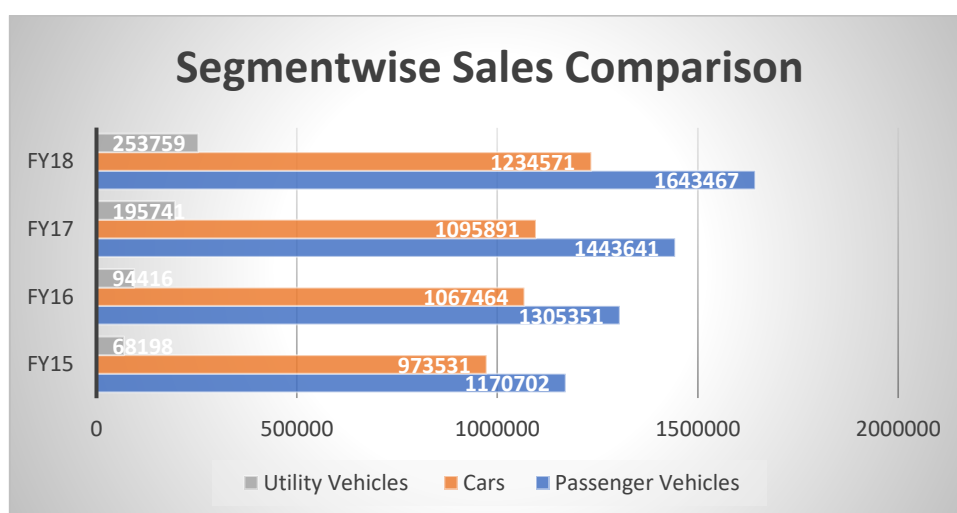
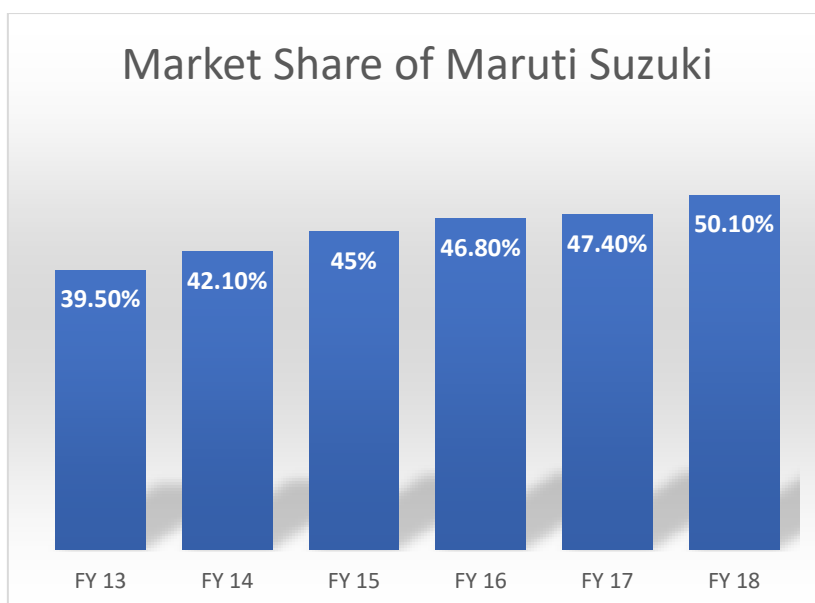
With the status as market leader, Maruti Suzuki has 1,820 sales outlets across 1,471 cities in India. It also has 3,145 service stations across 1,506 cities throughout India. Maruti's dealership network is larger than all its competitors combined viz., Hyundai, Mahindra, Honda, Tata, Toyota and Ford combined. It is also to be noted that the After sales (Service) forms a major revenue generator of the company.

Various Macroeconomic Factors affecting Maruti Suzuki India Limited is studied and is presented in this report for evaluation as Final Course Project (Introduction to Managerial Economics, YLP).

### **Methodology and Analysis**

#### **Data Analysis and Representation**

The data analysed is primarily from The Economic Times website covering the last five years. Below are the stats indicating the overall market share of Maruti Suzuki along with segment wise sales growth. In last 5 years, the overall sales have gone up from 39.50 % to 50.10% in FY 2018.



The total income from sales have almost doubled in the last 5 years, which speaks volumes about Maruti Suzuki.

| INCOME (in Rs. Cr)  | Mar'18         | Mar'17         | Mar'16         | Mar'15          | Mar'14          |
|---------------------|----------------|----------------|----------------|-----------------|-----------------|
| Net Sales Turnover  | 79762.7        | 68034.8        | 57538.1        | 49970.64        | 43700.63        |
| Other Income        | 2045.5         | 2279.8         | 1461           | 831.58          | 822.9           |
| <b>Total Income</b> | <b>81808.2</b> | <b>70314.6</b> | <b>58999.1</b> | <b>50802.22</b> | <b>44523.53</b> |

## **Microeconomics of venture**

### **Demand for the product**

Law of Demand applies to the case of Maruti Suzuki as well, as the price of some of its cars increases their demand decreases. But there are also some exceptions where we find that price increases and the demand for that car also increases. Indian economy is constantly growing along with this the standard of living is also growing to go comparatively on a higher side, which results in increase in disposable income and now more people wants to buy cars even at higher prices, as a result in the last 5 years the demand for Maruti Suzuki Products have increased from 39.50% to 50.10%.

### **Factors influencing demand**

1. Interest rate – This affects demand made by consumers. Although drop in it helps very few people to shift from base to deluxe model, a large shift can be made only if customers want to take long term loans rather than short term loans so as to avail interest benefits. There is negative relationship between interest rate and demand of commodity.
2. Price- This factor affects demand of cars in market. As the law of demand states that with an increase in price demand of commodity decreases and vice versa. Price of the vehicle in turn will majorly depend on the Price of Raw Materials such as, HR / CR Steel, Virgin Aluminum and Natural Rubber.
3. Advertising & marketing- Due to advertising & marketing many companies have been successful in increasing their sales. In general, both have positive relation with sales.
4. Income level of consumers- Increase in per capita income increases the consumption tendency of the customer. Growth in per capita income and rising aspirations and changing lifestyle is leading to increased preference for cars.
5. Global crude prices –There is negative relation between fuel price and demand of cars as reduction in prices of fuel will increase affordability of cars and ease out its maintenance.
6. New launches- Car sales increase when a new model hits the market. Due to increased competition in Indian car market, frequency of new model launches has increased.



## **Substitutes and Complements**

There are many other car makers / manufacturers in Indian market which are threat to Maruti Suzuki and close substitutes as well. If Maruti compromises with quality and price, then the customers would prefer substitute of Maruti cars like Hyundai, Mahindra, Tata, etc. Fuel / steel are complementing products for Maruti Suzuki cars. If the price of fuel / steel goes up, demand for Maruti Suzuki cars decreases and vice-versa.

## **Different elasticities**

Elasticity of demand refers to the relative responsiveness of the changes in demand to the changes in the price or income or price of substitutes and complementary goods.

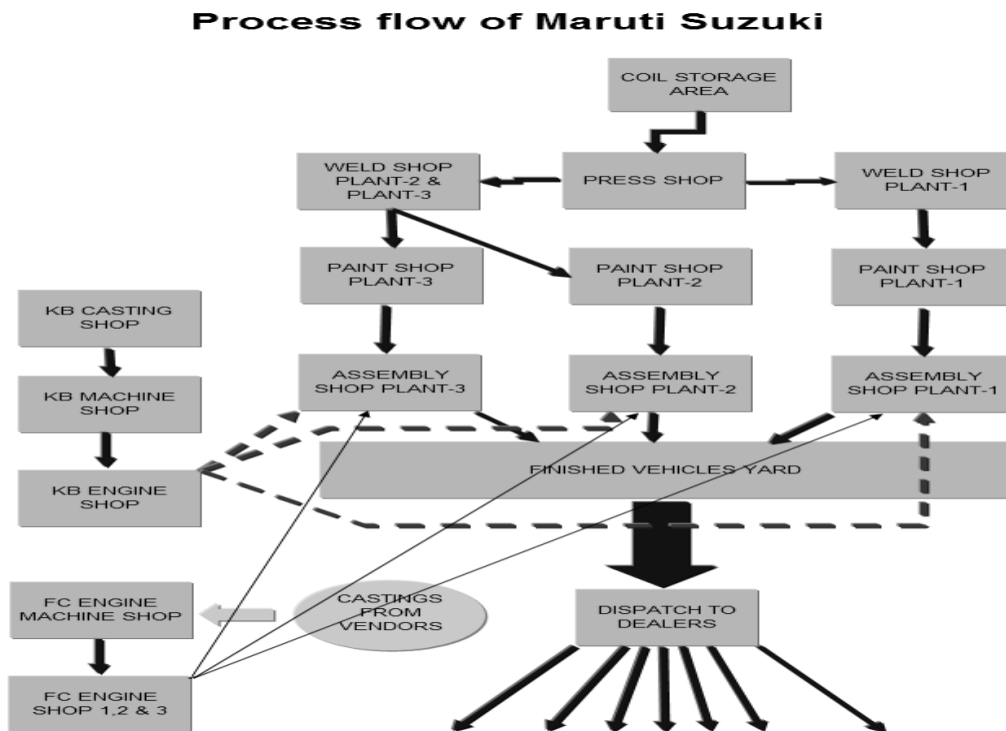
- **Price Elasticity:**In the case of Maruti Suzuki, price elasticity of demand is relatively elastic ( $e > 1$ ) because a little increase in its price will lead to a greater decline in the quantity demanded.
- **Income Elasticity:**When there is an increase in income of consumers, purchasing power increases and demand for Maruti cars increases. Maruti Cars are now a necessity product, i.e. a product that increases in demand when consumer income rises. Consumers now are willing to have their own cars, but due to their lower earnings they can't afford to buy their desired car. But if there is increment in their income, they would surely prefer Maruti for its best quality and price. Income elasticity of Maruti Suzuki cars are always elastic in nature. ( $e > 0$ )
- **Cross Price Elasticity:**Substitute- The price of Maruti Suzuki deliberately makes it a close substitute to other products in the market. If the price of other substitutes increases with no change in price of Maruti cars, consumers will definitely opt for a Maruti Suzuki.

## **Production: Process & Inputs**

### **Production Division of Maruti Suzuki India Limited**

Production Division in Maruti Suzuki India Limited has been renamed as Production Business Vertical (PBV) after inclusion of Projects, Production Engineering, Vehicle Inspection & Supplier Quality Assurance divisions in it.

## Major components of PBV



### Important Factors Influencing Production:

- Labor: Workers employed directly in the car industry; engineers, designers, paint sprayers, testers, management staff, transport & distribution workers etc.
- Land: Natural resources used in manufacturer, land for plant and equipment.
- Capital: Fixed capital: machinery, technology, buildings + Working capital: i.e. stocks of raw materials and components.
- Entrepreneurship: management, risk-taking ability

### Production Function for Maruti Suzuki:

A production function defines the relationship between inputs and the maximum amount that can be produced within a given period of time with a given level of technology.  $Q = Q(L, N, K, \dots)$  Production Function states that  $Q$  is the maximum amount of an output which the firm can produce if it combines the inputs (Land  $L$ , Labor  $N$ , and Capital  $K$ ).

For purposes of analysis, the equation can be reduced to two inputs  $X$  and  $Y$ .

Restating,  $Q = f(X, Y)$  Where  $Q$  = Output,  $X$  = Labor,  $Y$  = Capital

Hence, In the case of Maruti Udyog,

- Land: No details have been made available such as location, cost of land etc.
- Capital: 100 million+ 50 million from suppliers = 150 million
- Labor: No information on Labor required is available.

Hence due to absence of these factors, production equation for Maruti Udyog could not be derived.

### **Economies of Scale & Scope:**

Economies of Scale and Capital requirement acts as a barrier for new entrants in the automobile industry, an enormous amount of capital is required. Besides capital, a new firm that is interested in entering the market needs to conduct in- depth research beforehand.

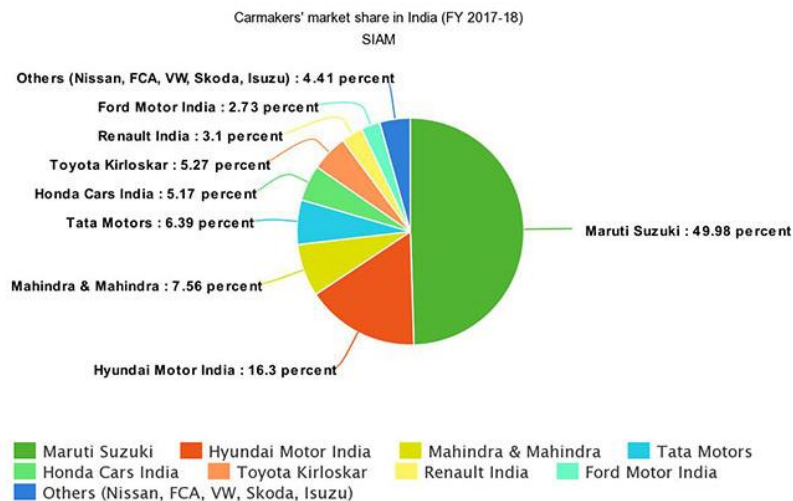
Being the largest player in the automobile sector in India MSIL clearly enjoys a positive impact from the economies of scale which not only serves as a threat to other competitors but also gives MSIL great bargaining power with suppliers and buyers.

Over the years the company has taken advantage of economies of scale. The cost-efficient production model all companies covet is optimal only when a plant is operating at high capacity utilization levels. As growth rates have slowed, multinationals like GM and Ford have found their small market shares making manufacturing unviable. GM announced its decision to pull out of the country last while Ford has been a laggard. Maruti with its multiple products at virtually every price point has been the clear gainer from the failures of these global giants. It is really a case off going from strength to strength though how it handles the coming challenge of electric vehicles could test its mettle.

### **Market Structure**

The financial year 2017-18 has seen car sales in India crossing 3.28 million units for the first time in India and very soon is set to overtake Germany to become the third largest car market globally. Overall sales in India in the domestic market last financial year saw a growth rate of 7.89 percent. India's largest automaker Maruti Suzuki continues its strong domination on the Indian car market and sold a total of over 1.64 million vehicles in the domestic market bringing its market share close to 50 percent. The company has not only managed to sustain its huge sales but have also increased its market share in both urban and rural buyers. New car launches like Maruti Suzuki Dzire, all-new Swift along with the constant demand

of Maruti Suzuki Baleno and Vitara Brezza helped the company to achieve this huge growth. Maruti Suzuki Alto continues to remain the most sold car in India. The company also exported about 1.23 lakh units to its export markets.



### Maruti Product Strategy

Maruti will be making products for all the segments that it possibly can, SUV like vehicles are on the cards but so are hatchbacks and sedans and Twenty new models set to go on sale in India by 2020

Factors which sets apart Maruti Suzuki from its competitors include,

- The Quality Advantage
- Brand Trust- A Buying Experience Like No other
- Quality Service Across 1036 Cities
- The Low cost of Maintenance Advantage
- Lowest Cost of Ownership
- Technological Advantage

### Pricing and other strategies

- ◆ The pricing strategy of Maruti is both penetrative and competitive. Maruti Suzuki has a pricing policy that is based on many factors. It makes proper evaluation of the market by studying the most important fact that how much is a customer able to pay for a car and what are his needs. The research team of the company makes an analysis of the current market trends, the competition, the cost of raw materials, the economic factors

governing the market, the distribution charges, cost of advertisement, the dealers profit and the profit of the company. Maruti has always emphasized more on volume than on prices. In spite of the rising costs, service is also an important generator of revenue for the company. The numerous service stations are handled on franchisee basis and have become major revenue earners for Maruti Suzuki."

- ◆ One of the key drivers of volumes of sale for Maruti Suzuki has been its 'value for money' strategy. This comes from its low-cost learning from years of engineering in India. By providing light weight yet safe cars, Maruti is able to cut down on costs and price its cars competitively, in some cases undercutting the competition by 7-10 percent. Maruti's low cost of ownership, affordable spares, long service intervals ensure that the pricing strategy of Maruti is implemented not just at the time of sale but also after the car has been bought. This gives Maruti an edge and makes it such a popular car company. Thus, the pricing strategy in the marketing mix of Maruti Suzuki is dependent upon the competitors, market dynamics and the segment catered to.
- ◆ It provides great Customer Service Post Sales, that is a major plus for Maruti Suzuki compared to other competitors. Additionally, it comes up with New Cars that are pocket friendly, aims to provide better mileage, light weight and safe cars which are the current need and is able to promote the same in market well.
- ◆ Distribution strategy in the Marketing strategy of Maruti Suzuki – The company has the largest distribution and after-sales service network comprising of over 400 sales showrooms, 1900 Authorized Service Stations spanning across over 1190 cities, 30 Express Service Stations on 30 National Highways across 1,314 cities and over 600 dealer workshops which are unparalleled in the country.
- ◆ The company also has 280 Nexa showrooms exclusively for premium car segment. To increase customer touch points in the rural parts of the country where setting up of the complete dealership was very difficult company has opened extension counters which are operated by some dealer in the city.
- ◆ Brand equity in the Marketing strategy of Maruti Suzuki – Maruti Suzuki has managed to break into global Top 10 brand chart for the auto sector, where it stands at 9th most valuable auto brand in the world just ahead of Volkswagen and behind Tesla. In addition to this Maruti Suzuki India is ranked 99th and 71st on Forbes World's Most Innovative Companies list and Top Regarded Companies list of 2018. The brand also features at 366 on Global 2000 companies of Forbes 2018.

## **Recommendations**

- At present, India is one among the largest exporters of automobiles and being a market leader in domestic sales, Maruti Suzuki would receive a strong demand from international market especially from developing Asian Countries.
- Maruti Suzuki is yet to fully venture to capture high end automobile segment. It has recently launched NEXA, a premium car showroom but the options available are limited. The company could also potentially capitalize the wide distribution network to make sales in Tire 1 cities.
- The key edge over other automobile manufacturers apart from wide network is the adaptation of new technology and vibrant design. To remain competitive, Maruti Suzuki needs to continue to innovative which could result in substantial investment in R&D.
- It is recommended that the company should focus on providing prompt and good after sales service to customers.
- Considering potential customers in rural areas, the company should resort to proper promotion to target this base.
- The company should utilize and target for new technologies, which will help making more fuel-efficient cars for the customers.
- Today due to high prices of petrol the customers are preferring diesel version vehicles. Hence, to capture major market share, it is recommended that the company should launch all its vehicles in Diesel variant as well.

## **Group 13: Microeconomic Analysis of Godrej Interio and the Furniture Industry**

### ***Executive Summary***

*This project aims to examine various aspects of the furniture industry. It briefly looks at the global furniture industry and then goes to explain the economics and situation of the furniture industry in India specifically. Additionally, this project further examines Godrej Interio, a business unit of Godrej & Boyce Manufacturing Company. Limited.*

*The aim of this project is to introduce the reader to the furniture industry overall and then use data and economic theory in conjunction to complete a microeconomic analysis of the specific firm and industry. The paper starts with explaining the various demand factors that play a role in the furniture industry. Following this, it outlines the production process and inputs. Finally, the paper explains the overall market structure of the furniture industry and the role of Godrej Interio within it.*

### **Introduction:**

In this project we have examined the trends of the furniture industry in India, while specifically focusing on the unit Godrej Interio. Furniture includes a wide spectrum of objects including beds, tables, chairs, desks, cupboards, etc. These can be manufactured using different types of raw materials, such as metal, plastic, glass, steels, wood, etc., due to which the quality, and in turn the cost of production of any one type of furniture can vary greatly. The furniture industry can be classified into different segments based on the material type it uses as its primary raw material, or by its application.

Globally, the furniture market is divided into four primary categories.

- Domestic Furniture (65%)
- Office Furniture (15%)
- Hospitality/Hotel Furniture (15%)
- Furniture parts (5%)

According to a study by the World Bank it is predicted that the organized furniture industry will grow at a rate of 20% per year and the consumer market in Asia will drive a majority of this growth. This highlights the potential and importance of the industry in India.<sup>18</sup>

Within India as well, domestic furniture accounts for the majority (approximately 65%) of the industry. While it is a rapidly growing sector, it is essential to note that in India 85% of the furniture industry falls under the unorganized sector with very little data availability. Only the remaining 15% falls under the organized sector and includes the key market players such as Godrej Interio and its rivals.

This project focuses on Godrej & Boyce Manufacturing Co. Ltd., which is one of the market leaders within this industry. It is a part of the Godrej group, which was incorporated back in 1897. Godrej started its activities within the furniture industry in 1923 with the manufacturing of its first signature steel cupboard, which is widely seen in use even today.<sup>19</sup> Ever since then it has expanded its activities within the sector, formally launching Godrej Interio in 2006. Now, Godrej Interio is known for its products catering to home and office furniture, turnkey projects as well as interior solution services. It has 6 manufacturing plants located across India, with its head office in Mumbai.

### **Demand for the Product:**

The overall demand outlook for furniture industry has seen an upward trend, with rise in purchasing power of middle class which accounts for about 40 crore of the population along with a continuous year on year demand growth of around 15% in the office furniture segment. The impact of globalization and world trend updates has also impacted the increase in demand for modern furniture in upper and upper middle class. The total Indian furniture industry is estimated to be about US\$17.9 billion (2015-16) (14<sup>th</sup> largest furniture market). A total of US\$1.49 billion furniture imports done in 2015-16 and with a forecast of US\$1.8 billion for 2016-17 the imports in the Indian Furniture sector has seen a year on year rise of about 20%, with major imports from China (approx.- 75,930 tons in 2016). As per the current forecast, the Indian furniture market is expected to be worth \$27 billion in 2022, with a trend indicating that demand will outstrip supply. Although the unorganized furniture sector which accounts for nearly 85% of the market is slowly transitioning into the organized domain but the demand by consumers are mainly characterized by more contemporary designs that are

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<sup>18</sup>[www.ibef.org](http://www.ibef.org)

<sup>19</sup>[http://www.godrejinterio.com/Godrejinterio/pdf/Interio\\_Sustainability\\_Report.pdf](http://www.godrejinterio.com/Godrejinterio/pdf/Interio_Sustainability_Report.pdf)



represented by the imports in the sector. Since Chinese furniture imports are high-end, competitively priced (even undercut the locally produced alternatives) with easy maintenance and installation both the domestic & corporate consumers prefer it and thus leading to a rise in demand.<sup>20</sup>

Currently, Godrej Interio covers around 15% – 20% of the overall demand in the organized furniture segment (both for office and home use furniture), with overall target to cater to rising demand and be a market leader in the organized furniture segment. In order to capture the maximum demand, apart from manufacturing company has taken measures of importing and acquisition of smaller companies. Additionally, Godrej Interio aims to dominate the mattress market, with major focus to expand its retail business, with a target of 4000 point of sales in the near future. Its major R&D is focused in introducing different variants of mattress, with a current strength of over 30 mattress types in its portfolio.<sup>21</sup>

### **Factors Influencing Demand:**

While examining the demand of the furniture industry, it is essential to note that the largest complement of furniture is land, housing, or real estate. Without having a space in which furniture can be used, it will have close to zero demand. Therefore, the demand of furniture is closely tied to the demand for property, housing, office spaces, etc. On the other hand, space also acts as a restraint for the demand for furniture. Even if the price of a piece of furniture falls, the quantity demanded of the furniture by the consumer can only increase up to the point that the space/land permits. Hence, the two factors are very closely linked.

Examining the factors influencing the demand for furniture from the perspective of the industry we see that with an increase in income, there is an increase in the demand for furniture. This can happen due to an increased demand for the furniture within the same space, and also due to an increased demand for property, which ultimately leads to an increase in the demand for furniture. The major factors that influence the demand for furniture are:

- Increase in Income- The purchasing power of the middle class is on the upsurge, given that India is a rapidly developing economy. The increase in income shifts the demand

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<sup>20</sup><http://economists-pick-research.hktdc.com/business-news/article/International-Market-News/India-Furniture-Sector-Opportunities-Soar-as-Demand-Exceeds-Supply/imn/en/1/1X000000/1X0ABG8G.htm>

<sup>21</sup><https://brandequity.economictimes.indiatimes.com/news/business-of-brands/godrej-interio-aims-to-dominate-the-mattress-market/59331424>  
[https://www.ibef.org/download/Furniture\\_170708.pdf](https://www.ibef.org/download/Furniture_170708.pdf)

curve to the right, leading to an increase in the overall quantity demanded, even though the unintended consequences make the prices rise to a certain extent.

- **Growth of Real Estate Sector-** With rapid urbanization taking place in India, there has been an increase in the demand for flats within housing societies. Many of these housing societies have large scale tie ups with specific firms such as Godrej Interio for its furniture products and interior solution services.
- **Technological Advancements-** A boost in the e-retail sector in India over the years has made furniture more easily available to customers. Furniture can now be easily delivered at the doorstep of the customer. These advancements have also played a role in building the demand for the furniture industry.
- **Tourism and Hospitality-** An increasing inflow of tourists in the country increases the demand for furniture in two key ways. Firstly, it increases the quantity of furniture required by hotels, accommodations, and other tourist spots. Secondly, it increases the demand for local furniture by tourists.
- **Tastes and Preferences-** Leading companies within the industry, such as Godrej Interio constantly come up with new designs to meet the varied tastes and preferences of the customers. An increase in the variety of products available increases the demand for the product.

**Substitutes:**

Apart from substituting between furniture of different qualities, there is no major substitute for furniture as such. The industry as a whole does not have a substitute since the purposes fulfilled by this industry cannot be met by any alternative industry.

However, if we examine a specific type of furniture, or the furniture manufactured by a specific firm, these can have substitutes based on the difference in quality. For instance, if the wooden furniture industry is being examined specifically, then a substitute can be steel furniture. An example of this will be wooden cupboards and steel cupboards. The demand for these would vary depending on the cost of steel and wood. If the cost of wooden cupboards increases, then the demand curve for steel cupboards will shift to the right, increasing the quantity demanded of steel cupboards.

Similarly, furniture can be viewed as a necessity or a luxury depending on the application and the material cost. If a specific luxury brand of furniture is considered, a

substitute for the product will be a basic low cost version of the same item solving the same purpose, but built using a less expensive raw material.

### **Complements:**

As explained above, the most important complement of the furniture industry as a whole is land, space, property, or real estate. A sudden increase in the cost of buying property, land, or a house will reduce the demand for the property/ land, and thus also reducing the demand for furniture. However, with rapid urbanization in India and increasing number of residential and commercial spaces being built in the cities, the overall demand for furniture is on a rise.

### **Elasticity:**

The elasticity within the furniture industry can be varied depending on the type of furniture. Given that the industry as a whole does not have a substitute and that the purpose of furniture cannot be fulfilled by any other alternative, except for furniture of a different type, basic furniture can be classified as a necessity. This should imply that the price of furniture should be relatively inelastic. However, due to the several different types of designs and qualities available, and the immense competition within the industry by rival firms, the elasticity for each type of furniture is relatively elastic. If the price of wooden furniture increases, the demand for wooden furniture will fall. However, since the demand for furniture as a whole cannot fall, the demand for a different type of furniture made from a substitute raw material, such as steel, will increase. This shows the presence of a significant cross price elasticity for different materials within the industry. Hence, we can conclude that while the demand curve of the industry is relatively inelastic, the demand curve of a specific firm within the industry is relatively elastic.

Furniture is also classified as price elastic because of its durable nature. As the price of furniture increases the consumer would prefer to get the old furniture repaired or buy pre-used furniture from the market. Due to technological advancements and improved e-portals like FurlencoRento-Mojo, etc., consumers prefer to rent or lease furniture instead of blocking capital by renting.

### **Production Process and Inputs:**

The furniture-manufacturing sector makes furniture and related articles, such as mattresses, window blinds, cabinets, and fixtures. The processes used in the manufacture of

furniture include the cutting, bending, moulding, laminating, and assembly of such materials as wood, metal, glass, plastics, and rattan. However, the production process for furniture is not solely bending metal, cutting and shaping wood, or extruding and moulding plastics. Design and fashion trends play an important part in the production of furniture. The integrated design of the article for both aesthetic and functional qualities is also a major part of the process of manufacturing furniture. Design services may be performed by the furniture establishment's work force or may be purchased from industrial designers.<sup>22</sup>

The typical inputs used in the production of furniture includes raw materials such as wood, glass, plywood of different grades, steel, metal, plastic, veneer, and laminates. Additionally, fabric and adhesives and other such materials are used to assemble and complete the piece of furniture.<sup>23</sup>

The process flow of a piece wooden furniture is typically as follows:

- 1) Receiving of Timber: Timber is a major raw material component that goes into the production of furniture. It is received in the form of huge trees/barks from forests to be further processed
- 2) Timber Cutting and Molding: The timber received is then shaped and molded in the saw mills with the help of wood cutting machines. The shape and sizes are kept standardized to ensure the universal sale of the semi-finished goods to the fabrication agencies/units
- 3) Component Fabrication: The semi-finished timber is further molded as per design and specifications
- 4) Assembly Operation: After the fabrication is complete, the timber goes through multiple stages on the factory shop floor and is finally shaped into finished wooden planks (modular furniture) or assembled finished product, depending upon the end customer requirement.
- 5) Finishing and Packaging: The end product is then packed in cartons to protect the product from wear and tear.
- 6) Delivery: Final delivery to wholesalers and retailers is done so that the product can reach the end customer.

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<sup>22</sup> <https://www.slideshare.net/taufiqrahman5/furniture-manufacturing-process-78671320>

<sup>23</sup> <https://mondecasa.com.sg/5-popular-materials-used-for-outdoor-furniture-manufacturing/>

The wood manufacturing/processing setup generally uses machineries such as wood cutting saws, wood lathes, edge benders, and boring machines in order to mass produce the items and reduce the variable costs associated with the products, increase productivity, and achieve economies of scale. Following this, there are extensive quality control checks that are undertaken to maintain the standards.

### **Market Structure and Competitors:**

Godrej Interio is one of the market leaders in the furniture industry. The size of the industry as a whole is 60,000 crores, out of which 85% belongs to the unorganized sector. Although it is not a perfect competition, the market structure resembles a perfect competition due to the presence of numerous companies. When entering the market, a company tends to become a price taker because of the standard prices existing in the market. Though, within the industry each company has its own share of monopolistic nature due to its uniqueness.<sup>24</sup>

Out of the organized sector, Godrej Interio occupies around 18% of the market share and aims to increase this to about 23% in the next couple of years. The growing import market from Italy, Germany, Spain, China, Korea, Malaysia, Indonesia, and Japan also affects the company. Recently, the entry of Ikea into the Indian market has been a massive threat to the Indian furniture industry.<sup>2526</sup>

The major competitors of Godrej Interio are Zuari (Birla Group), Durian, Usha Lexus (Shriram Group), Damro, Evok (Somani Group), Ikea (Sweden based company), Hulsta (German Based Company), Wipro, Nilkamal, Dynasty, Style Spa, Home Town (Future Group), Houseful, BP Ergo, Featherlite, etc. Indian manufacturers generally follow a three-tier selling and distribution structure, comprising the distributor, wholesaler and retailer.

### **Strategies for Competition:**

- Customization- As furniture industry is a need-based industry, the future lies in customizing the products as per customer's need. Compared to other companies, it brings an astounding number of slightly different styles to the furniture market every year. So Godrej Interio's marketing strategy should be based on customizing the products to utilize the previously held up products so that the resources can be efficiently utilized. The company has well

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<sup>24</sup><https://www.trendrr.net/1127/best-furniture-brands-in-india-famous-10-top-seller/>

<sup>25</sup><http://www.godrejinterio.com/GodrejInterio/export.aspx?id=29&menuid=308>

<sup>26</sup>[https://www.exchange4media.com/marketing-news/is-ikea's-entry-to-the-\\$20-billion-furniture-industry-a-worry-for-indian-furniture-online-players-65301.html](https://www.exchange4media.com/marketing-news/is-ikea's-entry-to-the-$20-billion-furniture-industry-a-worry-for-indian-furniture-online-players-65301.html)

captured the customer's need in 'upload and transform' campaign in which one customer can upload the photo and transform his home wholly designed by the Company's design team. In modular segment, the company has to compete with the foreign company's operating within the market as they have superior technology and design elements in place like Hettich fittings. Godrej has its designing team in place at Italy and France to infuse some of the European design element into its furniture, which will cater to the Hotels and MNC's offices across the country for their customized needs.

- New Marketing Strategies- In a rapidly modernizing world, there is need of changing manufacturing strategies to capitalize on market potentials. The customer's needs also vary according to the availability of goods in the market. So to harp on that potential the industry has to think about new strategies such as supply chain alliances and global outsourcing of the parts of the product. Godrej Interio also has to focus on the new concept of Just In Time by which the supplier can fulfill the consumer's demand at appropriate time. The company can also strategize for lean manufacturing through which the manufacturing process become lean and not bulkier to withstand the demand - supply gap. It has already started focusing on smaller cities and spread out its manufacturing units across India. Few years ago, the company was importing foams from outside, now it has started manufacturing the same in India, giving the company the economic scales of profit in its order. Now the company has dropped its dependence on out sourced materials to 30% in a sofa and 50% in a bed.
- Reinventing Furniture Design and Construction- To meet the expected demands of the consumers, the company has to reinvent different types of furniture with the help of different modern day architecture, so that the substitutes can easily be available. So the furniture can be more and more modular and the sophisticated modern furniture can be provided to the customer. The company should focus on creating new age furniture that are low impact on energy consumption, materials or processes. The transportation and assembly also to be in line of future designs because the competition in market will hold ground among the peers in future whose products are more easy to assemble along with perfect quality. The customer need in future lies in the mobility of the furniture.
- New Sales Channel- The standard demand curve arising out of the same can be boosted up to in developing new sales channel through which people who will charter into unchartered territory where the consumer are willing to buy but gets limited due to non availability of the product. This new sales channel also includes internet provision like Pepperfry and

Urban ladder are capitalizing the same but Godrej Interio has designed a unique strategy that it is creating unique showrooms to sell offline products in which when a customer walks in he can assemble his design for the home furniture there in the shop, which will give the customer the satisfaction for touching and feeling the goods in his hand to summing up the quality of the product.

- Innovation- Traditionally innovation is in the forefront of competitiveness and superior performance. Surviving firms in the furniture industry will be innovators, but competitive success through innovation is no longer simply a matter of having the lowest cost raw materials, labor, and other inputs, or a matter of which firms develop and implement new manufacturing processes and technologies most rapidly and efficiently. Rapid diffusion of new information and industry “benchmarking” practices tend to create parity in these competitive factors relatively quickly. Godrej Interio has collaborated with Dassault system Inc. to create software by which it can project 3D view of the home and the improvements. Also the consumer feedback and queries been utilized in a way that it eventually gives the consumer necessary information about a new product next time the consumer visit or checking something on the Internet.

### **Pricing Strategies & Other Strategies:**

A strong pricing strategy is required within the furniture industry to be able to maximize profits while also being able to provide competitive prices given the numerous players within the field. Since there are numerous firms within the industry, the price is relatively elastic. If one of the firms increases the price of a product, the consumer can choose from a variety of other sellers. Hence, the pricing has to be set with reference to the prevailing market rates. Additionally, some of the pricing strategies that can be used are:

- Reducing Prices- One of the pricing strategies is to reduce the price to attract consumers. This can be done until the point when the price is still fetching a profit.
- Enhancing Quality
- Psychological Pricing- Charging Rs. 99 instead of Rs. 100
- Premium Pricing- In certain cases, it is more beneficial to charge a higher price in order to showcase the quality of the product.
- Differential Pricing

**Recommendations:**

As the furniture industry in India is largely unorganized and fragmented, it provides immense opportunities to domestic and global players. The main reason for increase in demand for furniture is on account of increasing purchasing power of the consumers, change in the lifestyle, increasing urbanization and availability in tier II and III cities. For increasing the product availability, organized furniture manufacturers are also getting into tie-ups with E-commerce retailers. The furniture retail chains are also focusing on increasing their presence in tier II & III cities.

Some of the recommendations for firms within the industry include:

- Expanding by introducing E-Commerce to the venture. With online shopping becoming increasingly popular, consumers in India are becoming more aware of its benefits. For younger working individuals and as well as older generations, online shopping becomes the more convenient choice. By staying away from e-commerce, a firm can lose out on a massive market share.
- Introducing Basic, Low-Cost, Decent Quality Products- With the entry of Ikea into the Indian market, it will become essential for existing Indian furniture companies to keep up with what Ikea can offer. Ikea is known to cater to younger generations predominantly, providing low cost but good looking products. Ikea is also known to reduce its cost while maintaining a high quality by capitalizing on its extremely high volumes of production. In order to be able to compete, it will be essential for Indian furniture firms to maintain low costs, therefore maintaining low prices.



## **Group 14: Microeconomic Analysis of Volkswagen**

### **Executive Summary**

*Volkswagen Group sells passenger cars under the Audi, Bentley, Bugatti, Lamborghini, Porsche, SEAT, Skoda and Volkswagen marques; motorcycles under the Ducati brand; and TRATON AG (commercial vehicles, trucks, and buses) under the marques MAN, Scania, and Volkswagen Commercial Vehicles. The company has operations in approximately 150 countries and operates 100 production facilities across 27 countries.*

*Unlike that in US, other Asian countries, It has maintained the largest market share in Europe for over two decades due to a oligopolistic structure and*

*Volkswagen, being a global brand, faces competition from various companies across the globe across different segments. The major competitors across the globe are Toyota, General Motors, Ford, Daimler, Hyundai etc.*

*Volkswagen aims to keep itself the same way across Global markets, but is looking at cutting prices in the American Market, where it plans to massively grow and increase its product mix and portfolio base.*

*The company has recently been engulfed in a global emissions scandal where it agreed to pay ~\$31bn in settlements and plead guilty to criminal charges over its admission that it rigged diesel vehicles with software to cheat emissions regulations. Despite the Diesel gate emissions scandal, VW sold a record number of vehicles in 2017 (4.3% increase on the previous year). But in Western Europe, sales were more sluggish than rest of the world. The growth was mostly in South America, US and China.*

*In 2016, Volkswagen Group announced a corporate "Strategy 2025" that focuses on electrification of its portfolio. It aims to become a leading player in the latter part of this decade and aims to consolidate its position in the Battery Electric Vehicle segment by 2025, with a target of 1.8 Million BEV's.*

## **Introduction: Volkswagen, Automobile Industry**

Volkswagen Group is a German multinational automotive manufacturing company headquartered in Wolfsburg, Germany. It designs, manufactures and distributes passenger and commercial vehicles, motorcycles, engines, and turbo machinery and offers related services including financing, leasing and fleet management. In 2016, it was the world's largest automaker by sales, overtaking Toyota and keeping this title in 2017, selling 10.7 million vehicles.[9] It has maintained the largest market share in Europe for over two decades. It ranked sixth in the 2017 Fortune Global 500 list of the world's largest companies. Volkswagen Group sells passenger cars under the Audi, Bentley, Bugatti, Lamborghini, Porsche, SEAT, Škoda and Volkswagen marques; motorcycles under the Ducati brand; and TRATON AG (commercial vehicles, trucks, and buses) under the marques MAN, Scania, and Volkswagen Commercial Vehicles. The company has operations in approximately 150 countries and operates 100 production facilities across 27 countries.

In 2015, The US EPA announced that Volkswagen had installed a "defeat device" software code in the diesel models sold in the US from 2009-15. The code was intended to detect when an emissions test was being conducted, and altered emissions controls for better compliance. VW AG admitted that 11 million cars worldwide had been fitted with software intended to deceive emissions testing.

In 2016, Volkswagen Group announced a corporate "Strategy 2025" that focuses on electrification of its portfolio. The VW Group developed the Volkswagen Group MEB platform chassis that will be utilized in a range various cars and light utility vehicles across several VW Group Marques due to its flexibility and floor-mounted battery.

As of May 2018, the VW Group has committed \$48 billion in car battery supplies and plans to outfit 16 factories to build electric cars by the end of 2022. According to VW Group CEO Herbert Diess, the company will offer 25 electric models and 20 plug-in hybrids by 2020.

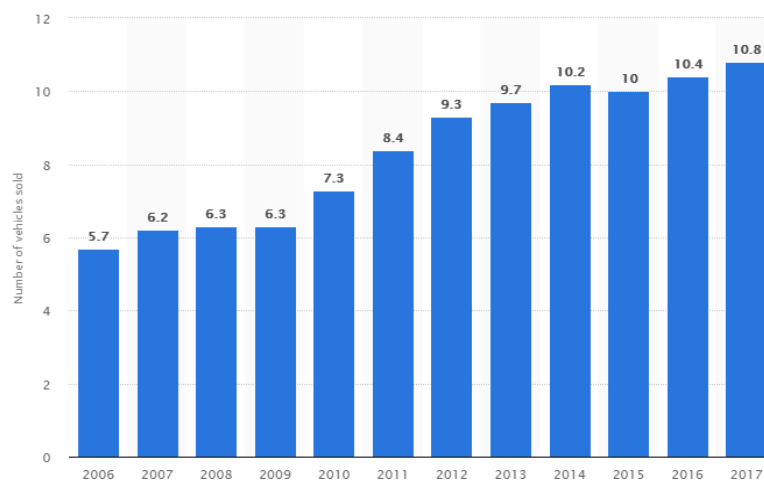
## Volkswagen: Primary Research

Volkswagen was established in 1932 as the “people’s car” since the auto industry composed only luxury models then. World war changed it temporarily to a production house of military vehicles. Later, VW became a central part of West German economic and symbolic regeneration and sold worldwide. VW developed the Beetle and later the Golf and expanded & innovated with its product line further post 1974. Sales fluctuated through the 1980s with the entry of Japanese and American players competing on similar products at lower prices. VW remained among the top in the industry with continuous innovation. Volkswagen Group soared past Toyota Motor in 2016 to take the crown of world’s largest automaker owing mainly to booming sales in China. Side note - Toyota remains the most profitable.

(<https://www.usatoday.com/story/money/cars/2017/01/30/volkswagen-toyota-world-largest-automaker/97234320/>).

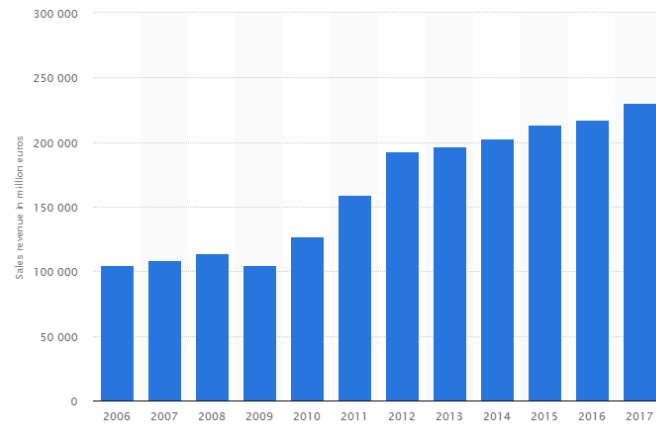
### SALES over the Years(Volkswagen’s worldwide vehicles sales – in millions)

Ref: <https://www.statista.com/statistics/272049/worldwide-vehicle-sales-of-volkswagen-since-2006/>



### Sales Revenue – in million Euros

<https://www.statista.com/statistics/264349/sales-revenue-of-volkswagen-ag-since-2006/>

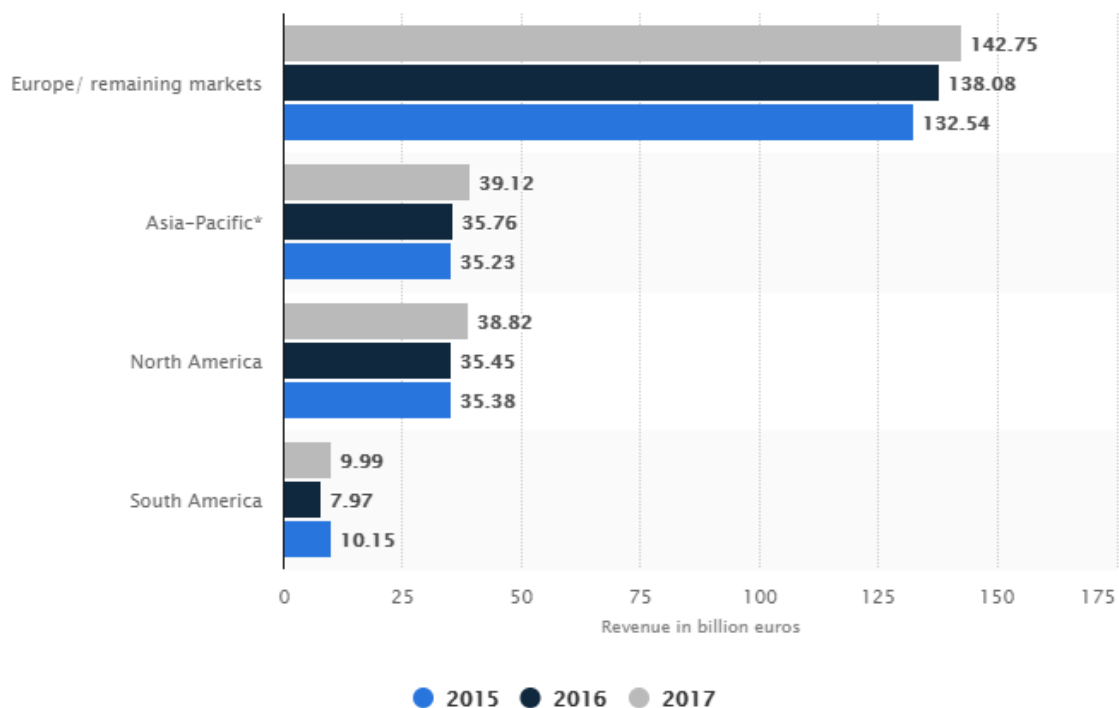


The sales above include its 11 subsidiary brands (Porsche, Audi, Skoda, Lamborghini etc).

The company has recently been engulfed in a global emissions scandal where it agreed to pay ~\$31bn in settlements and plead guilty to criminal charges over its admission that it rigged diesel vehicles with software to cheat emissions regulations. Despite the Diesel gate emissions scandal, VW sold a record number of vehicles in 2017 (4.3% increase on the previous year). But in Western Europe, sales were more sluggish than rest of the world. The growth was mostly in South America, US and China. (<https://www.dw.com/en/volkswagen-group-achieves-record-sales-in-2017/a-42177892>)

The largest customer base and revenue for VW remains Europe. Distribution of sales revenue in billion Euros by regions below:

Ref: <https://www.statista.com/statistics/260805/revenue-of-volkswagen/>



Following the scandal, VW has also launched & partnered with new cybersecurity firms to tackle automotive security.

(<https://www.zdnet.com/article/volkswagen-launches-new-cybersecurity-firm-to-tackle-car-security/>)

VW also plans to bring in electric cars starting 2019 and has set an audacious goal of building electric versions of all 300 models by 2030.

(<https://www.bloomberg.com/news/articles/2017-09-11/vw-ceo-vows-to-offer-electric-version-of-all-300-models-by-2030>)

### **Factors influencing demand:**

As a result of the diesel issue, the Volkswagen Group may experience decreases in demand, possibly exacerbated by media reports.

Consumer demand is shaped not only by real factors such as disposable income, but also by psychological factors that cannot be planned for. Key factors for commercial vehicle customers are total cost of ownership, vehicle reliability and the service provided.

A combination of buyer reluctance as a result of the crisis and increases in some vehicle taxes based on CO2 emissions – as already exist in some European countries – is driving a shift in demand towards smaller segments and engines in individual markets.

Constantly developing new, fuel-efficient vehicles and alternative drive technologies can counter the risk that such a shift will negatively impact the Volkswagen Group's earnings.

The Volkswagen Group is well positioned with its broad portfolio of products and drive systems, as well as its target-group-focused customer care. There is no concentration of default risks at individual fleet customers or markets.

### **Positive demand drivers:**

- Presence all over the world
- World-wide manufacturing
- Strong R&D plants
- Great performing brands
- Diversified portfolio
- Merger and acquisition
- Joint ventures with local Chinese automakers

**Negative drivers:**

- Most cars are not eco-friendly
- Diesel deception scandal of 2015
- Not a strong brand like Toyota
- Increasing facilities in local transportation
- Little expertise and no competence in making battery driven vehicles

**Production**

Volkswagen is creating and managing a global production and logistics network in the area of material and vehicle logistics, from the supplier to the assembly line and from the factory to the dealer and the customer. Logistics services are planned across all brands from a single source, managed and, when required, purchased via the “procurement of logistics services”.

In 2015, the Volkswagen Group implemented a total of 59 vehicle production starts in 27 locations across 14 countries; of these, 25 are new or successor product start-ups, while the other 34 start-ups were attributable to derivatives and product upgrades. In addition to the numerous new production start-ups, the range of models with alternative drive systems was expanded through the addition of the natural gas-driven Caddy and the plug-in hybrid versions of the Q7 and Passat. Furthermore, production of the current models’ replacement products was started at the assembly locations in Malaysia, India and Russia.

**Economies of scale**

Volkswagen group has been enjoying economies of scale. In particular, its MQB (modular transverse matrix) platform which underpins everything from the Skoda Octavia to the Volkswagen Touran and even the Audi TT, It has the added bonus of having this platform run across a number of different brands, allowing it to charge less for Skoda cars on the platform, while charging more for premium vehicles like the Audi TT, all without spending more on its platform. The goal is to lower production costs with more parts standardization between totally different models. Volkswagen’s goal is to build more than one million cars around it every quarter.

**Structure of Volkswagen (VW):**

Competing firms: Volkswagen, being a global brand, faces competition from various companies across the globe across different segments. The major competitors across the globe are Toyota, General Motors, Ford, Daimler, Hyundai, KIA Motors, Honda, Chevrolet etc

**Market Power:** Volkswagen is a major global player, but enjoys different market power's in various regions and countries due to external factors and competition. In a region like Europe, Volkswagen does enjoy significant market power due to a oligopolistic structure and high domination in countries like Germany and other neighbouring countries. The same power is not seen in countries like USA, South Asian and East Asian countries, due to a monopolistic competition structure in these countries. Volkswagen is still yet to create that kind of aura in these markets compared to Europe.

**Strategies for competition:** Volkswagen is always on the look out for Innovation. It believes that “new times call for new forms of collaboration“. Volkswagen looks to beat competition by delighting the customer. This means not just great cars, but efficient services and solutions. The Environment is also a great factor these days and Volkswagen is already ahead of the curve. The strategic KPI's of this segment include decarbonization index and emissions figures, as well as compliance. VW also plans to create a niche segment in the Asian markets with reinvented and efficient cars. China and India are certainly on top of their priority countries.

**Pricing Strategies and other Strategies:** Globally, Volkswagen has always primed itself to a car of the common man. In the European and American market , Volkswagen is an affordable car and is seen as a quality and price effective car. That obviously cannot be said about its group company: Audi, which is seen as a premium car. It is slightly on the premium side in the Asian markets, more due to the nature of the market and the general growing economy of the region. It is a niche and a ‘good to have car ‘ in the Indian market. Volkswagen aims to keep itself the same way across Global markets, but is looking at cutting prices in the American Market, where it plans to massively grow and increase its product mix and portfolio base.

VW also no longer plans to sell Diesel powered vehicles in the US and will focus on battery powered vehicles. It aims to become a leading player in the latter part of this decade and aims to consolidate its position in the Battery Electric Vehicle segment by 2025, with a target of 1.8 Million BEV's.

Volkswagen also sees Manufacturing and Production of cars as a major factor of costs and pricing. They aim to drive efficiency and quality through technology, automation and choosing the right places across the world for production. Closer to home, Volkswagen has started production in Pune.

**Recommendations:**

- Focus on strengthening the brand image with its latest EV segment and hybrid vehicles in US as US is the largest automobile market.
- Focus on technology advancement & enter in partnerships for research & development in alternative fuel/technology.
- Look at the possibility of manufacturing high efficiency cars for Asian market.
- Focus on lowering costs by using advanced/efficient technologies to improve their marginal productivity or review the product mix for regional markets.
- Regain trust of dealers, customers and employees through more transparent norms/testing and policies enforcement in the company.
- Focus on making profits from rising demand from US, Asian markets to compensate for reduction in European market.
- Look for an acquisition in EV space and digitization of its EV cars in order to compete with the modern technology.



## Group 15: The Economics of Medicine

### *Executive Summary*

*Pharmaceuticals is an industry that brings medicine and business together on a single platform, where on one hand it serves on the intend to humanity and betterment of earths living being and on the other hand runs the economies of nations and continents. While the never endingallegations are often put on the Big pharma's, for money minting, drug marketing and lobbying, forging data and unethical approvals, their contribution to create a healthy world cannot be ignored. We may choose our side depending upon the point of view we decide to look from, but what we cannot deny is that without R&D conducted by the pharmaceuticals, we cannot survive the deadly diseases takingthe grip of our world with every passing decade.*

*Talking of the figures, industry-wide research and investment reached a record \$65.3 billion in 2009. While the cost of research in the U.S. was about \$34.2 billion between 1995 and 2010, revenues rose faster (revenues rose by \$200.4 billion in that time). A study by the consulting firm Bain & Company, reported that the cost for discovering, developing and launching (which factored in marketing and other business expenses) a new drug (along with the prospective drugs that fail) rose over a five-year period to nearly \$1.7 billion in 2003. According to Forbes, by 2010 development costs were between \$4 billion to \$11 billion per drug.*

*In this analysis, we will discuss all aspects of the pharmaceutical business, the strategies incorporated by them to run their huge and critical operations and the competition they face. Our prime focus of this analysis is the giant Pharmaceutical Company Novartis, which is the largest investor in R&D and innovative medicine and treatments.*

### **Introduction**

Hoovers defines the Pharmaceutical industry to include “Companies thatresearch, develop, produce, and sell chemical or biological substances formedical or veterinary use, including prescription, generic and OTC drugs;vitamins and nutritional supplements; drug delivery systems and diagnosticsubstances; and related products, equipment, and services, including distribution, and wholesale.” (Hoovers.com 2005).

Novartis is one of the well-established pharmaceutical companies with vast and diverse product portfolio. Through the course of time, it has evolved as a top pharma player by strengthening

its product basket and investing in R&D to develop innovative medicines and products that can result in positive real-outcomes and improved healthcare. In this analysis, we are going to look at the market capability of Novartis with insight on its competing firms and its strategies for competition.

### **Microeconomics of venture**

#### **Demand for the product:**

“As Experts state, the demand for products in Pharma industry is mostly inelastic, the demand for a pharma product depends on its competitors’ pricing strategies and the uniqueness of the product in the disease division”. Demand in the pharmaceutical market is a complex combination of push and pull driven demand, regulatory, and pricing pressures. Third parties decide on formularies that influence prescription behavior, while pharmaceutical companies use lawyers, managed care, detailing, and direct-to-consumer campaigns to influence the FDA, pharmacy benefit providers, doctors and patients to prolong the patent, promote on formulary, prescribe and request their products. Novartis is a company well prepared for a world of a growing, aging population and continuously evolving healthcare needs. It is inclined to science-based innovation to deliver better patient outcomes in growing areas of healthcare.

Novartis focus on five key cancer areas where we have identified patient needs and promise within the portfolio – breast cancer, lung cancer, melanoma, kidney cancer and hematology.

Another factor driving the industry is the world's increasing elderly population. The over-65yrs (age) set, which consumes three times as many drugs as younger populations, which is expected to reach 690 million by 2025, and people are living longer thanks to drugs. Some 150 products for age-related conditions were brought to market in the 1990s, and some 600 more are in development. The aging population has also increased the demand for low-cost prescriptions. As drug prices continue to climb, many states are taking hardline bargaining positions to reduce their Medicaid drug costs. In a normal competitive market, prices influence what people buy — but not in health care. Brand-name drugs generally do not compete on price, because physicians and patients rarely pick treatments based on price — and often are not even aware of the prices. Drugs have a different risk-benefit profile, and doctors pick the drug they think will work best for their patients.

Novartis produces numerous products in the mentioned portfolios. We cannot generalize all the products as a single category but for a moment, we can take an example of Gleevec/Glivec, a cancer treatment of its kind, with the list price of \$26,400 a year at launch. Since, Gleevec was approved to treat a rare form of leukemia, similar drugs have come on the market- and the

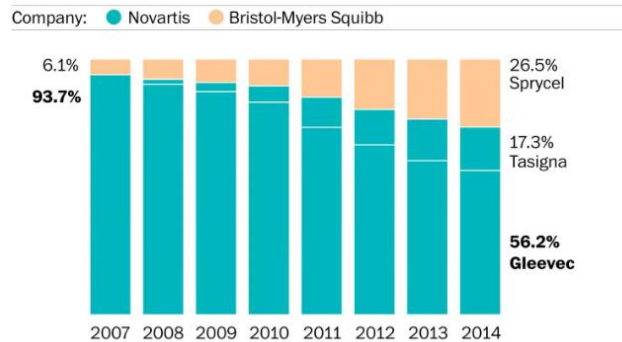
U.S. wholesale list price for a year's supply of that little orange pill has soared to more than \$120,000. Gleevec's price crept inexplicably upward each year. When powerful second-generation drugs began to give physicians choices, Novartis raised the price even faster. By the end of 2003, Gleevec was Novartis's No. 2 drug, a billion-dollar blockbuster. Last year, it generated \$4.7 billion in worldwide revenue, more than half of that from the United States. The number of people living with the disease in the United States has been growing since 2010, increasing the demand for the drug. The number is expected to become even bigger time to time.

If people need health-care services, then their demand is likely to be very inelastic (the quantity demanded does not respond much to price changes). Inelastic demand is not, in and of itself, a problem for a competitive market. It just means that the equilibrium price could be very high. But if we couple inelastic demand with consumers who lack information and add in some market power by suppliers, then matters become more complicated. Perhaps you already have a sense of why: we have a large group of consumers with very inelastic demand who are relatively uninformed.

In 2006, Bristol-Myers Squibb earned approval for a drug called Sprycel, that would work in the same-targeted way as Gleevec. Novartis developed a second-generation drug, too, called Tasigna, that was approved in 2007. In 2010, Gleevec gained more direct competition from both drugs, which were approved for newly diagnosed leukemia patients. At this point, Gleevec's price increases veered quickly into larger hikes that brought it closer to its competitors. An era of price increases of 10 percent or higher began.

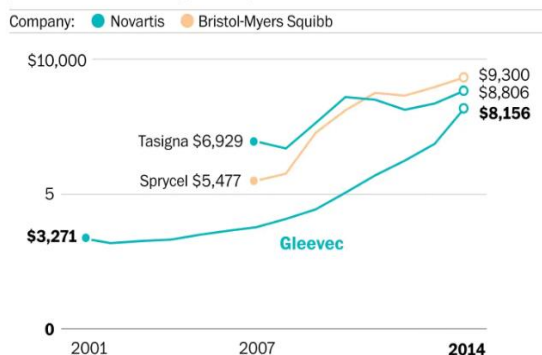
### Gleevec's shrinking market share

A growing portion of patients are being treated with a new generation of drugs, including one from Gleevec maker Novartis.



### Rising drug prices

New drugs treating chronic myeloid leukemia were introduced at prices higher than Gleevec's. Their prices have gradually risen since, and Gleevec's price has increased at a greater clip.



According to Dusetzina's data, Gleevec's median cost was \$3,757 a month in 2007, compared with \$5,477 for Sprycel and \$6,929 for Taisigna. price adjustments of Gleevec allowed the company to take risks in research and development necessary to fuel innovation, particularly in rare cancers.

Although Gleevec never became a drug for many patients, it surpassed expectations and was approved for other rare diseases. so the price continued to rise. Despite facing odds due to competition from competitors, Gleevec demand has been inelastic and it continued its success in sales by adjusting itself to the market share of the drug.

### Factors influencing demand, substitutes and elasticities

The variables that impact the demand for drug are:

1. Socio-financial status
2. Physician Supply
3. Risk practices of a populace
4. Health Status

5. Advertisement Expenditure
6. The Number of Consumers in the Market

These factors add to expanding interest for social insurance around the world, which is putting cost weight on wellbeing frameworks. Governments and wellbeing safety net providers are progressively looking for approaches to hold spending under tight restraints. They are concentrating on the esteem they get, in light of the advantages for patients and medicinal services frameworks. These improvements approve the attention on development to create noteworthy restorative advances, and worldwide scale to enhance productivity and viability.

These factors are adding to higher interest for social insurance worldwide and putting human services frameworks under expanding cost weight. Human services costs universally have ascended at a rate of about 10% every year as of late. In numerous Nations, by and large spending on medicinal services keeps on developing as an extent of aggregate financial action, for example, US spends the most, at 17% of the considerable number of products and enterprises created in the nation, as indicated by the Organization for Economic Cooperation and Development.

Reacting to the world's rising human services needs to open door for the medicinal services organizations, like Novartis in the coming years and decades. Nevertheless, human services organizations additionally have an essential task to carry out in guaranteeing medicinal services frameworks are feasible as time goes on.

The main influential factors over firm's financial performance expressed through ROE are the following:

- Earnings Per Share (EPS)
- Net Profit Margin

The weight on medicinal services frameworks as of now has governments and wellbeing safety net providers searching for approaches to moderate the ascent in spending, while yet considering whatever number individuals as could be allowed. Now and again, they are utilizing intense strategies, from constraining access to treatment and abating the take-up of inventive new medications, to moving a greater amount of the expense to singular patients. This pattern implies social insurance organizations progressively end up crushed by clashing requests to give financially heavy medications, while in the meantime proceeding to utilize the most recent innovation to seek after leap forward drugs and gadgets. Increasing expenses have additionally helped fuel a warmed open discussion about the pharmaceutical business valuing hones and have incited an uplifted level of investigation.

### **Processes, Inputs, Substitutes, and complements among inputs, costs, economics of scale and scope**

Novartis as a company is primarily engaged in innovative approaches while launching new drugs or taking new steps towards growth. Their primary area of growth and effort is in the innovative medicines division. Before 2005, there were many big mergers in the Pharmaceutical industry. This was justified by economies of scale, diversified portfolios and businesses across the healthcare spectrum as an antidote to looming patent cliffs, and to overcome declining R&D productivity.

However, later on all the big corporates including Novartis started to embrace a leaner and focused model by divesting non-core assets and concentrating on their strengths. One such initiative taken by Novartis was, when GSK and Novartis swapped their oncology, consumer health and vaccines business to create focused organizations with GSK increasing the focus on consumer health and vaccines and Novartis on oncology.

During development of a drug, a lot of money is invested on R&D and in the actual development of drug with clinical trials. Initially, Novartis had multiple R&D centers around the world, but later they realized that they had to convert to model where R&D is more centered and distributed in major development hotspots, instead of random development initiatives in multiple locations. This improved their scale as well as scope of development.

Novartis has taken initiative to turn to a pure play biopharma company targeting on its core strengths. Drug manufacturing involves using multiple chemicals as input for production. Most of the times the equipment manufactured to make a particular drug can also be used to make other drugs. The input costs are quite low when compared to the actual product sale cost. Increased automation increases the capital cost while reducing the variable cost. This gives a lot of advantage to the pharma firm to benefit from the patented drug before it transitions to a generic drug. The pharmaceutical industry relies heavily in research and development and synergies in R&D is beneficial for a firm's growth.

Current drug manufacturing – the “batch method” – can be a laborious, segmented process, requiring significant time, resources and financial investments. Before reaching a patient, products often pass through multiple phases of manufacturing at various facilities across hundreds of miles before being ready for distribution. Novartis – recognizing the need to deliver treatments to patients faster and more efficiently, and the limitations of the current manufacturing process to meet those needs – is working to transform the pharmaceutical development and manufacturing process through continuous manufacturing.

The scope of applications in drug manufacturing is quite huge and Novartis has realized that they will have to specialize in certain fields. Their Sandoz generic division has achieved economies of scale upto a certain extent in many of their facilities by putting efforts on innovative manufacturing along with sub-vending many of their noncore products to other manufacturers through the licensing model.

There is also an increased risk of substitutes in the field and hence Novartis has been diverting their strategy to more specific population groups. By integrating drug development, they have improved the transition from early research to clinical development. As a result, Novartis has seen the number of projects moving from research to development double in the past year.

## **Market Structure**

### **Competing Firms:**

Pharmaceutical Industry is a major sector that has worldwide revenue of about \$1105bn approximately for 2017 alone. Upon the analysis of the relative position and the level of contribution globally, Novartis stands as a 4<sup>th</sup> largest pharmaceutical organization with revenue of 49 billion USD in 2017 corresponding to almost 4% of the world pharmaceutical market. In terms of overall revenue Johnson & Johnson, Roche & Pfizer are the major competitors while in terms oncology, a major revenue-generating segment of Novartis it has to stand through Bristol Myers Squibb, Fresenius Kabi & Merck. Also Abbott, Amgen, AstraZeneca Roche & GSK are also notable competitors for Novartis.

Pfizer is a well-established pharmaceutical organization with revenue of 52.46 billion USD and stands as a tough competitor for Novartis with its potential products ruling the market.

Roche and Bristol Myers Squibb are competing firms for the oncology products as they have a strong oncology product portfolio. Roche generates revenue of 27,106 million USD from oncology products alone.

## **Market Power**

Novartis has a strong market potential with about 80 products reaching over 1 billion people across the global market for various indications. About 125,000 people of more than 140 nationalities are committed in finding innovative ways to expand access to improved healthcare. Novartis market power is strengthened with R&D excellence, 21 breakthrough therapy designations, 90 New chemical entities in the clinical development phase and more than 175 projects in clinic & 500 plus active clinical trials.

Novartis has good market sustainability especially through oncology segment, which is the highest revenue generator of 37%. It has six molecules in early phase development pipeline targeted for several types of cancer.

Apart from the Oncology products, it also focuses on building new platform capabilities in therapeutics and advanced therapies like CAR-T, CRISPR, AAV, Covalent Binders, mRNA, Novel IO Rx Delivery, Targeted Protein Degradation, Radiopharmaceuticals and leveraging M&A to build and accelerate their pipeline to build strong market power.

Research and development (R&D) is a core part of strategy at Novartis. It has a strong record of accomplishment of innovation, delivering 16 major approvals as well as 6 FDA breakthrough therapy designations and 16 major submissions in 2017 alone.

With 9.0 billion USD of R&D spends out of 49.1 billion USD net sales shows their strong commitment to their sustainability in market. Pharmaceuticals and oncology grew by 8% in third quarter and contributed for 11% sales growth.

### **Strategies for Competition**

Novartis is driven with strong commitment to improve and extend people's lives. It utilizes innovation and digital technologies to give a synergistic effect in creating transformative medicines in areas of medical need. Novartis has breakthrough molecules in pipeline that are expected show a remarkable impact in the market potential.

- Its main strategy to stand ahead from the competitors is by strengthening the key driver i.e., R&D. It has a strong pipeline of late stage assets with blockbuster potential wherein three new chemical molecules targeted for the year 2018 and 4 molecules for the launch in 2019 in multiple nations and six molecules for 2020 which are first in class drugs.
- Novartis has targeted the competitor's products by developing biosimilars. Biosimilars Hyrimoz (Abbvie's Humria) and Pegfilgrastim (Amgen's Neulasta) were approved in the Europe market and targeted to capture the market share of these products. Humira (no.1 drug occupying 18.9% market share) & Neulasta (occupying 4.6% of market share) were the top drugs that ruled the market in the year 2017. The focus on biosimilars is a clear example of product differentiation and a well- defined strategy for competition.
- Apart from the focus on R&D and improvising product efficiency for better patient compliance, during recent times Novartis has been working on internal re-organization



of structure and collaborating with new firms to stand as a powerful pharmaceutical firm in the market by expanding its product portfolio.

- Being an innovator company one of the major threats it faces is by patent expiry wherein the market share is swept away by the generic industry. Despite the upcoming patent expiries it has other strong growth prospects and tentative product launches to withstand the effect.
- Cosentyx (82% growth in sales) & Entresto (195% growth in sales) being the key products accelerating the overall performance majorly, it is driven to hold the market and improve the sustainability in the competitive market.

### **Pricing strategies**

Novartis adheres to the objective of constantly innovating new products, finding the gaps and unmet needs in the market, defining solution to new diseases as well as the old ones through extensive market research.

Three main factors determine Novartis's pricing strategy:

- The amount of time and research that is invested into the product or to innovate it, considering the opportunity cost attached to it.
- How much molecule and salt is used in the medicine
- The training and amount of test trials that are used for the medicine.

The various pricing strategies followed by Novartis are:

- **Cost-based pricing:** It is the most widely used strategy of the company, where they first set up all the cost, time and resources that have been consumed and charges a markup. Since, Novartis relies heavily on its patents this causes it to charge high markups and costs. However, this costing highly depends on the criticality and magnitude of the disease the product is treating.
- **Equitable pricing:** Under this strategy, Novartis charges different prices in lower income countries, the lower prices are based on the purchasing power of the patients and payors. Key innovative products are sold on lower prices depending upon the disease priorities of the region, with the goal to maximize the patient access at a sustainable commercial model. This also helps the company to reduce the lag period between introductions in higher and lower economic countries.

- **Differential pricing:** This is very similar to equitable pricing; prices are charged differently based upon the economic conditions. For example, full price for a treatment is charged in developed countries, but subsidized prices in least developed countries (LDC) and lower income countries (LIC) such as the MALARIA INITIATIVE, where the company provided antimalarial medicine at not-for profit prices for public sector use. For patented products, Novartis charges premium prices in developed countries but do not enforce patents in LDC's and LIC's, and grant non-exclusive licenses to qualified third party to supply the patented products.
- **Novel pricing:** Other than these, Novartis has started to incorporate Novel pricing, where the price of the product is based on the clinical outcome that is better the data (safety and efficacy) from the clinical trials higher would be the price. Novartis would be launching this strategy for its new heart failure treatment "Entresto", which is expected to bring billions of dollars of sales to the company.

#### **Recommendations:**

1. Novartis and like pharmaceutical, need to be incorporate better technology in capturing and processing the data. With IA, automation, and machine learning, the drug development operation would be steadier and more efficient at lesser prices. This money saved during the development of drug will help the company to make more profits, invest more money in R&D, and above all reduce the cost of drugs and treatment.
2. Medical companies should join hands with the tech companies, and work collaboratively in bringing up more diagnostics and treatments for public use
3. For treatments that are estimated to require a lot of money as investment, the pharmaceuticals should join hands in sponsoring those trials, so that the investment burden on them is reduced in parallel to ease in operations and less heavy price tags.

## **Group 16: Microeconomic Analysis of Mercedes-Benz**

### ***Executive Summary***

*Automobile industry is a symbol of technical marvel by human kind and is one of the world's largest economic sectors by revenue. It consists of a wide range of companies and organizations, involved in the design, development, manufacturing design, marketing and sale of motor vehicles.*

*Today, this industry is at crossroads with the global mergers and relocation of production centers to emerging developing economies and is concerned with consumer demands of style, safety, and comfort, with labor relations and manufacturing efficiency.*

*Asia has become the major consumer as well as supplier of automobiles. With the support from individual governments in the development of domestic and critical component manufacturers, inter-alliance with other countries, the industry has shown an improvement in the investment environment with stronger patent regimes and incentives for R&D.*

### **Introduction**

Mercedes-Benz is a global automobile marque and a division of the German company Daimler AG. The organization is well known for its brand of luxury vehicles, buses, coaches, and lorries. The headquarters is located in Stuttgart, Baden-Württemberg.

Mercedes-Benz was the automotive division of Daimler-Benz AG, Germany's largest industrial group. Daimler-Benz was created in 1926 by two of Germany's automobile pioneers, Gottlieb Daimler and Karl Benz, each of whom had been active in early designs of motorized vehicles. Benz Patent-"Motorwagen" was regarded as the first gasoline-powered automobile.

The Tagline for Mercedes-Benz is "the best or nothing". It was poised from the beginning to be a power brand.

The main factors that would have contributed to such a successful brand would have included the marketing mix strategy adopted by the firm in approaching the market amongst other things.

Mercedes-Benz is a part of the "German Big 3" luxury automakers along with Audi and BMW companies. These three are the best-selling luxury automakers in the world.

## Product Categorization

As already mentioned, the company currently produces a wide range of advanced luxury trucks, coaches, cars and buses in its manufacturing facilities based throughout the world.

The company was organized in two (2) divisions: -

- (i) Passenger Cars
- (ii) Commercial Vehicles

The product is the strongest “P” in the marketing mix of Mercedes Benz. Mercedes remained as one of the leading brands in the Indian market, that too for more than 50 years.

The brand of the vehicles produced is categorized by an alphanumeric system, consisting of a number sequence, which is equal to the engine's displacement in litres (multiplied by 100) and followed by an arrangement of alphabetical suffixes, indicating body style and engine type, which is as follows: -

- (i) "C" indicates a coupe or cabriolet body style (C-Class is an exception and is also available as a sedan or station wagon).
- (ii) "D" indicates that the vehicle is equipped with a diesel engine.
- (iii) "E" indicates the vehicle's engine is equipped with a petrol fuel injection. It is also used for electric models and plug-in hybrids.
- (iv) "G" is used for SUV-Type (G, GLA, GLC, GLE and GLS).
- (v) "K" indicates a supercharger-equipped engine.
- (vi) "L" indicates lightweight sporting models, and long wheelbase for sedan models.
- (vii) "R" indicates racing cars.
- (viii) "S" indicates “special class” for flagship models which includes S-Class, and the SL-Class, SLR McLaren and SLS sports cars.
- (ix) "T" indicates "Touring" and a station wagon body style.

Today, many numerical designations no longer reflect the engine's actual displacement, but it reflects the relative performance and marketing position of the product.

Some models also carry further designations indicating special features:

- a) "4MATIC" indicates the vehicle is equipped with all-wheel-drive.
- b) "BlueTEC" indicates a diesel engine with selective catalytic reduction exhaust after treatment.
- c) "BlueEFFICIENCY" indicates special fuel economy features (direct injection, start-stop system, aerodynamic modifications, etc.)

- d) "CGI" (Charged Gasoline Injection) indicates direct gasoline injection.
- e) "CDI" (Common-rail Direct Injection) indicates a common-rail diesel engine.
- f) "Hybrid" indicates a petrol/diesel -electric hybrid.
- g) "NGT" indicates a natural gas-fueled engine.
- h) "Kompressor" indicates a supercharged engine.
- i) "Turbo" indicates a turbocharged engine, only used on A, B, E and GLK-Class models.
- j) "AMG Line" indicates the interior or engine, to the luxuries of the sports car series.

### **Demand and Factors Influencing**

It is evident that Mercedes Benz produces products that fulfill individuals transportation needs by providing vehicles to those who prefer private transport compared to public.

A further analysis is required to analyze which category Mercedes Benz cars fall into. There are 3 such categories: -

1. Durable Products—These are products with significant wear and tear capabilities and are consumed over long period of time.
2. Consumer Products—These are products purchased to satisfy a want or need.
3. Speciality Products—Goods with a high level of emotional attachment and involve considerable planning.

Presently, it is enjoying strong demand in China, thanks to its updated automobile line-up, giving it a boost past Audi as the No.2 luxury automobile manufacturer in the world. Efforts directed at creating new models and redesigning operations in China resulted in placing the company profit as long-term thirst for luxury automobiles. An increasing upper middle class and increasing incomes in China are counter-balancing its slowing economy and an anti-corruption crusade that had affected the demand for foreign luxury cars.

#### **i. Extremely Strong Growth in China**

Sport Utility Vehicles (SUVs) are highly popular in China. In fact, in the year 2017, SUV sales were forty percent of the overall sales of passenger autos in China. Mercedes-Benz has responded to this trend by offering their GLA and GLC SUVs. The SUVs are in addition to the C-Class and E-Class autos.

A string of approximately 500 Mercedes-Benz dealerships across the country and local production capabilities expanded, Mercedes-Benz is poised to take advantage of the Chinese desire for its luxury vehicles. These features also made China the largest single market for Mercedes-Benz in 2015.

China led the world in economic growth for the year 2016, and is currently the world's largest automobile market. Mercedes-Benz expects this trend to continue indefinitely. China was responsible for almost one-fourth of the carmaker's world sales for 2016, as well as being a major player in recent previous years. Growing twenty-eight percent in 2016 alone, Mercedes-Benz leads the Chinese luxury automobile market.

The goal of Mercedes-Benz is to strive for a sustainable, profitable, and healthy growth in tandem with its dealers so that its customers will readily recognize brand value. This does not necessarily translate into being Number One in premium car sales, but rather is based on customer satisfaction, product reliability, and brand recognition.

Mercedes-Benz is striving to meet the Chinese trends in terms of assisted driving, connectivity, and other features. The E-Class long wheelbase is being touted as "Made in China, designed for China". This new model, with its thirteen trim levels, was just one of sixteen product lines that Mercedes-Benz debuted in China during 2017.

In an effort to meet the demands of an ever-increasing digitalized lifestyle, Mercedes-Benz has now offered features such as WeChat My Car, offering door-to-door service that includes test-driving. These things are proof of Mercedes-Benz's efforts to address the needs of the Chinese customer's digital lifestyle.

## **ii. Best Customer Experience**

Mercedes Benz has introduced many technological and safety innovations over the years, which went on to be replicated by other brands. The company understands that consumers are not just interested in buying a car that moves them from one point to the other, but reflects the status of the consumer owning the vehicle, and distributes its brand through a broad network of dealers throughout the world.

According to statistics from Mercedes-Benz, approximately seventy-five percent of their customers choose to utilize dealership services from initial purchase to follow-up services

including maintenance. This results from years of efforts directed towards optimizing cost of ownership, among other factors.

Mercedes-Benz puts forth its best efforts to help people realize their dreams—dealers, employees, and associates, not just customers. Mercedes-Benz strives for sincerity, genuineness, transparency, and fairness in its dealings with all those with whom it comes in contact.

### **iii. Income elasticity of demand**

Income elasticity of demand is the measure of responsiveness of the quantity demanded to a change in consumer income. In particular, it is the ratio of the percentage change in quantity demanded of a good to a given percentage change in income.

$$E_y = (\% \text{change in quantity demanded}) / (\% \text{change in income})$$

The major determinant of income elasticity of demand is the degree of “necessity” of the good. For a normal good or service, income elasticity of demand is positive ( $E_y > 0$ ). Those are goods or services whose demand increases as consumer incomes increase. Luxury goods (Mercedes Benz S-class) will have a higher income elasticity of demand than basic goods. A positive  $E_y$  suggests that when consumer income goes up, they will buy a great deal more of that good.

The income elasticity of demand is an important concept to firms considering the future size of the market for their product. If the product has a high-income elasticity of demand, sale is probably growing promptly as national income rise, but may also degrade considerably if the economy falls into depression.

### **Production**

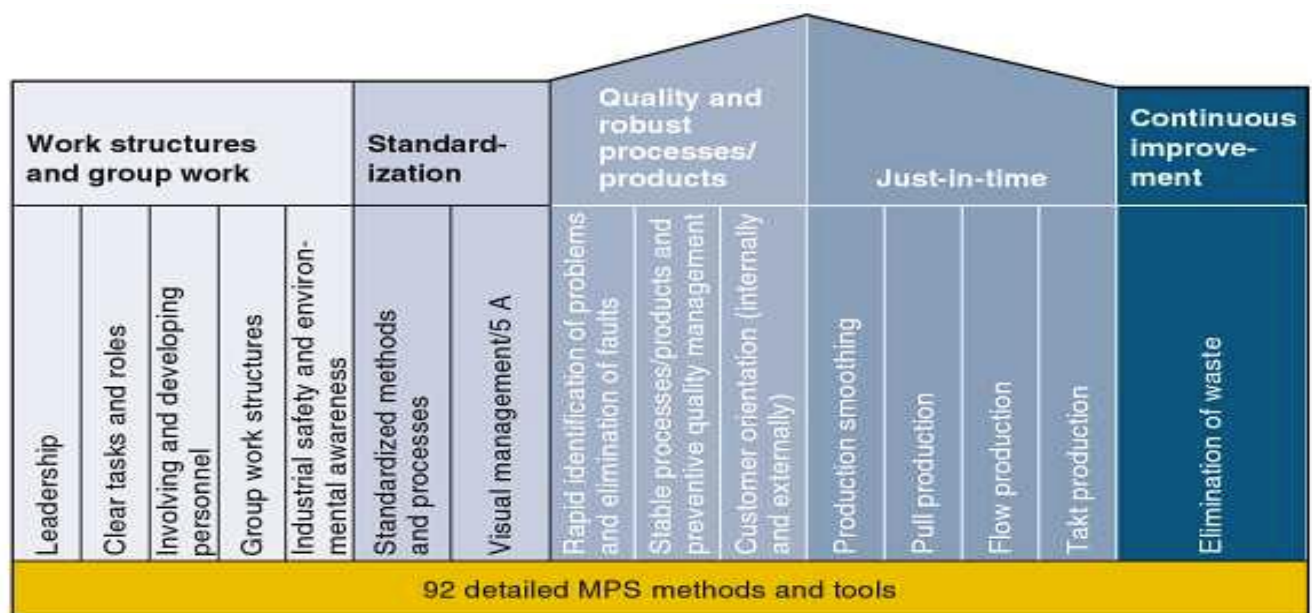
Most of the people who own and drive a Mercedes-Benz vehicle are not aware of what it takes to assemble and produce these high-end cars. The process of building such cars is complex. The assembly line production not only involves highly skilled labor but also highly mechanized process. All the vehicles that come out of the production line have the same specifications and are of the highest quality.

Mercedes-Benz has earned a reputation for [luxury](#), [safety](#) and the [latest technological features](#) which implies that a lot of work goes into producing the different Mercedes-Benz models that

blaze the trail and meet the expectations of customers. The Mercedes-Benz Production System (MPS) is an example of a company-specific solution within the development and introduction of standard production systems currently seen in the automotive industry. The automotive industry got aware about the efficiency of Japanese manufacturing techniques after the oil crisis during the 1970s. With the formalization of the Toyota Production System (TPS) in the early 1980s, it gained widespread recognition as a company-specific production system. This approach of having a company-specific production system possesses a large resemblance to the lean Toyota Production System that has inspired automotive plants worldwide in the past decade. Both the approaches require just-in-time inventory. Both reduce job descriptions to simplified and standardized routines. Both strive for stable production flows in the belief that stability leads to product quality. Both organize their plants into work teams that strive for skill development. Both believe in embracing the mantra of continuous improvement.

The Mercedes-Benz Production system is a five-step program that focuses on five areas:

1. Work structures and group work (Human infrastructure)
2. Standardization
3. Stable quality processes
4. Just-in-time inventory
5. Continuous improvement



*Source: Daimler Chrysler (2005)*



It is a production system, which is a tool kit of best practices with 5 subsystems and 15 production principles.

### **Processes, Substitutes and Complements**

The five subsystems are the principles followed by Mercedes-Benz, which is as follows:

#### **1. Work structures and Group work**

##### **a. Leadership:**

The first principle is leadership. In this, the company has formed groups and appointed leaders for each group, who will be responsible for the activities of the group.

##### **b. Clear tasks and roles:**

The roles and tasks given to the workers are clear and understandable. The workers are communicated in such a way that they are able to identify what needs to be done to complete the tasks.

##### **c. Involving and developing personnel:**

The employees are involved in the activities of the organization and proper training is given to the employees for developing their skills and to motivate them.

##### **d. Group work structures:**

The group work structures are not complex and the workers know about how to work in groups and whom to report on a priority basis.

##### **e. Industrial safety and environmental awareness:**

The workplace safety has been ensured such that no worker will be harmed and they are given proper information on how to keep environment clean and safe for work.

#### **2. Standardization**

##### **a. Standardized methods and processes:**

The methods and processes used to develop the automobiles are standardized throughout the plants located at different locations and areas. Same techniques are used to build the vehicles with all facilities.

##### **b. Visual management:**

In this, clear instructions exist and are displayed for each of the techniques specified in a production system.

### **3. Quality and robust processes/products**

The fully assembled Mercedes-Benz is then driven out of the plant, where defects are checked and repaired before the car is released into the [market for sale](#).

#### **a. Rapid identification of problems and elimination of faults:**

Mercedes-Benz follows a system in which the problems are identified rapidly and through proper measures, they eliminate the problem. They also make sure that in future, the problem will not occur by eliminating the faults.

#### **b. Stable processes/products and preventive quality management:**

The processes used in MPS are stable and do not change frequently. Also, they have a system of preventive quality management, which means being proactive to the quality problems and not to be reactive, which means acting only after the problem, has occurred.

#### **c. Customer orientation (internally and externally):**

The production system and its activities always keep in mind the needs and preferences of the customers and work in accordance to make what is desired by the customers. The same thing is followed internally and externally in the outlet.

### **4. Just in Time inventory**

Just in time (JIT) is a production strategy that strives to improve a company's return on investment by reducing in-process inventory and associated carrying costs. Just in time is a type of operations management approach, which was originated in Japan in the 1950s, and Mercedes-Benz has adopted it as a part of their production system.

#### **a. Production Smoothing:**

The first principle of JIT is production smoothing. It means the production should not be having any breakdowns because of inventory shortage. JIT in MPS ensures that the production is going on continuously and the materials required are placed just before they are needed for smoothening the processes.

#### **b. Pull Production:**

Mercedes-Benz uses pull production technique in which it produces the vehicles only when there is a demand for the same by the customer. In this, the dealers place the order to the company and then the company starts producing the vehicles and delivers them to the dealers thereby using pull production and not push production. It also reduces extra inventory levels thereby reducing costs.

**c. Flow production:**

Mercedes-Benz uses flow production, which involves a continuous movement of items through the production process. This means that when one task is finished, then the next task starts immediately. Therefore, the time taken for each task is same.

**d. Takt production:**

It is the average unit production time needed to meet the customer demand. In Mercedes-Benz, if the customer wants to buy 10 units per week, the average time to build a unit is 4 hours (or less) as the units are built during a 40-hour work per week.

The production cycle time in MPS is less than Takt time. The cycle time to complete work on each station is often less than the takt time in order to ensure that the customer is never short of product. Although, the company tries to match cycle time to takt time to avoid building inventories and over-sizing equipment but the reality is that demand is dynamic and never precisely known and also process disruptions such as unplanned downtime can occur.

**Other factors****Raw Materials and Design**

The raw materials used depends on the needs that the Mercedes-Benz model is intended to meet. The atmosphere of the interior will also influence the choice of materials to be used. The [design](#) is another important process in the making of a Mercedes-Benz. It takes an average of three to five years from inception to completion of assembly.

For decades the big auto manufacturers have always believed that stronger steel made a stronger vehicle. Mercedes-Benz was and still remains as a primary innovator among other companies in the Automobile industry. Mercedes-Benz neither compromises on quality nor resorts to procuring anything beyond the standard parts for the cars.

**The Manufacturing Process**

This is one of the last steps in the production of a new model Mercedes-Benz. However, the process involves a lot of work, coordination and complex steps.

**Components**

Various contract-based suppliers to Mercedes-Benz supply the different components to the assembly plant. During this process, it is estimated that over 4000 suppliers deliver their components to the automaker and production facility. The components are brought together,

with those that will form the chassis in one place and those to be used on the body in another place.

### **Paint**

Before the shell can be painted, it has to be taken through a rigorous inspection process. The inspection process allows the workers to correct any defects in the body of the automobile. Once the defects have been repaired, the shell is cleaned, taken through a drying booth after which the first coat of paint is applied using robots. The robots are programmed to apply the same amount of paint over a specific period. The painted body is then taken through baking ovens so that the paint can be treated.

### **Economies of Scale & Scope**

By being involved in the manufacture of pre-production vehicles at an early stage, they were also able to gain valuable experience when it came to assessing how the different phases of the production process could be best configured. These high standards were also constantly further developed after the start of the pre-production series, and process reliability was therefore continuously improved. One of the new production system's key features is its modularity. More than any other Mercedes model, the new C-Class comprises a number of modules that having been built off-line and offered up to the vehicle on the assembly line. With maximum precision and minimal tolerances being key MPS features, the production engineers have developed what they call "soft touch form and piece". The actual dimensions of the individual body panels are compared with the specified data and in the event of even the slightest deviation; the parts are reshaped for the ideal fit. In the eternal quest for "zero defects," an error-signaling system simplifies the faultfinding process so that the normal working process is back to reliable operation within a short time. Another benefit of MPS is in logistics where the number of parts stored which has been dramatically reduced. While part of the stocks of the assembly line of the outgoing model is represented up to five hours of production, the material supply on the new model has been reduced to just two hours. Numerous technological innovations have been introduced on Mercedes-Benz automobiles throughout the many years of their production. Half a century of vehicle safety innovation helped win Mercedes-Benz the Safety Award at the 2007.

Although Mercedes Benz marketing strategy is focused on the luxury, safety and precision engineering of its cars, competition has propelled it to adjust its product to suit the changing consumer attitudes. Now, their marketing strategy focuses more on presenting a more energetic, fun loving and approachable side of Mercedes Benz younger consumers.

The Commercial Vehicle Division manufactures trucks and buses, and has its production broadly distributed around the world, with manufacturing sites in Mexico, Argentina, Turkey, and the United States. The U.S. operation included Freightliner, a leader in U.S. heavy-duty trucks. In 1992, fully 112,800 commercial vehicles were produced outside of Germany. Mercedes-Benz's automobiles competed at the high end of an industry that was increasingly characterized by global competition. The world's leading automobile companies included U.S., Japanese, and European countries.

### **Merger & Challenges**

It all began in 1926 after the World War 1 affected by inflation and poor sales figures – especially for luxury goods such as passenger cars. Only strong brands marketed by financially stable companies were able to survive. Businesses are often forced into mergers or partnerships. Competitors for many years, DMG and Benz & Cie. entered into a joint venture in May 1924. They focused on remaining competitive through coordinated designs, production techniques, purchasing strategies, sales and advertising. The newly founded “Mercedes-Benz Automobile GmbH” initially handles the joint marketing activities of the “Mercedes and Benz” brands. The fusion of these two oldest automotive manufacturers in the world took place in June 1926 when Daimler-Benz AG was established. The new company presents the first Daimler-Benz product range at the 1926 Berlin Motor Show. The exhibition saw the unveiling of the first jointly developed passenger car models launched under the new Mercedes-Benz brand name: The 8/38 Hp two-litre car (W 02) and the 12/55 hp three-litre model (W-03).

In the late 1990s, Mercedes-Benz was sold in the UK through a franchised network of some 138 dealerships. Each of these was autonomous, with the exception of three dealerships owned by the distributor DaimlerChrysler UK (DCUK). DaimlerChrysler had relatively little control over relationships between dealers and customers. Dealers managed their own relationships including customer research, data base management, acquisition and retention processes, DCUK recognized that managing data was critical to the success of CRM at Mercedes-Benz. Central to the whole new approach was building a total picture of the customer. The sales

process was carefully set out to support data capture. Customer support and sales personnel were trained in how to accurately record important customer information, improving the quality of data and it could control the trust of the dealer network it has built over a period of time.

### **Market Structure, Dominance and Market Power**

The marketing mix of Mercedes Benz shows what a fantastic company Mercedes is, and how, as per “Business Week” Magazine, is the top most recognized global automobile brands. This high profile success is not an accident but hard work, patience and excellent application of effective marketing strategy all rolled into one.

The company deals in luxury automobile, buses, trucks and coaches. Mercedes Benz is a part of ‘German big 3’ in automobile car makers along with Audi and BMW. The ‘German big 3’ is the top 3 best luxury car makers in the world with Mercedes leading at the global front.

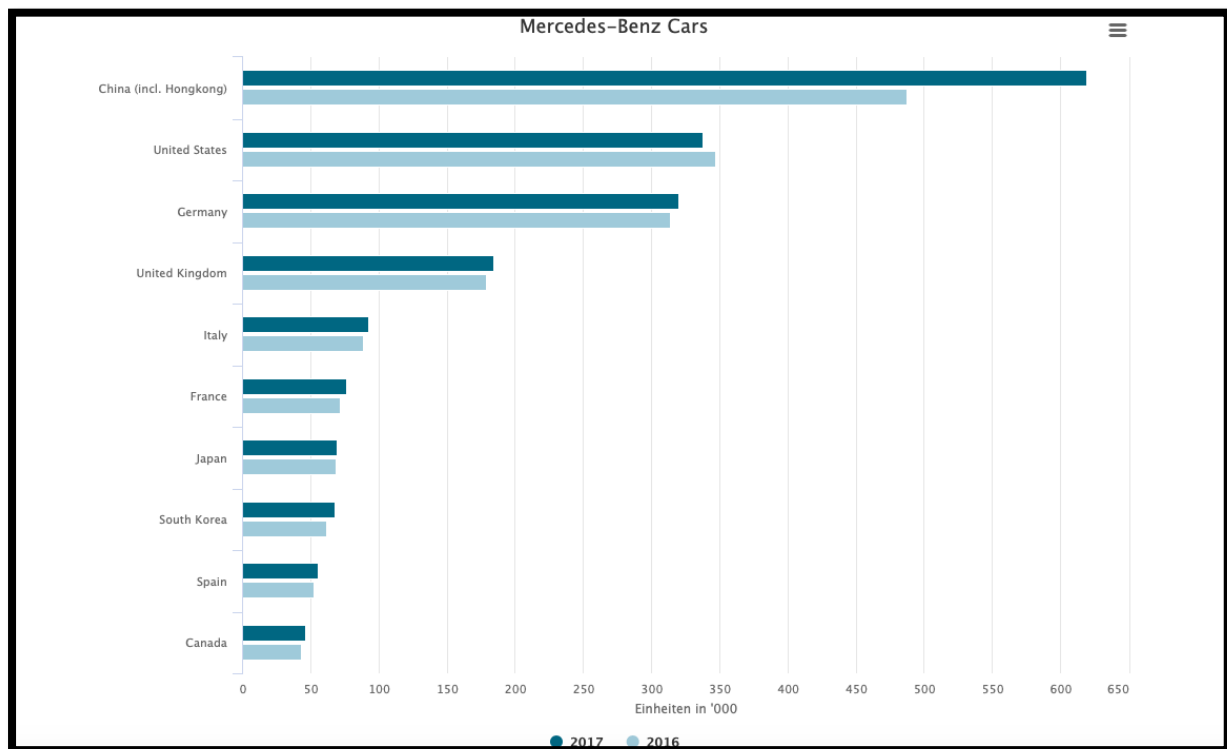
The Mercedes-Benz Cars department consists of the Mercedes-AMG, Mercedes-Maybach and Mercedes sub-brands, as well as the smart brand and the new EQ brand for electric mobility. The company always strive to hold on its position as the market leader in North America, Europe and Japan.

Mercedes Benz is successful across all the segments, starting from compact segments A class, B class, C class, E class, the luxurious S class to even SUVs- ML and GL class. The company also deals in the sports segment- the AMG batch series consist of CLA, GLE and SLR.

The company sets a new sales record in Jan-Feb 2012 with 182.600 units (+13%) and strongest growth of all premium competitors. The highest number of units were sold in Russia and Japan. As far as figures of 2016-2017 is concerned, the sales were highest in China and North America.

Mercedes-Benz target both manual and automatic transmission automobiles and design their middle aged males and females.

Top 10 markets per sales:



Mercedes Benz research and development centre in Beijing, China is an important component of the Mercedes international development network. Outside Germany, the largest research and development centre is based out of Bangalore, India. The company has paired up with Renault-Nissan which is the strategic partner for designing, producing next generation compact premium cars.

In economic sense, the company has shown the promising results with promising future vision. **The company aims to transition from vehicle producer to full-range supplier of innovative mobility solutions.** In order to achieve the vision, the company has set the four strategic areas for action – CORE (strengthening the global core business), CASE (leading in new future fields), CULTURE (adapting the corporate culture) and COMPANY (strengthening the divisional structure).

Mercedes has also narrowed its gap with its competitors BMW and Audi in China in sales and revenue. The strategy appointed by Mercedes is to make local manufacturing tie ups. The company has invested along with its domestic partner, BAIC Motor, in their joint venture Beijing Benz Automotive Co., Ltd. By doing this, the company has produced and sold more

units with efficient cheaper cost to them in China. Local production will help the German giant to bypass the heavy import tariffs and value-added taxes, which make Mercedes-Benz less price competitive.

As far as India is concerned the company has always focused on customer centric approach for brand marketing. The CEO of the company clarified to The Economic Times that one of the reasons for company's commendable performance in Q1-2018 is due to the correction in the impending price, creating a demand for the luxury industry in India, launch of new affordable products across different segments and body shapes and most importantly to increase customer's interest along with make in India initiative. The company also claimed that "Apart from the sedans, the New Generation Cars continued to attract younger customers to the brand, while the AMG and Dream Cars portfolio made the fascination for the brand more visible than before".

### **Market competition**

Mercedes has a strong brand and it's a financially solid company. It is a leader in innovation forefront, i.e., first to introduce diesel engine, fuel injection and anti-locking brake system. The company invest huge amount every year in the R & D so as to remain ahead of its competitors. The company has a significant presence in sports & formula one racing through sponsorships & participation. Mercedes-Benz is a pioneer in advertising and marketing & creates brand awareness through various channels. Company's major competitors are BMW, Porsche, Audi, Volkswagen, Jaguar, Ferrari, Aston Martin and Volvo. The competition becomes even tougher due to ever changing fuel prices and government policies. Audi, another German giant, competes with Merc in the automobile sector and generates around 200% of Mercedes-Benz revenue. On the other hand, Volkswagen another German legendary automobile company have a heavier work force than Mercedes in order to cater the automobile luxury car domain. As far as social media response and advertisement, BMW, Audi and Volkswagen dominates the UK region in terms of fans, active users, page post, comment, shares and response rate. BMW is also a major competitor for the company's SUV and sedan class and is offering front wheel drive with better interior quality/space and superior luxury upholstery comfort. Beamer also provides better in class driver assist technology at cheaper rate than Mercedes Benz.



Not limited to base and mid category cars, BMW also competes the Mercedes ultra-luxurious S class with its 7series. BMW also offers specialist chauffeur dealership network across the UK with their chauffeur class 7 series in order to capture major chunk of the market. This BMW approach tremendously boosts up revenue and sales compared to Mercedes-Benz.

### **Strategies for competition:**

Mercedes Benz holds a strong ground compared to its competitors by devising attractive strategies to customers as well as to other businesses. Starting with the company's very own tag line –'Best or nothing'; which says it all and gives a well-defined and solid attraction to the brand. The company has a strong ambition to lead the future which is very well advertised and marketed at global forums:



## Four levers of Mercedes-Benz 2020



The company has a good forecasting team, which gives a head, ups for investment for potential future markets to target different segments and products in developed and developing countries.

## India will become the third largest passenger car market by 2020 - Growth potential similar to China



8.6 mio  
passenger cars  
in 2020



Average GDP  
growth of 8%  
over the last five  
years to be  
continued



1.2 billion  
inhabitants  
>50% younger  
than 25 years



Emerging of a  
new and wealthy  
middle class



Very high  
chauffeur  
share



Important  
production hub  
High import  
taxes require  
local production



The company aims at different models, segment and class to cater different taste of customers hence capturing bigger market share compared to BMWs and Audis.

Mercedes Benz with its class marketing and international media recognition could easily generate better sales and customer satisfaction. Daimler's ambition was clear and straightforward. It aims to embrace e-mobility customer offer.

The Mercedes communication activities targets and supports three important brand values- **Fascination** (sport cars), **Perfection** (C, E and S class) and **Responsibility** (Blue Efficiency). In order to put their competitors on their toe, it focuses on 5 international sponsoring platforms, namely, Fashion, sports, corporate social responsibility and classic/retro car domains. The company uses sponsorship activities to advertise and communicates in an authentic way to the target customer group. Mercedes-Benz always prefers to launch a new product or experience in a stylist ceremonial way with red carpet, Champaign, lights and stage shows that again added up as a brand marketing strategy.

Mercedes-Benz's product differentiation has allowed it to beat down the customers' power by offering them the same product (engines) at various prices under different car models and class. The versatility of Mercedes Benz allows the company to produce a diverse class and variety of vehicle ranging from cars to trucks/buses has made them a well-known household name. The diversity of product programme offered by the company permits consumers to make wide variety of choices. This diversification of the product has been a determining factor for consumers who decided to buy a Mercedes Benz products.

In a nutshell Mercedes-Benz's growth strategy dominated the automobile market post 2013 compared to its competitors. The company started a new initiative to design compact high-end luxury cars along with its smart electric cars, which are the market leaders in the home grounds. Mercedes-Benz's strategy to diversify its basic automobile product and the customer centric approach resulted in higher growth than its counterparts. It was the first premium car manufacturer, which offered its vehicles online and even via a smartphone app for customers to book and buy.

## **Pricing and Other Strategies**

The concept of buying a car is well known particularly in India but renting or leasing out a car is something new. Mercedes-Benz was the first premium car manufacturer to give options and discounts in insurance, rent and lease option to Indian customers.

Pricing is the only element in the marketing mix which accounts for demand and sales revenue. The basic objective of pricing policies are:

1. Survival of the company
2. To increase current profits
3. To increase current revenues
4. To increase and maximize sales growth
5. To maximize market skimming
6. To establish product quality leadership
7. To penetrate market rapidly
8. To win over market competitors

Mercedes was able to reach out to the potential segment of the consumers through an efficient product positioning, unconventional marketing mix and effective promotional mix. There 4 P's involved in the marketing mix – Product, promotion, price and place.

Mercedes is a well-known brand in the country as a premium dealer in the luxury car segment. Mercedes' focus on customer satisfaction and attractive pricing strategy like rent/lease out option to own a high end luxury car, has resulted in a positive revenue growth curve. Mercedes' manufactures different types of hatchbacks, sedans, coupe SUVs ranging roughly from Rs.22 Lakhs to Rs.7 crores for the Indian market. The company offers an attractive price bundling strategy to cater different segment of premium customers. The price varies from A Class, B Class, E and S Class. The customer can also go for basic model of Mercedes like A and C Class with add on sports kit which is known as the AMG batch and/or mid model car with add on luxury kit, the Maybach. The company offers a huge diverse variety of accessories like driver assist model, the sport strip racing model, corporate elegant models etc under the price bundling scheme. Mercedes has also established itself in the social media platform like Facebook, YouTube, Merc blogs as a way to enhance for customer engagement, interaction and to resolve basic queries.

Another marketing strategy employed by Mercedes Benz is its decision to slice prices and make

the product more affordable to consumers.

One thing that Mercedes managed to do is to build a reputation of quality and exclusivity in all its products, making it one of the most recognizable brands in the globe. Thus, it enjoys a reputation of class and prestige. Mercedes is leaving no stone unturned to tap Indian market in premium segments. As a matter of fact, the company deals in a niche segment where the customer is more concerned with the value they are getting on the product more than anything else is.

Mercedes offers various attractive referral schemes as well to the customers such as: -

- 1) If a Mercedes customer refers and introduces his/her friend to the Tri-Star through star lease and if they lease out a star (Mercedes car), the customer will get Rs.30,000 worth gift voucher from Mont Blanc.

This particular scheme introduces the customer to lease out option which simply means – pay for what you use with the luxury of owning/driving your dream car at an affordable price. The lease out option requires no down payment which makes it an attractive deal.

Other benefits include

1. Tax benefits
2. Additional line of credit
3. No insurance or maintenance costs
4. Easy car upgrade every 3 years.

It's not just financial pricing scheme, it transforms the driving experience without compromising the future plans.

The company also offers the star finance which is Mercedes' own financial loan scheme provides number of benefits as well. STAR Lease has been designed to ensure that applying for finance is carried out on your terms. The customer has to just choose the desired car, the repayment period and the anticipated contract kilometer limit and then the customer can drive home 'The Mercedes-Benz'.

## Recommendations & The Road Ahead

Overall, Mercedes-Benz is a brand that has firmly positioned itself in the automobile market with its new designs. The hope for expanding its market base in other parts of the world is on the rise. The brand awareness and brand loyalty that Mercedes has acquired over the past years is admirable. The company intends to change the perception of the brand and reposition it so that it is more appealing to the younger generation. They are also sending out the message that they are more approachable than ever before.

Some of the opportunities available for the organization are:-

1. The focus of expanding its presence in developing markets like China, India and other Asian countries is on the rise due to rise in disposable income, changing lifestyle & stable economic conditions.
2. **Maintaining strategic alliances** can prove smart for the automobile companies. By using specialized capabilities & partnering with other company they can **differentiate** their offerings.
3. Developing fuel-efficient futuristic technology & hybrid cars can help Mercedes in emerging as a market leader globally.
4. **“CASE” connected, Autonomous, Shared & Services, and Electric**—These four concepts will shape the future of driving. At Mercedes-Benz, it has been moving the world for the past century. As part of the case initiative many new advance technological changes are being implemented like “The EQ Ecosystem”, Mercedes has already invested more than \$1Bn production investment to bring in hybrid models by 2022.

Apart from the positive things on the organization, there are also few negative points that it has to take care not only as a company but also for the Industry: -

1. Servicing cost is one of the important deciding factors whichever vehicle we are planning to buy. Mercedes servicing cost is high as compared to other players in the same segment.
2. It may happen that Daimler itself being such a big group can fall prey of conflicting objectives of the group companies such as AUDI, BMW, Volvo etc. who are not leaving any stone unturned to emerge as a global player & leader in most of the markets, and this may have an affect Mercedes brand.

3. Although Mercedes could expand strongly, however, it is found to have a stunted growth because it keeps distribution of its vehicle very much exclusive, which affects its supply and therefore its brand equity.
4. Due to the fact that mature markets are already overcrowded, Industry is shifting towards emerging markets by building facilities, R & D centers but benefit of these decisions is yet to be capitalized.
5. Government policies like reduction in global warming by discouraging the use of personal transportation, reducing the road permit validity, volatility in fuel prices, restricting the entry of outside state vehicles are some of the policies/regulation which are already been implemented in various regions in the world and is affecting the sector by & large.

## Group 17: Microeconomic Analysis of Ola Cabs

### *Executive Summary*

*This report analyzes the microeconomic structure of Ola Cabs, an Indian origin passenger transportation company. The market structure of any firm depends on the demand and supply factors along with other cost factors and elasticities. The following table illustrates the demand factors for the passenger transportation firms of India in general.*

| <i>Demographics</i>        | <i>Commercial Activity</i> | <i>Transportation Options</i> | <i>Land Use</i>     | <i>Prices</i>     |
|----------------------------|----------------------------|-------------------------------|---------------------|-------------------|
| <i>Number of employees</i> | <i>Tourism</i>             | <i>Public Transport</i>       | <i>Footpaths</i>    | <i>Vehicle</i>    |
| <i>Age group</i>           | <i>Parking Facilities</i>  | <i>Cycling</i>                | <i>Roads</i>        | <i>Road Taxes</i> |
| <i>Income group</i>        | <i>Internet Plans</i>      | <i>Mass transit systems</i>   | <i>Connectivity</i> | <i>Fuel</i>       |

*“Prices are the direct, perceived costs of using a good”. The price also takes in the factors of time, health, safety, and comfort. Depending on each of the factors the cost of a service is determined. The impact of quantity demanded and price can better be studied using the elasticity of demand, cross elasticity (complementary and substitutes), the income elasticity of demand.*

*Similarly, the production quantity of a firm depends on various inputs that govern the cost function. As much as it is important to scale the business in terms of manpower, it is also equally important to maximize the efficiency of the resource.*

*In as many cases, the production also depends on what and how much is the competitor producing, in the case of Ola cabs, the rival companies are Uber India, Meru Cabs, Sony Transportation etc. The number of trips, average trip fare, and distance decides the market share of a firm in the passenger transportation business.*



*Being in a monopolistic competition, Ola has to continually take strategic decisions in order to reduce costs, maximize revenue. Along with innovations in the technology, the company also aligns itself with the lifestyle of people thereby leveraging the economies of scope by introducing Ola Auto, Ola Motorbike, Ola Pink.*

### **Introduction of the Business**

Ola Cabs is an Indian origin passenger transportation firm founded by Bhavesh Aggarwal and Ankit Bhati, developed by ANI Technologies Pvt Ltd on 3, December 2010. Started as a cab aggregator, today Ola has its footprints in 169 cities with over 10,00,000 fleets under its name. Ola has its services spread from the affordable bike transportation to luxurious travel in a sedan or an SUV to outstation transportation thereby emerging as one of the top firms in the market.

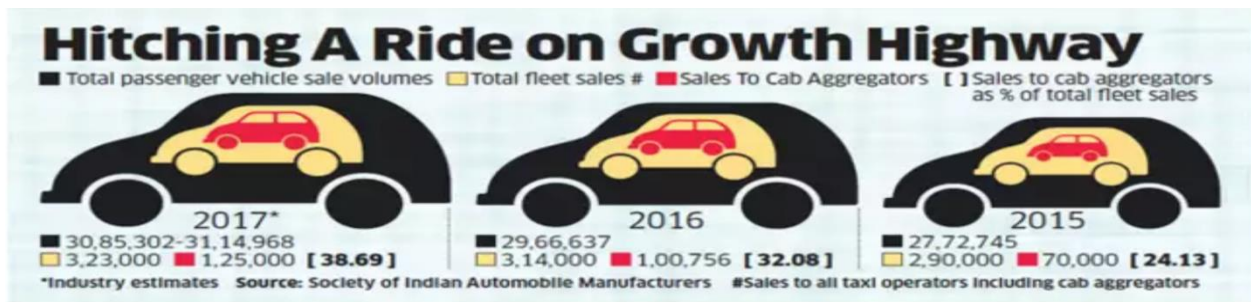
Due to increasing demand and lack of proper public/mass transit systems, Ola found its way occupying a few MBs of memory in every smartphone users and making them their target customer. Like any other business, Ola scaled its business, touching new cities and adding new drivers every day until late 2015 when the diseconomies of scale led to depreciating profit margin thereby to cut the costs, the company had to cut its cost factors of which driver incentive is one of them.

Ola Cabs is one of the finest examples and its journey is a case study in understanding the microeconomic factors and their impact on the economic profitability of a firm. In its move to expand its business, Ola has acquired foodpanda and has also started various new services like Pink Cabs exclusively for women and partnering with auto (three-wheelers) drivers to ensure that the market is disrupted.

### **Methodology and Analysis**

The methodology used for this analysis is to refer all the relevant principles and terminology of microeconomics, thereby applying them to the data available through various verified sources online to study the pros and cons of various decisions taken by the firm. Finally, proposing a set of recommendations to overcome the current economic paralysis. Due to the unavailability of proper data, a concrete analysis could not be carried out and the sole information available on the Internet is used in the report.

## Result of Analysis



The above image from economic times illustrates the increase in the demand for the taxi aggregators and as reported by Quartz, Ola owns 56.2% of the market. Ola has been increasing the revenues and scaling the business leveraging the economics of scale.

Ola Cabs entered the markets when there were fewer players and with the technological spearheaded product, Ola enjoyed the market before turning the monopolistic competitive markets to Duopoly along with Uber India.

In order to gain economic profits, the firm has ventured into other geographical places like Australia and food delivery business by acquiring foodpanda, currently is doing a great job.

In India, with the increasing fuel prices and an oversupply of drivers, the industry is facing a tough situation of paying or incentivizing the drivers due to which the supply of drivers has taken a hit. Also, with metro cities developing their own mass transit systems, the industry is set to witness a steep decline in the number of long trips.

## Interpretation of Analysis

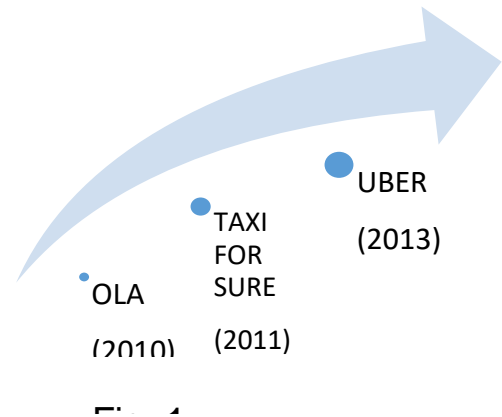
- **Demand for the Product**

The Taxi Market in India is highly Unorganized. It constituted of individual car owners and agencies which operate in very few areas. Taxi market in India is around \$9 billion of which unorganized market is \$8.5 billion market share.

Organized Taxi sector is still at the initial stage. The growth of organized Taxi market in India is as described in the illustration (fig 1).

Various factors affecting the demand are:

1. Income of the customer
2. Price of other goods
3. Taste of the customer
4. Demographics, Population
5. Seasonal Effect
6. Expectations on the product/service
7. Availability of credit



- Derived demand

### Factors Influencing Demand

The following table describes the factors that influence the demand for the taxi industry and Ola in specific.

| Factors Influencing         | Description   |
|-----------------------------|---|
| Price Competitive           | Lack of Public Transport to satisfy the current demand has paved the way for cab services. Ola with its affordable pricing has been competitive.                                |
| App Interface               | Elegant and easy to use interface targetting the users in India has led to an increase in demand for the services of the firm.  |
| Demographics and Population | Due to the increasing young tech-savvy population, the demand for the transportation services has increased manifold.   |
| Derived Demand              | Due to an increase in smartphone users and reduced high-speed Internet charges, the demand for an app based, aggregator transportation has experienced an exponential increase. |

### • Obstacles for Growth

The following table describes the obstacles to the growth of Ola Cabs.

|                  |   |
|------------------|---|
| Skilled Drivers  | Lack of skilled drivers makes customers avail other taxi services.  |
| Technical issues | Issues in booking over the call or app crashes make the customers look for other alternatives.                      |
| Regulations      | Lack of clear-cut and stable policy could lead to wariness from players and investors, slowing the industry growth. |

|                       |   |
|-----------------------|---|
| Vehicles availability | Cab services provide their services within the city limits thereby losing out on the opportunities. |
|-----------------------|---|

- **Substitutes and Complements**

One of the factors for the demand of the product as described in 2.1 is derived demand. In the case of substitutes and complements, due to an increase/decrease in the quantity or price of one product, there is an increase/decrease in the quantity or price of another. If the increase in the price of one product decreases the quantity demanded of the other, then the products are said to complements and otherwise, substitutes.

In the case of Ola cabs, Uber India is the biggest competitor alias substitute along with other local shuttle services. As and when the prices of Uber reduces, there is an increase in the quantity of service demanded at a given time.

Consequently, with the increase in tourism, infrastructure (roads) and the purchasing power of the population, there is an increase in the services of Ola Cabs. They complement the quantities of services demanded of Ola Cabs.

- **Different Elasticities**

Elasticity refers to the responsiveness of one economic variable, such as quantity demanded, to a change in another variable, such as price. There are majorly four types of elasticities in economics:

1. Price elasticity of demand (PED): is the measure of the responsiveness of the quantity demanded to change in the price. Eg: If the price of the bike service increases by x%, there will be a reduction in the number of trips demanded by the end customer.
2. Price elasticity of supply (PES): is the measure of the responsiveness of the quantity supplied to the change in the price. Eg: If the price of the bike service increases by x%, there will be many drivers willing to drive thereby increasing the supply.
3. Cross elasticity of demand (CED): is the measure of the responsiveness of the quantity demanded of one good, X, to a change in the price of another good, Y. Eg: Change in price of Uber Moto would impact the number of trips of Ola bike.
4. Income elasticity of demand (YED): is the measure of the responsiveness of the quantity demanded to a change in consumer incomes.

## Production

- **Processes and Inputs**

Production is a process of a mixture of materialistic and immaterialistic inputs whose output is consumed by the end user. Since Ola Cabs is a technologically driven product aimed at leveraging the demand-supply theory wherein the customer who is in need of a transportation service is mapped to a driver who is looking for a trip and earning a commission out of each trip.

The inputs of the production process are:

1. Technology

Technology is the key driver of the whole business model employed by the Ola Cabs and a capital investment is made in order to maintain the servers and data along with customer support.

2. Drivers

The number of drivers directly affect the demand pricing of the service along with the profits earned.

3. Fleets (Cars/Bikes) owned by Ola

- a. Ola pays EMIs for these cars along with the maintenance charges in order to run its operations.

- **Substitutes and Complements among Inputs**

The substitutes and complements for the inputs described above are as follows:

| Input          | Substitute                 | Complementary                      |
|----------------|----------------------------|------------------------------------|
| App Technology | Phone calls                | Internet Speed and Price, Hardware |
| Drivers        | Self Driving Vehicles      | Not Available                      |
| Fleets         | Mass/Public Transportation | Not Available                      |

- **Costs**

Taxi aggregator app Ola will invest Rs 5,000 crore in the coming year to expand its newly formed cab leasing business. The Bengaluru-based firm has also roped in former LeasePlan

India executive Rahul Maroli as Vice President (Strategic Supply Initiatives) to head the leasing business that will operate as a fully-owned subsidiary company.

Under the programme, drivers can lease a car for a minimal initial deposit of Rs 35,000 and monthly lease payments (of about Rs 15,000) with an option to own the vehicle after a period of three years. "This will open up the opportunity for hundreds of thousands of drivers to turn entrepreneurs in the long run while giving them instant access to a stable income. It added that the programme has a dedicated capital of over Rs 5,000 crore that will be infused for scaling up the leasing programme in the coming year.

| Type of service | Minimum Bill (in Rs) | Extra Km charge (in Rs) | Wait time charge (in Rs) |
|-----------------|----------------------|-------------------------|--------------------------|
| Sedan           | 150                  | 13                      | 2                        |
| Mini            | 100                  | 10                      | 2                        |
| Prime           | 200                  | 18                      | 2                        |

- **Economics of Scope and Scale**

Ola Cabs, after the early days, has witnessed a tremendous increase in demand for transportation services in the metro cities and as a result has recruited a lot of drivers onto its platform. That certainly increased the revenue and profits until the marginal cost increased the marginal revenue of lately the firm is hit by diseconomies of scale. To balance it out, Ola cabs has increases its scope by starting various new services. Some of them are below in the table.

|           |   |
|-----------|---|
| Ola Prime | The business-class car service for luxury travel available in a few cities offering bigger cars like Toyota Innova and XUV                  |
| Ola Sedan | A regular-class car service aimed at providing the customers a spacious car for comfortable travel with cars like Toyota Etios, Honda City. |
| Ola Mini  | An economic-class car service to serve customers looking for affordable personal transportation with cars like Tata Indica, Ritz.           |
| Ola Pink  | The car service driven by a lady driver   |
| Ola Auto  | The auto service provided to the customers, removing the need for haggling the price with the drivers.                                      |

## Market Structure

### 1. Competing firms and Market Power

- Uber
- Meru
- Grab
- GetMeCab
- Carzonrent
- UTOO Cabs
- SKY Cabs
- Easy Cabs

Uber & Meru are supposedly the prime competitors for Ola in the current scenario.

### 2. Strategies for competition

Ola(ANI Technologies Pvt Ltd) sped past its predecessors. Meru's revenue in the year ended March 2015 was Rs.280.57 crore against Ola's Rs.418.25 crore. Meru had been in business for about nine years then, while Ola's big moment came only in October 2014, when it raised \$210 million from SoftBank.

Uber was a fledgling business in India until early last year, with just about 5% of the market share in January 2015. Having launched in India amid much fanfare in November 2013 with high-end cars, Uber soon changed track to low-cost offerings suited to the local market. It was already battling the establishment, trying to first cope with the Reserve Bank of India's directive mandating two-factor authentication for credit card payments, a major blow to its feted cashless payments, and then the rape of a woman by a driver affiliated to Uber in Delhi, which triggered a regulatory backlash.

Meanwhile, Ola in March 2015 acquired smaller rival TaxiForSure (Serendipity Infolabs Pvt. Ltd, which, strangely enough, went bust after it was unable to raise more money following the Uber rape case), effectively making the on-demand point-to-point ride-hailing market a duopoly. In May, Uber introduced cash payments in India for the first time in Hyderabad and extended it to Bengaluru and Delhi, two of its biggest markets, by September. Currently, Uber allows cash payments in all 27 cities where it operates.

Uber also slashed fares for its low-cost offering UberGO to Rs.7 per km, lower than the Rs.10 per km charged by Ola for its cheapest offering, Ola Mini.

The move helped the company wean away consumers from Ola, according to multiple industry executives, though cash burn escalated significantly. But, again, Uber had the money to burn. In an attempt to counter Uber's overbearing presence, Ola, which raised \$500 million more in November 2015, launched a new category called Micro in March. Priced at Rs.6 per km, Micro was cheaper than UberGO. Soon, and perhaps in response to Alexander's boast, Ola was claiming that Micro as a category was bigger than Uber's entire India business.

Going by its claim that it has an 80% market share of the \$ 6 billion Indian cab services market, Ola seems on strong ground for now; Meru holds just 12%, followed by Uber and others at 4%. But clearly, it would like to retain its hold on a market that's growing at 25-30% year-on-year, according to industry estimates. Ola says it is adding 1,500 cabs every day to its current fleet—in the next one and a half years it is looking at one million taxis. And it expects to cross \$1 billion in revenues in 2015-16, which would include revenues from TaxiForSure—a rival Ola bought in March for \$200 million.

Ola's rapid growth has come at a cost though since it has had to offer huge discounts to drivers to win them over to its fold. It has been able to create multiple avenues of revenue generation for itself. First, percentage commission from the trips completed by a partner-driven. This may range from 15%-30% depending on car type or city. Secondly, by corporate tie-ups or event tie-ups, Ola offers heavy discounts to passengers from a company or an event. This is often offset by the volume of bookings done through them. Thirdly Ola started its own virtual wallet called Ola money and charges merchants based on transaction discounting rate. Ola started its own car leasing service to provide drivers who don't own one.

### 3. Pricing strategy

While Ola claims 20% of the total fare per ride, the rack rates have dropped from R12 per kilometer in the pre-Ola days to Rs 7 per kilometer, with a starting base fare of R100, for a normal hatchback—Ola Mini. Ola Cabs by the year 2015, September, was valued at 5 billion dollars with its estimated revenues at the end of the fiscal year 2014-15 at 62 million dollars. At its onset, Ola cabs supported payment via Paytm only but later it included options for both cash and cashless via Paytm. Passengers are nowadays concerned about convenience rather than prices. Ola Cabs offer rides in a comfortable setting with furnished and air-conditioned cabs. It offers to price flexibility with its range of vehicles that includes economic-range, mid-



range and high-range. Ola Cabs has adopted a penetration policy and has kept its price range reasonable so as to gain a competitive advantage over rival companies. It has also adopted a promotional policy and offers incentives to increase its customer base.

#### 4. Other strategies

Ola Cab operates in business segments such as Cab services for passengers, for corporate customers through Ola Shuttle i.e. daily office goes through fixed routes and Ola outstation. Since Ola had widely penetrated through its Ola passenger segment even in the Tier-3 cities in India as compared to the peers companies and hold around majority of market share (around 40%), therefore it is Stars in the BCG matrix, and other two segments are in evolving stage and is question mark in the BCG matrix. Operating in 180+ cities in India Ola Cabs serves more than 8,00,000 customers every day by empowering and collaborating with around 10,00,000 drivers in its platform.

Ola Cabs works with a Platform wherein a customer can easily book a Cab and drivers can easily get passengers by paying commission to the company. In the process Ola Cabs does not need to own any car, any driver with duly authorized and verified by transport authorities can work with Ola. Ola has a dedicated team of 6000 employees who work dedicatedly to provide the best in technology services to its stakeholders. As per the reports of research firm ICRA, the domestic Cabs segment has high growth & strong potential (currently growing at 9%) supported by increased income level, purchasing power parity and low car penetration in passenger vehicle segment. The fleet sales of which cab aggregators such as Ola, Uber etc. are part will achieve the growth rate of 15-17 % by 2020. For strengthening the brand offerings the companies are creating competitive deliverables such as Ola Cafe by Ola which failed to make its marks in 2016, later on, to which Ola acquired Foodpanda, UberEats by Uber.

#### 5. Market Expansion

Ola has classified the different cabs available on their platform into Micro, Mini, Prime, Lux, Auto, and Shuttle. They have also introduced shared rides in select cities as well as hourly rentals and outstation bookings. It certainly has done its analysis about the UI and UX given the number of people using the app. The UI is very intuitive and doesn't jump around a whole lot while making a booking. Overall functionality Great design. Ola Cabs has always been looking at its competitor, not just nationally but also internationally. Ola took some of its design patterns from Uber and modified it to serve its own needs. From a design standpoint, the app

raises a lot of questions about the placement of its UI elements. Functionality wise the app works well.

Future initiatives and steps to mitigate competition from competitors of Ola Cabs, it is clear to say that Ola Cabs' strategy is to capture new market share, so it is looking to expand not only to all of Tier 2 and Tier 3 cities but also globally. It wants to foray into as many as 50 global cities by 2019, with a prime focus on high-end European and Gulf markets. The company's global expansion started with Australia earlier this year, which followed its entry in the United Kingdom and New Zealand. The next destination of the SoftBank-backed company is the Netherlands. Its capital, Amsterdam, is a central location for catering to the markets in Central, Northern and Eastern Europe and even North Africa. They are aiming to expand across the United Kingdom by the end of 2018. Ola's approach in the UK is slightly different. It will not only offer passengers the option to book private hire vehicles (PHVs) but also black cabs. They are also planning to add other modes of transport on the same platform in the future. The company has already obtained a license in South Wales and Manchester.

To meet its expansion targets, the company is seeking more investment, Business Standard reported. Right now, Ola's major shareholders include SoftBank Group (26.1 percent), Tiger Global (15.94 percent), Tencent (10.39 percent), Matrix Partners (8.57 percent), and DST Global (6.72 percent).

They are trying to increase their product offering by serving every possible niche category where a group of people might want to rent a cab such as Sedans, SUVs, Luxury, Hourly rental, Outstation etc. We might see a couple more categories coming up before Ola exhausts its offering. Ola may also in future go the Uber way and offer a product for business logistics needs like food delivery(integration of Food Panda), grocery delivery etc. although they did not succeed in the logistics domain on its own, a B2B offering would help reduce the downtime for its driver partners.

## **Recommendations**

The following are the recommendations for Ola Cabs based on the microeconomic analysis performed above:

1. Economics of scale:
  - a. With metro cities having their own mass transit systems, the business has to expand to tier 2 cities in India.

- b. Increase the number of app languages by providing the app in local languages and thereby increasing customer usage.
- 2. Cost Factors:
  - a. Partner with electronic automobile companies to ensure that the increasing fuel prices do not affect the profitability of the business.
  - b. Since there are too many drivers already, adding more drivers onto the platform would trigger diseconomies of scale by increasing the marginal cost than the marginal revenues.
- 3. Efficiency Techniques:
  - a. In order to maximize the revenues, the customer experience through the technology (apps) has to be constantly improved.
  - b. In order to boost the demand in the metro cities, advertisement of last mile connectivity options have to be ensured.
  - c. To compete with the transportation market in the metros, Ola must start its own bus service to ensure that a huge pool of drivers is managed to the extent along with starting the electric tuk-tuk service connecting all metros.
- 4. Customer Experience/Satisfaction:
  - a. In order to increase customer satisfaction and presence, open outlets where people can come and book services.
  - b. Organize local trips or treks to make the service popular.

## **Group 18: Microeconomic Analysis of Honda**

### ***Executive Summary***

*Honda Motor Co. Ltd. together with its subsidiaries, engages in the development, manufacture, and distribution of motorcycles, automobiles, and power products primarily in North America, Europe, and Asia. Its motorcycle line consists of business and commuter models, as well as sports models, including trial and motor-cross racing; all-terrain vehicles; personal watercrafts; and multi utility vehicles.*

*The company also produces various automobile products, including passenger cars mini vans, and multi-wagons, sport utility vehicles, and mini cars; and power products comprising tillers, portable generators, general-purpose engines, grasscutters, outboard marine engines, water pumps, snow throwers, power carriers, power sprayers, lawn mowers and lawn tractors, home-use cogeneration units, thin film solar cells home use, and public and industrial uses.*

*In addition, it sells spare parts and provides after sales services are through retail dealers, as well as involves in retail lending, leasing to customers, and other financial services, such as wholesale financing to dealers. The company was founded in 1946 and is based in Tokyo, Japan.*

### **Introduction**

Honda Motor Co., Ltd. is a Japanese public multinational conglomerate corporation primarily known as a manufacturer of automobiles, aircraft, motorcycles, and power equipment. Honda has been the world's largest motorcycle manufacturer since 1959, as well as the world's largest manufacturer of internal combustion engines measured by volume, producing more than 14 million internal combustion engines each year.

Honda became the second-largest Japanese automobile manufacturer in 2001. Honda was the eighth largest automobile manufacturer in the world behind Toyota, Volkswagen Group, Hyundai Motor Group, General Motors, Ford, Nissan, and Fiat Chrysler Automobiles in 2015. Honda was the first Japanese automobile manufacturer to release a dedicated luxury brand, Acura, in 1986.

Aside from their core automobile and motorcycle businesses, Honda also manufactures garden equipment, marine engines, personal watercraft and power generators, and other products. Since 1986, Honda has been involved with artificial intelligence/robotics research and released

their ASIMO robot in 2000. They have also ventured into aerospace with the establishment of GE Honda Aero Engines in 2004 and the HondaHA-420 Honda Jet, which began production in 2012.

Products:

- Automobiles
- Power equipment
- Engines
- Robots
- Aircraft
- Mountain bikes
- Motorbikes

Honda has three joint-ventures in China (Honda China, Dongfeng Honda, and Guangqi Honda). In 2013, Honda invested about 5.7% (US\$6.8 billion) of its revenues in research and development. Also in 2013, Honda became the first Japanese automaker to be a net exporter from the United States, exporting 108,705 Honda and Acura models, while importing only 88,357.

#### *VISION AND GOALS OF HONDA*

Honda Motor Company's new CEO, Takahiro Hachigo, unveiled his future vision for the company. He highlighted two themes that the new 'Team Honda' will pursue: Advancement of the six-region global operation structure and Continuous development of challenging products unique to Honda and delivering them to customers around the world.

To demonstrate the advancement of the six-region structure, operational functions of the global headquarters will be enhanced, to strongly promote mutually complimentary inter-regional relationships. Furthermore, Honda began local production of the Honda Accord in 2017 in Nigeria (with planned annual production capacity of 1,000 units.). This is the first time Honda assembled automobiles in Africa.

Hachigo stated that 'Honda will continue to be firmly committed to the creation of 'challenging products' unique to Honda'. Hachigo concluded, 'what drives me forwards with my fellow Honda associates is The Power of Dreams. Driven by The Power of Dreams, Team Honda will keep moving forward with the goal to share joys with customers all around the world'.

## **Methodology & Analysis**

### **SWOT Analysis**

#### Strengths

- Competence in engine manufacturing - company's core product.
- Diversified product portfolio.
- Dominance in motorcycle and engine industries leading to a high brandawareness.
- Strong position in Asia's motorcycle markets.

#### Weakness

- Dependence on North America to generate most of the revenue.
- Low investments in research and development (R&D) leading to innovative products.

#### Opportunities

- Increasing government regulations.
- Timing and frequency of new model releases.
- Low fuel prices are increasing the demand for pickup trucks and SUVs.

#### Threats

- Increased competition.
- Rising Japanese Yen exchange rates.
- Natural disasters.

### Source of Microeconomic Analysis – Secondary Research

#### **Microeconomics of Honda**

##### Demand for the Product

Honda has been the world's largest motorcycle manufacturer since 1959&world's largest manufacturer of internal Combustion Engines measured by volume, producing more than 14 million internal combustion engines each year. The company recorded monthly domestic sales of 14,820 units in September 2018 while exports stood at 545 units.

"HCIL registered a cumulative growth of 3.5% in the first half of fiscal year 2018-1."

Factors influencing Demand: Features in the autocars, performance of the vehicles, technology used, ease of handling, pricing strategy, after sales service, festivals of the country, discounts etc.

### **Substitutes and Complements:**

The threat from substitute products in case of Honda is moderate. Apart from the products by the other brands, there are means of public transport that also act as substitutes for Honda vehicles. However, there are some factors that moderate the threat from substitute products. These factors include brand image, marketing capabilities, large product range as well as customer trust and loyalty. The overall threat from the substitute products in this way remains moderate.

Complementary products such as Petroleum/Fuel, Car Batteries, Car accessories, Service stations, Mechanics, Spare Parts, Traffic police, Fuel stations and Parking spaces are heavily dependent on the demand for automobiles to generate demand.

Furthermore, a consumer's income would also make him or her sensitive to the change of price; therefore, buying a cheaper car, for example, Maruti Suzuki, as a substitute. Also, when the price of the complementary goods increases, such as petroleum and car batteries increase, consumers tend to decrease the purchasing power and take other means of transport for a period of time. All of these will decrease the quantity demanded and shift the demand curve left.

Elasticities: Elasticity of demand for Honda is positive as the demand rises with a fall in prices, given that income of consumers is stagnant. Within Honda, the demand for certain products, such as Honda Accord, is even more elastic.

### **Production**

Processes: Honda has 31 production plants all over the world with 2 plants in India one in Noida and other in Rajasthan. The production processes of Honda would be based on the purchasing decisions of consumers and can be understood in Production Technology, Cost Constraints and Input choices. In the short run, quantities of one or more production factors can be changed, while the long run will make all production inputs variable.

Inputs: Inputs in the market would include raw material (metal, plastic etc.), labour (man-power to work at the factories, sales men etc.) and technology (the R&D and technology used to produce the vehicles).

**Substitutes and Complements among Inputs:** While there are multiple firms to buy raw material from, the inputs needed are still the same for the manufacturing of Honda vehicles. The cost of inputs determines the shift in the production function.

**Economics of Scale:** Economics of scale is the falling long-run average cost when a good is produced at a larger scale. When Honda Motor Company produces better technology and more automobiles; the cost of production will decrease. This benefits this company as it will maximize profit and minimize cost.

### **Market Structure**

- **Competing Firms** – Honda is an oligopoly because the industry is only competing with a few other dominant automotive industries, such as Toyota, Nissan, Suzuki, Mazda, and Subaru. As brands, Maruti Suzuki and Hyundai are close competitors for Honda, as they have competing products.
- **Market Power** - The level of competitive rivalry among the existing brands is very high. While the number of large and global players may not be very large, still all of them have large product portfolio's and apart from that invest heavily in marketing as well as research and development. Still, there are a large number of factors that affect a brand's competitive strength. these factors include the brand's product portfolio, level of investment in innovation and technology as well as marketing and customer loyalty. Honda is an innovative brand whose cars as well as motorcycles are quite popular in the global market. Still, it is positioned against some very tough players like Ford, Volkswagen, Toyota and Hyundai which makes the situation tough and intensely competitive. the brand remains focused on future and better technologies so as to find growth and remain competitive.

The threat from new entrants in the automotive industry is very low. It is because of the high entry and exit barriers. For any brand to enter the automotive industry, it will have to make a very large financial investment for the infrastructure as well as supply and distribution network. Apart from these things technology and a highly skilled workforce will also require a very large investment. Moreover, a new player cannot grow significant overnight. It will need to invest in marketing and build trust among its customers before it can grow into a large brand with a large customer base. All these



factors prevent new brands from entering the market and thus keep the threat from new players minimised.

- Strategies for Competition: Outward Expansion Strategy, Product and Process Innovation, Focus on Factory Flexibility, Leadership is Engineers and not other functions, Labour-intensive industries
- Pricing Strategies: Product pricing is average, higher than Maruti Suzuki and lower than Hyundai, from product to product.

### **Recommendations**

In large part, because of its approach to global operations, Honda, a relative industrial newbie, has a lot to boast about. There are 4 strategies that are making Honda one of the most innovative companies in the world, and it should continue do the following:

1. Combining engineering, design, and manufacturing functions in each of its large local facilities
2. Have labour-intensive factories
3. Have an engineer CEO
4. Factory flexibility is the focus

## **Group 19: Micro Economic Analysis of Fintech Industry**

### ***Executive Summary***

*The Fintech Industry is rising Globally. In fact, the number of startups offering financial services in the region doubled from what it was 3 years back. Post Demonetization scenario has been changed very fast where more and more customers are focusing majorly on Online segment rather Offline segment. Payments Industry are the most popular sector accounting for some billion Dollar of Revenue in India. Declining customer loyalty is not necessarily bad news for banks though the three main obstacles for Fintech startups are visibility, customer Education and trust. Therefore 9 in 10 fintech startups seek collaborations with corporation and bank are well positioned to integrate into growing fintech ecosystem. Lending startup include crowd funding, money circle peer lending and loan comparison platforms. Finally, second generation startup specialize in international money transfer, Wealth management, Insurance solutions and block chain-based services such as crypto currencies. Professionals drop out to launch Startups. Only 1 in 4 Fintech startups went through accelerator This is mainly driven by a significant increases in series A,B & C deals up from an average of 30% in the past to 65% moving forward. By considering the current scenario we project some major fintech startup to be fully operational by 2020.*

*In looking over the challenges identified above one certainly could ask so what is really different about payment gateway industry? Any technology firm must deal with developing skills among their technical managers, be they engineers, financial analyst or software developers.*

*Because and with all statistical analysis along with future prediction regarding the payment Industry PayU India launched in 2011 by capturing very small merchant segment at that point of time*

*when digital transactions not yet formalized in India. However, post Demonetization the penetration for digital transaction has been overshadowing the offline segment. Many factors are held responsible like Government policies, Huge discounts to tap customer with the help of large investment especially due to foreign direct investment. PayU India plays an important role while offering various banking products to cater the large customer base of fastest growing Ecommerce industry.*

## Introduction

Financial technology describes tech enabled products and services that improves traditional financial services. They are faster, cheaper, more convenient or more accessible. PayU India, A Naspers company. Majorly works in an Online market place to help lacs of merchants globally for accepting payments online from consumers worldwide along with international cross border payment against goods and services. PayU has been promoted by Naspers Group a global leader for Internet based technology that promise to significantly improve the way the individuals and companies bank by collaborating or competing with established financial service providers.

Post demonetization payment industry has been growing significantly where major focus on Online segment with huge foreign direct investment followed by certain merger and acquisition. Last 3 years PayU has significantly add major banking products in order to compete the market structure in terms of varieties of technology product. In case of competitive market structure all entities manufacture homogeneous product just like payment industry where primary product is payment facilitator in terms of CC/DC/NB. How many varieties are available within this mode plays a crucial role and this would be the deciding factors from business point of view.

## Methodology and Analysis: Result of analysis, interpretation and presentation

Our organization comes under Perfect Competition Market structure as there are large number of producers and consumers are present in Online market and all are engaged in buying and selling of the homogeneous products may be in similar or little bit of difference in pricing structure basis success rate and wide range of banking products available to that particular platform to attract consumers to choose the product. Due to free entry and exit under perfect market completion many players enter, produce certain technology product to sell it the client and lastly if company fails to make any profit in a long run they simply exit as difficult to manage the fixed cost and variable cost of that organization. In terms of profit our company in very good position due to certain strategy even after getting steep completion from other players.

### Factors affecting Demand:

**Income:** Being an Internet based technology service provider in Payment gateway industry, company is focusing more on high income category consumer due to purchasing power capability. More and more transaction on Online platform lead to high merchandise value. Recently company launched a product called Lazy pay where they are targeting the consumers for short term credit based on purchasing behavior on online goods & services



**Price of Other Goods:** This factor affects the profitability of the company majorly because of steep completion from other company with the same product and services. With the same shot of services from technology point of view consumer would definitely move to the product where they get high success rate in terms of online transaction with same pricing structure.

**Taste:** This is one of the most relevant factors now a days for all internet-based industry where consumer taste has changed drastically from offline purchasing behavior to online sector. FDI plays an important role in this sector. getting huge discounts on Online portals attract more and more consumer. This would help increasing the purchasing ability of the customer by giving short term credit instantly basis repayment history.

**Population:** Huge population density makes India one of the major consumption-based place where demand is increasing day by day irrespective of sector. Most popular Online segment where major player Flipkart, Amazon, Mytra come into picture. With huge volume of transaction getting from these industries is helping drive our profitability by selling our technology product to this industry. India's growing population is the major factor driving our business growth aspects.

**Composition of Population:** Age matters in a business-like online purchasing. India is a country where age group is much lower in comparison to other country. The reason being most major global players have focus on Indian Market for the growing demand in different product especially in electronics and apparels. Also, today's generation is much more tech savvy than old age people.

**Seasonal Effects:** From Payment industry point of view season effects is the major factor. Especially in festive season where companies are giving huge discounts to attract consumers to their platform. This helps us drive our selling capacity much more than the other time duration. Major chunk of Annual Revenue of our company are done during seasonal period.

**Expectations:** Expectation helps our industry upto some extent which completely depend upon consumer behavior. Chances of increasing the price of any product listed in website may lead to the increase in demand for that item.

**Availability of Credit:** Recently our company launched a product called Lazypay where credit can be enhanced to the consumer based on their credit re-payment capability and purchasing behavior. The focus of this product is to hook the consumer in our platform along with certain information which comes post re-payment of this loan amount. Credit capability enhance the purchasing power of consumer upto some extent that's the core business of our banking industry as well.

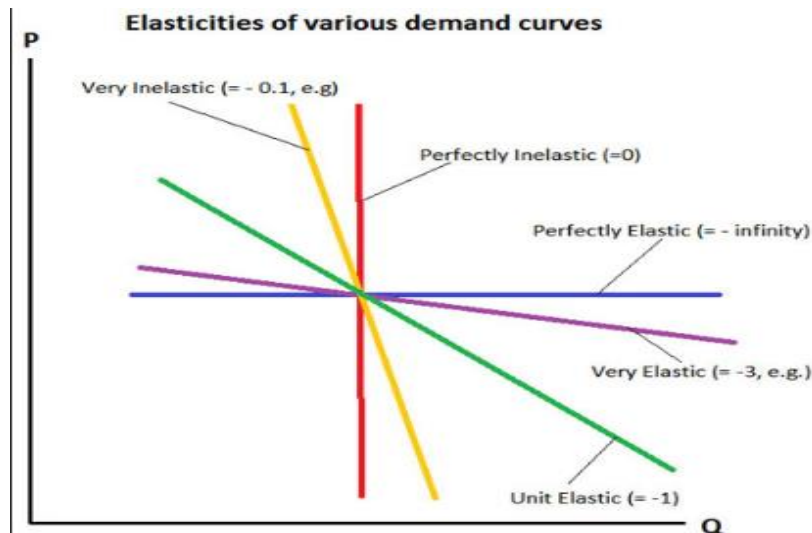
**Derived Demand:** This is absolutely important factor in Internet based industry where each segment is interlinked. Demand in purchasing power may fetch the consumer to the online platform which lead to the increase in utilizing our services on these platforms. This is the backbone of the payment industry.

**Others External Factor:** More and more investment make company in a healthy situation to expand this sector. Demand would automatically increase by offering good product and services and last but not the least by giving huge discounts. Big Billion of Flipkart is one of the examples of this factors. Our company makes good volume of Revenue during this time. This is only happening once the company in a good financial position to offer promotional campaign.

**Substitute & Complementary product:** Price elasticity measures the degree of relativity of change in demand of a product in response to change in price of the product. Price elasticity of a substitute good is cross elastic, i.e., its demands and price are inversely proportional to each

other. If a certain product enjoys monopoly in the market, it is less likely to have any substitutes. Thus, the degree of substitution may differ, too. These goods can be further classified into weak substitutes or perfect substitutes, i.e., those that are quite like each other.

### Different Elasticities of Demand:



**Perfectly Elastic Demand:** When a small change in price of a product causes a major change in its demand, it is said to be perfectly elastic demand. In perfectly elastic demand, a small rise in price results in fall in demand to zero, while a small fall in price causes increase in demand to infinity.

**Perfectly Inelastic Demand:** A perfectly inelastic demand is one when there is no change produced in the demand of a product with change in its price.

**Relatively Elastic Demand:** Relatively elastic demand refers to the demand when the proportionate change produced in demand is greater than the proportionate change in price of a product. The numerical value of relatively elastic demand ranges between one to infinity

**Relatively Inelastic Demand:** Relatively inelastic demand is one when the percentage change produced in demand is less than the percentage change in the price of a product. For example, if the price of a product increases by 30% and the demand for the product decreases only by 10%, then the demand would be called relatively inelastic

**Unitary Elastic Demand:** When the proportionate change in demand produces the same change in the price of the product, the demand is referred as unitary elastic demand. The numerical value for unitary elastic demand is equal to one.

Production is a process of combining various material inputs and immaterial inputs (plans, know-how) in order to make something for consumption (the output). It is the act of creating output, a good or service which has value and co



Stakeholders of production are persons, groups or organizations with an interest in a producing company. Economic well-being originates in efficient production and it is distributed through the interaction between the company's stakeholders. The stakeholders of companies are economic actors which have an economic interest in a company. Based on the similarities of their interests, stakeholders can be classified into three groups in order to differentiate their interests and mutual relations. The three groups are as follows:

- Customers
- Suppliers
- Producers

**Economies of Scopes :** The theory of an [economy of scope](#) states the average total cost of a company's production decreases when there is an increasing variety of goods produced. Economy of scope gives a cost advantage to a company when it produces a complementary range of products while focusing on its [core competencies](#)

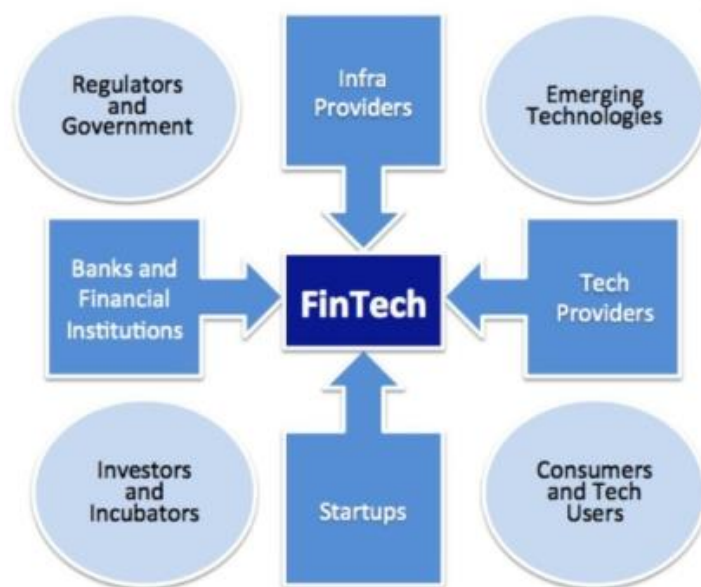
A product-based company like XIOMI (MI) which initially introduced budget smart phone now into various segment which completely follow Economics of Scope. Along with smart phone they are into watch, television etc giving steep completion to other market player. Growing demand for this product due to low pricing structure help company to take further decision to innovate new product. They follow one tag line "Marketing without Advertisement". This is really conceptual. Major online market place like Flipkart & Amazon indirectly or directly helping this kind of organization upto certain extent to capitalize their

product. Similarly, PayU undergoes the same scenario where majorly focusing on various banking products to cater the need of various tech-based Ecommerce Industry

**Economies of Scale :** An [economy of scale](#) is the cost advantage a company has with the increased output of a good or service. There is an inverse relationship between the volume of output of goods and services and the fixed costs per unit to a company.

Just Like in Fintech Industry where pricing depends upon the volume technology and services utilizing by any tech-based Industry.

### Market Structure:



Our organization comes under Perfect Competition Market structure as there are large number of producers and consumers are present in Online market and all are engaged in buying and selling of the homogeneous products may be in similar or little bit of difference in pricing structure basis success rate and wide range of banking products available to that platform to attract consumers to choose the product. Due to free entry and exit under perfect market completion many players enter, produce certain

technology product to sell it the client and lastly if company fails to make any profit in a long run they simply exit as difficult to manage the fixed cost and variable cost of that particular organization .In terms of profit our company in very good position due to certain strategy even after getting steep completion from other players .

### Market Leader:

Currently many major players are working in the Payment gateway Market. Just like PayU India others players are Billdesk , PayTm, Razorpay and many more smaller organization. However, PayU India leads the market with clocking Highest GMV in a quarter majorly in Ecommerce segment. While our Rival Billdesk which leads among particular segment like Government, Education sector. Now our major focus is to tap these two segments to be the complete market leader in terms of all category and we have started certain strategy to achieve this goal. However due to digitalization the growth of ecommerce industry has been increased tremendously the result of which more and more consumers are focusing on Online transaction and we are biggest beneficial of this move due to our largest focus on Ecommerce segment. Of course, Huge discount on product plays an important role.

**Product Variation:**

Though our organization comes under Payment Gateway segment and all other competitor are also under this segment but there is huge product differentiation which makes company the market leader. There are more than 100+ different banking products like CC/DC/NB/MCP/MCC/INTERNATIONAL/WALLET etc are available with PayU while other competitor has around 60-70+ products. That's the major difference in a competitive market structure. Even if homogeneous product is Payment gateway but there is different banking product which decides the market leader as consumers have more and more option to do online transaction where they have wide variety of options.

**Pricing Strategies:**

Pricing strategy is the most crucial things in competitive market structure as we must sell in similar pricing just like our competitor. In case we charge more they consumers will move to another producer. Before closing any deal with Payment Gateway Industry for their online platform, consumers always compare the pricing what they receive as a quotation. Accordingly, they decide. Apart from pricing sometime there may be some exception in this kind of Industry where even if there is some difference in price, but consumers prefer better SRT based product which are more customer centric and provides better purchasing experience for their customer.

**Other Profit Maximizing Strategies:**

In a perfect competition market as price need to be maintained like other Industry for this instance, we adopt different profit maximizing strategy to sustain in the market. We adopt certain process to maximize our difference between our buy rate and take rate. In order to maximize the profit segment only way is to reduce the buy rate with our banking partner. Lesser the buy rate would maximize our difference of margin with take rate. Also, movement of certain profit maximizing PG (from high cost less efficient PG to low cost most efficient PG) also one major factor of profit maximizing. More and more payment option we offer there is a largest possibility of getting the business deal closed and also helps us in our profit maximizing strategy.

**Government Policies:**

India, considered to be a great emerging financial hub, hosts one of the best financial minds coupled with a brigade of techies. If channeled properly with some major reforms by the Government and regulators, Indian financial domain could grow in leaps and bounds the finance ministry has set up an 8-member committee to consider various issues related to Fintech for making regulations more flexible and promoting financial inclusion. The panel headed by Economic Affairs Secretary will also suggest ways to enhance entrepreneurship in the Fintech or financial technology space where India has distinctive comparative strengths. Major focus are on Reduction in taxation, centralization in KYC process, Relaxation of Compliance process, Financial education for techies, Lower entry costs etc.

**Ending Notes:**

There is a plethora of FinTech startups emerging in India, across all segments in financial services. The pace at which FinTechs are emerging; there is no denying the fact that our country has enormous entrepreneurial potential. There are roughly 1500 FinTech startups, big and small, operating in India, and out of these, almost half were setup in the past two years.



The FinTech revolution is being further encouraged by the initiatives of the government and regulatory bodies which are ready to go the extra mile to enable innovation in financial services a reality. Big banks and other financial institutions are also looking to actively collaborate with startups for their mutual benefit. Having a structured program for engaging with FinTech startups can almost act like an outsourced R&D function for the financial institutions.

PayU has emerged as a leader in FinTech solutions. More than 80 of the top 100 E-commerce companies in India prefer to use PayUbiz for their payments. It is projected that in the upcoming time, PayU biz will have more than 50% share of Fintech services in India and more than 30% share worldwide.

## **Group 20: Microeconomic analysis of McDonald's Corporation**

### **Introduction**

The name of the business that we have chosen for our analysis is McDonald's Corporation. It is one of the world's largest fast food corporations and belongs to QSR (Quick Service Restaurants) industry.

The company thrives on its ability to provide consumers with a variety of dining options at affordable prices which are delivered almost instantaneously. Though perceived by many as unhealthy due to high amount of fats, calories, and sodium, McDonald's continues to be a go-to option for consumers looking for a quick and delicious bite.

The report provides a holistic scope of influential factors such as demand for products sold by McDonald's, reasons for high influence in demand and also explores different elasticities. The report also elaborates on production costs, economics of scale and scope, and how McDonald's has benefited by optimizing these concepts in business operations. Other contributing factors mentioned are the market structure of the existing QSR industry and positioning of McDonald's amongst the competing firms, its market power, strategies for competition and other strategies deployed by McDonald's to stay relevant in the market.

### **Demand for the product, factors influencing demand, substitutes and complements, different elasticities**

The demand for the products is primarily driven by the menu variety, accessibility, and value for money. McDonald's entered the Indian market before most other U.S. chains such as Burger King and Wendy's; however, the company could not capture much of the growth in the Indian quick service restaurant market. For example, Domino's Pizza commands a nearly 16% share in the Indian chain food service industry, while McDonald's has been able to manage to capture just 7.5% of the market, as reported by Forbes in 2017.

### **The three main factors influencing demand**

*Income:* In India, higher disposable income increases the propensity to spend on quick service restaurants. Eating out is no longer a luxury. With the increased financial stability, parents are able to afford higher pocket money for kids, who in turn are lured by McDonald's attractive offerings.

*Taste:* The demand for McDonald's burgers is highly taste-driven. There is a spike in the consumption rate each time a new item is introduced on the menu. Also, the McDonald's is known for customizing the menu as per the taste preferences of the destination country. For instance, McDonald's has a number of India-inspired variants on its menu – e.g. McAloo Tikki, Paneer Wrap/ Burger. Keeping in mind the increased focus on health, McDonald's has also introduced healthier menus by tweaking their core ingredients and preparation process.

*Composition of population:* Population plays an important role for McDonald's to take strategic decisions with respect to opening new outlets. Also, McDonald's has revived their strategic tie-ups with Disney for inclusion of Disney toys with happy meals. This would mean renewed focus on the kids/teenage group for consumption of happy meals.

### **Substitutes and complements**

While McDonald's is primarily a burger joint, its close substitutes would be pizzas, rolls, sandwiches, or any other fast food outlet. In that light, consumers would substitute McDonald's with Subway, Faasos, Domino's. Substitutes have positive cross elasticity of demand – increase in price of substitutes would lead to increased demand for McDonald's. Complements have negative cross elasticity of demand – a fall in the price of paneer, could lead to increase in demand for Paneer Burger and Paneer Salsa Wraps.

**Elasticity of demand:** McDonald's has many competitors, and thus, higher is<sup>27</sup> the elasticity of demand. Consumers will be much more sensitive to price changes by one firm if they have more options. Consumers' choices are driven by the value they get for the money spent. McDonald's products have a high elasticity of demand as price plays a major role in consumers choosing McDonald's over competitor brands. In order to rise above competition, McDonald's needs to ensure that the price of "value for money" items do not see drastic changes. They also need to continue with bundled meal variants at different price levels, to cater to demand of consumers looking for complete meal options.

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<sup>27</sup>References:

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[2].<https://asia.nikkei.com/Business/Companies/McDonald-s-India-adapts-to-lure-health-conscious-and-religious-diners>

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## **Production: Processes, inputs, substitutes and complements among, costs, economics of scale and scope**

### **A) Production Process:**

McDonald's beef, chicken and other meats are imported or delivered from various sources to the restaurant. The food is either frozen for storage or defrosted for serving. Fresh ingredients are used that day. Fresh ingredients such as lettuce, tomato and pickles are purchased from local locations and are brought to the restaurant to be used that day. Meat is cooked, fried or grilled for serving, and left on a warm plate. Fresh ingredients are added last. Fries are cut up and deep-fried then sprinkled with salt and left on a hot plate to be served. When a customer orders the food it is a quick process to assemble all the ingredients together as well as drinks.

The customer has their order in no time, that's why it's called fast food.

### **B) Substitutes:**

Substitutes to the MacDonald industry include sit-down restaurants, convenience stores, specialty-food retailers and cooking at home. Consumers have many options to choose from when dining. The food products available at convenience stores offer the closest substitute and the most significant threat. Many convenience stores offer sandwiches, burgers and hot dogs at prices often below those of McDonalds establishments. Specialty-food retailers are relatively good substitutes for the snack portion of the McDonald, but these establishments rarely offer meals. Cooking at home is a viable alternative to McDonald for consumers who spend a good portion of their time at home.

### **C) Complements:**

Complements to the McDonald's include businesses that are partnered with fast food restaurants. Examples include gas stations, discount retailers, airports, mall retailers and sports stadiums. On a long road-trip, most people would prefer making only one stop for gas and food rather than two. Hence, the appeal of a combination McDonald's / gas station is strong. Customers at a discount retailer appreciate low prices and they are able to pick up dinner while they run an errand after work.

### **D) Economy of Scale:**

McDonald's economies of scale benefit the company in various ways in its international endeavors including: the fact that its uniform menu offerings can be mass produced, lowering production costs; the company's bargaining power with its suppliers lowers its input costs and boosts margins;

### **E) Economy of Scope:**

McDonald's can produce both hamburger and French fries at a lower cost than what it would cost two separate firms to produce the same goods. This is because McDonald's hamburger and French fries share the use of food storage, preparation facilities, and so forth during production.

### **Competing firms, market power**

McDonald's is a part of the QSR (Quick Service Restaurants) market in India which was approximately 9125 crore (in 2016) and is poised to grow exponentially to a potential of about 24,665 crore industry by 2021 [1]. The QSR market power was and is hugely dominated by Domino's. In 2014, the market share of Domino's was 20% market share followed by McDonald's with a market share of 11%. Subway had a market share of 12% whereas Subway 9% followed by Pizza Hut at 8%. The rest 40% of QSR market was owned by small local players. McDonald's and Domino's, particularly these two, entered the Indian market quite early on. Several other competing global international food chains such as Burger King, Starbucks, Dunkin Donuts, Subway, have now set their foots in India and started operations later on. Apart from these giant global food chains, there are various other smaller local players who have also started operating in the recent past. The emergence of new global chains combined with various local food chains have added to the intensity of competition of McDonald's which lead to decrease in the market share and revenues.

Along with the increased competition, McDonald's took a beating by lawsuit which lead to closing down half of its store's in India. Due to which, it suffered a major blow in profits; market share was reduced from 9% (in 2016) to a meagre 3% (in 2017). Because of this, sales of its competing firms have taken advantage of the void. Profits of firms such as KFC rose by 2%. Subway, on the other hand, saw a steep rise of 8% in their profit margins [2]. Another rival, Burger King, reported a staggering 69% growth just in the year 2017 as compared to its previous year's growth.

McDonald's have lost its market power that it once had due to increased cut-throat competition and recent unfortunate events. Despite the steep decline in the market share - in such a thriving and promising sector in India - McDonald's did not lose on its valuation [3]. The long term growth may look hazy but the India operations contribute hardly as compared to its global initiatives. And hence, its valuation is not to be likely affected due to this loss.

## Strategies for competition

With the breaking up of economic barriers, globalization has taken prominence. Expansion of organization in to external markets enables it to take advantage of global skills, competencies for gaining suitable competitive advantage.

Strategies for competing in globalizing markets, issues companies face in crafting strategies suitable for multinational and globally competitive indirect environment.

Globalization of markets refers to the process of integrating and merging of the distinct world markets into a single market. This process involves the identification of some common norm, value, taste, preference and convenience and slowly enables the cultural shift towards the use of a common product or service.

There are few reasons why McDonald's enter into foreign markets:

1. To gain access to new customers.
2. To achieve lower costs through economies of scale, experience, and increased purchasing power.
3. To further exploit core competencies.
4. To gain access to resources and capabilities located in foreign markets.
5. To spread business risk across a wider market area.

McDonald's in terms of economics market can be resemble as Oligopoly as it has ability to control over prices, has high barriers to keep out the potential competitors, and has potential to keep the market share as well.

There are two broad Strategy which McDonald's opted: **Generic Strategy & Intensive Strategy**.

McDonald's Generic Strategy confines to develop and grow its Business strategy and approach for competitiveness, as market changes across the world and with due respect of every countries tries to develop the similar implications as a global standardization. Its Intensive growth is to support the business development and expansion into new cities take local market advantage, keeping operational cost as low as possible so as to keep the lower prices in competing with other firms, especially responding to economic changes.

### **McDonald's Generic Strategy:**

McDonald's, has a very specific set of competitive advantages they strive to be cost leaders and offer the food at prices that cannot be matched by other competitors. In order to do this, they have kept operations costs as low as possible in an efficient manner. Doing so, they be superior to other fast food restaurants because they can serve food at lower prices than any other fast food company.

This secondary generic strategy involves developing the business and its products to make them distinct from competitors. For example, through McCafé products, McDonald's applies the broad differentiation generic strategy.

Another important competitive advantage at McDonald's is the speedy delivery of food. In order to maintain this advantage over other fast food chains, the deliverance to the customers makes important in food chain.

Vertical integration is a strategic objective linked to McDonald's cost-leadership generic strategy. For example, McDonald's owns facilities that produce standardized mixtures of ingredients. Also, cost minimization is a financial strategic objective based on the cost leadership generic strategy. In addition, product innovation is related to McDonald's broad differentiation generic strategy.

### **McDonald's Intensive Strategies (Intensive Growth Strategies):**

**Market Penetration** - Get International – McDonald's has extensive operations throughout the world with large presence in Asia, Latin America, Australia and Europe. The company made a strategic decision in 2006 to divest itself of its majority holding in Chipotle Mexican Grill. To develop more franchise in various locations. It redesigned menus to meet the demand for healthier quick service meals in the last decade by introducing salads, combos offer, wraps and other items.

A strategic objective connected to this intensive growth strategy is global expansion through new locations. McDonald's generic strategy supports this intensive growth strategy because low costs and low prices empower the firm to easily penetrate markets.

**Market Development** - A strategic objective for this intensive growth strategy is to establish new locations in new markets, such as new McDonald's restaurants in African or Middle

Eastern countries where the company currently has no operations. Based on its generic strategy of cost leadership, McDonald's supports this intensive growth strategy by using low prices to compete in new markets.

**Gas Station Integration** - McDonald's has been successful at building store-within-a-store locations such as those at Walmart. However, the company has been beaten to the punch by Subway and Dunkin' Donuts, who have aggressively added mini-locations at gas stations across the country. So even, McDonald's took initiative and roll out its McCafe concept as stand-alone units in gas stations, train stations, air terminals and other smaller locations.

This was the new innovations by McDonald's for marketing the food chain across new and various locations.

**Product Development** - McDonald's has always tried to make product development to capture the new market or to make an eye to customers and increase the productivity level. Through intensive research, it develop the new products over time, such as new McCafe products, New Breakfast Meal.

The strategic objective for this intensive growth strategy is to capture more consumers by attracting them to new products. This intensive growth strategy agrees with McDonald's broad differentiation generic strategy in terms of new products that make the company distinct.

McDonald's generic strategy of cost leadership enables the company to sustain its market leadership. The company's broad differentiation strategy also helps. However, a possible strategic direction for McDonald's continued growth is to establish more locations in developing economies and in countries where the firm has no market presence. The recommended strategic goal is to fuel business growth through a combination of the market penetration and market development intensive strategies.

### **Pricing strategies, other strategies**

A key part of McDonald's success as a fast food chain can be contributed to its strategy management and implementation. McDonalds has focussed on the creation of a global brand which caters to families and has distinct brand image to distinguish itself from its competitors. McDonald's has focussed on three key strategies to market itself to the target customers - restaurant branding, localisation of product and services, and pricing.



Think of McDonald's and the first thing that would come to mind are the Golden Arches. The Golden Arches have become synonymous with the company. Positioned strategically near highways and city hotspots, these brightly lit yellow arches not only promote the company brand but also act as a location finder to the nearest restaurant. Once inside, customers can choose their meal with the understanding that every McDonald's restaurant will have the same offerings and quality of product and service irrespective of whether it is a company owned shop or a franchise. The strict control of standards in franchises has enabled the company to project itself as one brand with common products and services at all locations.

McDonald's is a global brand however, it distinguishes itself from other global brands in its offerings which cater to the requirements of local population. An example of this would be McAloo Tikki which is a product made available specifically in India to cater to Indian taste. McDonald's also provides a variety of vegetarian options in India for this reason which is quite contrary to its North American markets where product offerings are predominantly non vegetarian. This localisation of menu also enables the company to introduce from time to time, local offerings to a foreign market such as Mexican Burger in Indian markets. Apart from products, services are also localised as McDonald's offers home delivery option in the Indian markets which is not provided to the North American consumers. Localisation helps the company to connect with the local population and avoid being perceived as "foreign" which may have an adverse effect on sales.

McDonald's takes advantage of **Bundle pricing and Psychological pricing strategies**. Meals are offered as a bundle to encourage customers to buy more. Various product mix of burgers, sandwiches, salads, snacks, beverages, desserts, shakes are on display at the ordering station for the customer to choose their bundle meal. Pricing is strategically marked at ending with 99s to give the psychological impression of a relatively less amount to be paid. A Rs 299 meal appeals more to the subconscious than a Rs 300 variant. This false sense of affordability coupled with the bundling option serves as the right mix for the company to maximize its revenue.

### **Recommendations**

To control the challenges and prevent the decline, there are several measures which are being implemented as well as , shall be taken care in the future to improve business :

**Customized menus:** McDonald's is testing customizable burgers that can be topped with various toppings based on Customer's choice. This nod to the strategy, where customers build burgers to their exact specifications. On the same pattern, the brand introduced the McWrap, the wrap has between 360 and 600 calories and comes stuffed with chicken, veggies, cheese, and sauce. This strategy is being implemented with hopes that customization and healthier options will bring in a younger crowd. In the recent time, with the change in eating habit of a large part of customers, McDonalds also should change. Company should bring new vegetarian products to restaurant's menu. An organic menu is very necessary. This would give customers an alternative while allowing McDonalds to maintain its market share globally.

**Smaller Menus:** Pairing down on few items and smaller menus will prevent the time and manpower consumption of an overwhelmed staff and longer waiting time. McDonalds should spend more money on Research and Development to create new products and services as well as increase the efficiency of operations. First, one thing McDonald should focus on is that the play place for kids. McDonalds has play place but not in every restaurants. If you eat in McDonald's restaurant, you can be free to party while your children play at the place for kids. Customers love this service.

**Marketing Strategy:** It is essential to create a new label for McDonald's which is viewed as unhealthy junk food, by many. To improve public perception of the company, McDonald's is doing a global audit of the marketing department. The brand is also strengthening the creative messages by placing greater emphasis on the quality of our food and again re-establishing the emotional connection that the customers associate with the McDonald's experience.

**Expansion and Market Development:** Considering its dependence on Western markets, McDonald's has the opportunity to grow and expand in developing countries, such as Asian economies. The company can also use a market development strategy to establish operations in Middle Eastern countries that it has not yet entered. There are not many McDonald restaurants in this potential market. Japan is the only Asian country which has a lot of McDonald's fast food restaurants. In contrast, China is considered as one of the biggest market in the world because of this country's population. Nevertheless, according to the recent figures, China is just in ninth position among the countries which have McDonald's restaurants with about 1000 restaurant while this number in US is about 14000. If McDonalds can develop more and more in Asia, it is a huge advantage for company to gain market share.

## **Group 21: Micro economic Analysis Of “Make my Trip Limited-Memories Unlimited”**

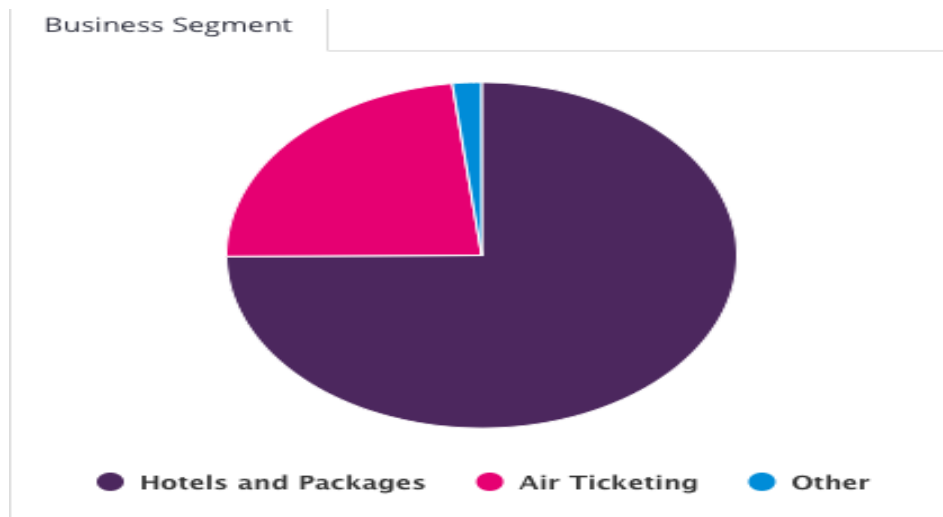
### **Introduction**

We have chosen “Makemy Trip Limited- Memories Unlimited” as our organisation from the tourism industry for this project. We have used primary data indicating learnings from various sources and written as understood. We have also used secondary data i.e researches from newspapers, magazines, internet and some reference books.

MakeMyTrip is an Indian online travel company, founded in the year 2000. Their Headquarters is in Gurugram, Haryana. The company provides online travel services including flight tickets, domestic and international holiday packages, hotel reservations. It is also a web based online travel ticket, accommodation and holiday package booking website. The company was founded by Mr. Deep Kalra, an alumnus of IIM-Ahmedabad.

MakeMy Trip is a market share leader in the business-to-consumer travel side. It is the largest online player in our country. A large section of small enterprise’s people who travel for business have the option of an online tool, which helps them get the same advantages that large companies get for their business travels. People have become a lot more comfortable with online transactions. In addition, the online payments have really been driven hard over the last one year in India. All these factors have encouraged them to come up with a tech-based solution, which will bring all the consumer-side technology to the corporate travel bookings. The tool is available both on the desktop and mobile app. MakeMyTrip launched travel mobile application for Windows Phone, iPhone, Android, and Blackberry devices. Currently, they have around 50-50 split on desktop and mobile. On the business-to-consumer side, 70 per cent of the bookings are coming through individuals.

MakeMyTrip route planner provides all the basic required information on more than 1 million routes in India.



### Microeconomics Venture:

#### Demand for the product, factors influencing demand, substitutes and complements, different elasticities

Online travel mainly depends on making the payments online, hence the customer must be aware of making the payments online else he/ she must contact the agents.

- **Income:** The affordability of the customers to accommodate the travel/ tourism. The income plays a very important role in taking the decisions. A person with lower income will focus on travelling by some cheaper means and may use that money in some other basic essential requirements.

As the income level of the person increases the affordability to travel sophisticatedly also increase and hence travel can be considered as a **normal good/service**.

The website Make My Trip is integrated with options to book buses /flights/outstation cabs/holiday packages/ hotels for domestic and international travel plans. The pricing is comparatively higher as it is integrated service and involves hidden brokerage charges.

- **Price of other similar organizations:** As it falls into **oligopoly market structure** there are few sellers dominate the market and sell the homogeneous or heterogeneous product, the pricing decisions are made in comparison to the close rival firms. The pricing is more or less than same. The other websites also have the same features and almost of the same quality and hence substitutable. Hence **demand curves are**

**perfectly elastic** for they price the bookings at the dominant price. Some of the **close substitutes or the rival firms are like Yatra, Clear Trip etc.**

- **Taste:** People who wish to travel hassle free opt the services of this website. With the increase in globalization traveling across the globe is easy but subject to affordability. People travel different parts of the world for various reasons one such reason is relaxation, sightseeing, honeymoon, etc.

Holiday packages are the attractions. The website offers variety of options affordable to wide range of customers to suit their taste and budget. They are associated with all kinds of travel agents, home stays to make it available to all types of customers.

The website is also engaged with the outstation cab vendors, which will ease the customers and relieves them saving their time in discovering the options after they enter the new city. Thus depending on their taste the customers can make their bookings and hold all the booking information at one desk.

- **Population:** As India is densely populated and travel is part of the almost every individual either as part of official work, travelling to hometown, may be for relaxation etc, the demand is always there. For example, Bangalore which is the Silicon city has highly dense population and almost people (with wide range of income) from different parts of the country reside here. The demand for the busses/flights is usually very high during the weekends/ festival seasons. Sometimes the demand may be very high and the supply that is the busses may not be sufficient and the price is very high than the equilibrium price. People sometimes change their travel plans due to non- availability of the buses.
- **Composition of population:** The composition of the population that is female and male is not much relevant in this scenario. The composition of the population affordable to travel, willing to do online transactions, aware about Make My trip website is very important. With the advent of technology and storage of all information on the mobiles, it is very easy to download an application and book everything.
- **Seasonal effects:** This business is highly seasonal. The demand for the website is very high during the festival days, summer seasons etc. The overwhelming demand during the peak seasons will create a supply shortage where's as during the week days there will be supply surplus. The demand during the peak season is **perfectly inelastic** as the increase in price will still not affect the customer who wants to travel.

- **Expectations:** Meeting the expectations of the customers is very crucial for any business to work and gain profits. Recently, the website has come up with the option of Zero cancellation charges when they withdraw their travel plan. This sort of encourages the customers and flexibility to book tickets and block seats without any hesitation, cancel and take the full refund amount if required.

The website currently has no option to book the IRCTC train tickets and may be the access to this website through Make My Trip can make the prospective customers happy.

- **Availability of credit:** Offers extended on the debit / Credit offers, lazypay website a sort of attracts the customers towards tourism. The promotional offers such as refer and earn e-cash, flexibility to redeem the e-cash around 5% to 10% of the e-cash will be beneficial to the customer. Now the website Make My Trip also come up with the option of Gift cards loaded with cash. These cards can be gifted based on the occasion and different scenarios.
- **Derived Demand:** During the festival and holiday periods the demand is usually very high. The derived demand is created by the payment providers like PayPal, Mobiwik, and Phone Pe etc. as these e-wallets offers great deal of discounts/ cashbacks. Some tourism policies/ Socio economic conditions can also increase/decrease the demand for entering a particular country etc. For example, in the recent times Canada is the preferred place to migrate because of the policies that have been extended to the migrants.

**Substitutes:** **Yatra, Clear Trip** are few substitutes like Make My trip where the same options will be available for booking. The other substitutes include the travel agents who plan the trip with some extra charges or we can access the individual websites for every booking.

**Complements:** The complements include the e-wallets which are used during booking the tickets and other online payments. The fuel prices is also a complement to the travel industry as it has greater influence on the pricing.

**Production: Processes, inputs, substitutes and complements among inputs, costs, economics of scale and scope**

MakeMyTrip's spectacular success stems from its unblinking vision to empower the traveller with choice. With its best-value travel services. MakeMyTrip is much more than just a travel portal or a famous pioneering brand - it is a **one-stop-travel-shop** that offers the broadest selection of international and domestic travel products and services in India, MakeMyTrip is the undisputed online leader, with a share of the travel market extending to more than 50% of all online sales, a sign of the trust placed in it by millions of happy customers.

To complete the cycle of production in travel industry for perfect competition below are the service which an travel agents or travel company should provide on which MMT has covered all of them.

| Service offerings             | Frequency | in terms of Revenue | Prescribed Value |
|-------------------------------|-----------|---------------------|------------------|
| International Ticketing       | High      | High                | Low              |
| Domestic Ticketing            | High      | Average             | High             |
| Flight + Hotel Deals          | Less      | High                | Low              |
| Domestic Bus and Rail Tickets | Less      | Average             | High             |
| Private Car and Taxi Rentals  | Less      | Low                 | Low              |
| Holiday Package               | Seasonal  | High                | High             |
| Corporate-myBiz               | Average   | High                | High             |
| Other facility                | Average   | Low                 | Low              |

According to the above analysis Make my trip has prescribed value that is customer is willing to pay premium along with cost since service is not readily available in market for few categories of service provided by them because MMT is portal for **One Stop for all the**

**Travel Essentials.**

**Ticketing.**

Customer will not be willing to pay premium in case of international travel because cost itself will be higher, but we can expect some amount of premium in case of Domestic travel because cost will be minimal and customer will look for comfort at his single button click.

MMT offers. cheapest fare guarantee, experience great value at the lowest price. Instant notifications ensure current flight status and instant fare drops, amazing discounts, instant

refunds and rebook options, price comparisons and many more interesting features, My Rewards Program, MyWallet.24/7 dedicated helpline for support.

### **Flight + Hotel deals.**

If it is business travel, most of the customer will have their own arrangements that is accommodation will be arranged by host therefore there is less possibility of choosing the combo deal and customer will also think on the premium charges since the cost itself will high if the combo offer is accepted.

MMT offers all types of hotel ranging from luxury to cheap rates are available in single web page according to customer requirement. Payment gateway is totally secure, so all the bank details are safe. Budget or upscale hotels in any destination hotels are available in Make my trip portal. Additional feature is Zero cancellation charges that is 100 % refund on hotel cancellation. Cash discounts from certain partners example 40% off on Oyo hotels.

### **Holiday Packages.**

MMT provides dynamic or customized tour and travel packages to consumers, an option to create and design their own holiday, the fixed departure holiday packages have a pre-designed itinerary; thus ensuring there is something to meet the holiday needs of every kind of traveler.

### **Domestic Bus and Rail Tickets**

Bus tickets- It enables to choose from the widest range of available buses like Mercedes, Volvo, Volvo AC, AC luxury, Deluxe, Sleeper, Express and other private buses since it is an Oligopoly market. Railway Tickets. Railways is run by government and it is Monopoly Market. Price are fixed in nature.

### **Corporate.**

Customer may accept to pay premium charges since transaction may be enormous in organization which will help them to prevents delays and cash hassles involved every time. myBiz reduces payment inefficiencies and potential corporate card abuse by keeping the overall control with the organization, while providing the employees and organizations greater flexibility, benefits and convenience for business travel. It also rings in big savings for all.

*Organisation*-In addition, companies stand to claim GST input credit and save up to 18% of total travel transaction transparently.



*Employee*-fully automated process which prevents delays and cash hassles involved. Facility not available in corporate travellers earlier like complimentary in-Flight meals, seat selection, hotel upgrades etc are available in myBiz.

**Substitute and compliment among input.**

| Sl.no | Substitute          | Compliments among inputs                    |
|-------|---------------------|---|
| 1     | Yatra.com           | Flight Meals                                |
| 2     | Local travel agents | To and from Cab arrangements                |
| 3     | Clear Trip          | Cash discount voucher with limited validity |
| 4     | Trip Advisor        | Seat Selection, Gift cards                  |
| 5     | Travel Triangle     | Earn loyalty points for cash discounts      |

If the travel agents provide any of the above compliments among their input, they become substitute for MMT i.e if consumer feels MMT price are more when compared to other substitute available in market due their complimentary offers in their input demand curve for MMT will come down while the demand curve for other substitute raise.

**Cost**-Even though the cost increases due to complimentary offers in input, it is in future interest of the company for their long run to acquire the market by earning trustworthy customers.

**Economies of scale**-It will be applicable in the travel industry because we might get discount if we book more number tickets or select a combo deal. In round-trip booking, the total cost of booking goes further down, which means there is economies of scale.

Cash discount voucher will be provided only when customer meets certain expectation of supplier for example customer should shop over above Rs 50000 to get a discount voucher of Rs 5000 in future transaction which in turn will result in economies of scale.

**Market Structure:**

- **Competing Firms, Market Power:**

Some of the major competing firms for MakeMy Trip are Yatra, Trip Advisor, Travel Triangle., booking.com. Their major competition was GoIbibo which was acquired by MakeMy Trip recently. The combined entity will bring together brands in the consumer travel space in India including Goibibo, redBus, under one umbrella. Post the merger, MakeMyTrip shareholders own 60% stake whereas Ibibo Group shareholders get 40% stake.

A major competitor of MakeMyTrip is *yatra.com* started in 2006 in India. Their marketing strategy was to target market through TV and online. Yatra.com has a market share of 30%. Another major competitor is *cleartrip.com* started in year 2006 by It has unique feature travel feature for both air and trains i.e. the air and train calendar which displays fares between destinations for up to 3-6 months ahead.

The views of the company when comparing its strategies with *booking.com* (a competitor) were as follows: While MakeMyTrip has an advantage in domestic bookings and in outbound travel, *Booking.com* has an edge in its big business to India. It also has far more marketing and engineering power. MakeMyTrip has strong brand recognition with Indian consumers and the company plans to invest more in that. Their market research shows that, while many consumers comparison-shop on multiple sites, they will ultimately book with their preferred online brands. They have seen people travel in large parties, and they want different rooms and different arrangements. The solution for that was they can offer different rooms in the same hotel in the same kind of shopping cart.

Below is a comparison chart of MakeMy Trip's major competitors. Data Courtesy

:<https://craft.co/makemytrip/competitors>

|               | <b>MakeMyTrip</b>   | <b>Ctrip</b>   | <b>Tripsta</b>  | <b>Travel Holdings</b>                          | <b>OKTO Board</b>  |
|---------------|---|--|---|---|--|
| Founding Date | 2000  | 1999   | 2005  | 2004  | 2010   |
| Type          | Public  | Public   | Private   | Private   | Private  |
| Tags          | Technology<br>Travel&Leisurebooki<br>ngecommerce<br>travel agency | Technology<br>Travel & Leisure<br>booking hotel<br>travel agency | Travel<br>&<br>Leisure<br>bookingt<br>ravel<br>agency | Travel &<br>Leisure<br>bookingtra<br>vel agency | Technolo<br>gy<br>Travel &<br>Leisure<br>booking<br>travel<br>agency |

|                   |                |  |               |                             |   |
|-------------------|----------------|--|---------------|-----------------------------|---|
| Locations         | Gurgaon, IN    | Shanghai,CN<br>Xiamen Shi, CN<br>Wuhan,CN<br>ShenzhenShi,CN<br>Shenyang<br>Shi,CNSanya,<br>CNQingdaoShi, | Athina,<br>GR | Altamonte<br>Springs,<br>US | New<br>Delhi,<br>INChenn<br>ai,<br>INKhara<br>r,<br>INAmrit<br>sar, |
| Employees         | 3,051          | 37,400   | 83            | 459                         | 9   |
| Valuation<br>(\$) | 2,58,52,34,371 | 18,62,53,32,190  |               |                             |   |
| Facebook<br>likes | 24,86,709      |  |               | 2,869                       | 2,370   |
| Twitterfollowers  | 73,978         | 37   |               | 1,142                       | 100   |

Some of the Strengths, Weaknesses, Opportunities & Threats (SWOT) Analysis of Makemytrip are its One of the earliest market entrants, its presence in the international business scenario, its Secure and trusted channel for facilitating payments, its attractive brand name and convenient website navigation, It offers services like International and domestic air tickets, holiday packages and hotels, domestic bus and rail tickets, private car and taxi rentals. A major back draw of the portal is that there is a general Reluctance in customers to use internet for financial transactions like booking tickets online. The possible lack of co-ordination with tourism entities is very less. Also the present competitors having substantial market share and the newly emerging online booking portals with better offerings for beating the competition. Customers usually prefer using traditional methods of booking as they offer better travel packages in line with customer expectation. It is also untapped in the sections of international tourism market.

MakeMyTrip started its business from India-USA travel market in year 2000. Following its success in US the company started its operation in India in 2005 and within 5 years it captured almost 50% of all online sales of travel market in India. Although MakeMyTrip operates purely on internet initially but in 2008 they decided to open their offline retails stores in India to

promote their holiday packages and to create a brand value. Currently there are 20 offline stores running in major cities of India.

### **1. Strategies for competition:**

A competitive strategy is a long-term plan of action that a company devises towards achieving a competitive advantage over its competitors after examining the strengths and weaknesses comparing them to its own. The strategy can incorporate actions to withstand the market's competitive pressures, attract customers and assist in cementing the company's market position.

- Makemytrip.com provides certain offers on airline ticket bookings and reserve hotel rooms. The following offers are provided by the MMT.

| <b>Offer by MMT</b>                          | <b>Description</b>   |
|--|--|
| Daily basis Deals                            | MMT have daily deals on Airline booking and hotel reservation. In the website MMT provide different offers on daily basis for grabbing attention of the consumers.   |
| Competitive Pricing and Round-trip Discounts | Consumer can book domestic flights online. MMT offers attractive discounts on flights which helps to save money. Add to that, in round-trip booking, the total cost of booking goes further down, which means more savings |
| Better offers on App                         | The notification section on the app has the latest offers. Consumers can use the coupon or promo code for next booking with in a limited period.   |
| Seasonal Promotions                          | MMT provides special seasonal discounts on Airline tickets and hotel reservation during festivals, Summer vacation and new year. It helps to increase the demand as well as supply.  |
| Special Discount Deals                       | Based on customer search and purchase history MMT offer special and timely discount deals, notifications on fares, updates on airline sales, offers through bank cards and many.   |
| Offers on credit cards                       | MMT have booking offers on Credit cards of specific banks.   |
| Reference                                    | Customer can refer their friends and get customised coupons or benefit for their next booking or holiday package.  |

- **User friendly website:** A motivating factor is the quality and quantity of information on the website. The promotional deals are also categorized into three parts: Discounts (only for app users), Hot deals and Last-Minute Deals with an intention to grab the immediate attention of the consumer.
- Consumer can book for rejuvenation services within or outside the hotel. They can make use of list of option provided in MMT website that includes Choice of places, Choice of food each place offer, Choice of travel mode, Type of holiday package, Coupons or Discounts, Budgetdeals, Luxurypackages, Beach, adventure, family trip etc.
- **Zero Cancellation charges/penalty:** MakeMyTrip doesn't charges cancelation charges on specific flights and hotel bookings. Consumer can cancel the booking on certain terms and conditions for reasonable situation.
- **Refund status** as well as the flight status (availability) can be checked anytime from the website and communication with the personnel is easy in this portal.
- The brand also introduced a special **helpline for the consumers** to address any grievance they have with the hotel bookings.
- MMT website have special feature of tickets and hotels booking on EMI via BajajFinserv card for zero interest for up to 3 months and with interest for up to 12months.
- MakeMyTrip has launched several advertisements with the Bollywood duo to raise awareness on different features offered by it. MMT focused on how the platform offers great discounts and has a wide range of hotels present on it.
- The Important strategy is Make my trip merged with significant competitor "Goibibo" The merger and other investment-led activities have boosted growth.

- **Pay at Checkout:** Unlike direct bookings, customer can pay 100% of the hotel cost during checkout, booking through MMT travel app comes with an element of trust. Here, not only booking confirmed, customer have the option to pay after enjoying your stay at the hotel at checkout.
- **Ratings and Reviews:** With the help of the ratings and reviews in website consumer can choose the better booking option. Even if MMT also can improve the quality of service.
- **Makes Travelling Less Stressful:** Most international destinations entail painfully long flights. The idea of spending an entire day in aircrafts and airport lounges can be extremely stressful and physically taxing. Planning a multi-city trip not only helps relax but also stirs in an extra element of excitement, since customer get to explore new destinations with the help of MMT guidance.

## **2. Pricing Strategies:**

Price is the value that is put to a product or service and is the result of a complex set of calculations, research and understanding and risk-taking ability. A pricing strategy takes into account segments, ability to pay, market conditions, competitor actions, trade margins and input costs, amongst others. It is targeted at the defined customers and against competitors.

Price setting for tour operators requires a strong mix of marketing strategy and financial analysis. The people, accommodation and components that make up the experience/holiday you provide can be incredibly diverse and pricing strategies often evolve as a tour operator develops its brand and market share.

### **Pricing Components**

Pricing strategy may be made up of the following components:

#### ➤ **Rack Rates**

All tourism businesses should have a rack rate – this is your “full rate” before any discounts are applied and typically is what is provided to wholesalers and printed on brochures for the season ahead. For activity and attraction operators their full rate is more likely to be charged all the time without any day to day discounting; however accommodation operators – particularly those in the middle of the market will be changing pricing almost daily for the month or 2 months ahead to fill gaps.

### ➤ **Seasonal Pricing**

Using a mix of pricing throughout the year to cover low, high, and shoulder seasons is a standard way for tourism businesses to cater for differing levels of demand due to the time of year. Typically these will be the same date periods each year but may also apply for school holiday dates and for local events where the dates vary each year.

### ➤ **Last Minute Pricing**

A common method for accommodation suppliers to fill those last minute gaps in inventory availability, last minute pricing is basically discounting daily prices according to forward bookings and promoted on last minute booking websites.

## **Common Pricing Types**

- **Per Person pricing:** A set price per person e.g. Adult and Children prices. Commonly used by activity/attraction and transport operators or backpacker accommodation and camp sites. Options may include an adult, child and senior citizen price.
- **Per Unit pricing:** – A set price for 1 unit of the product e.g. Price per night, this is the standard way to price accommodation, usually the advertised price is for 2 people so if the accommodation fits more than 2 guests it can have a mix of the per person pricing with extra adult and extra child rates.
- **Single or double occupancy** – common for B&B's there is a single rate and a double rate (which is not double that of the single rate).

## **Discounting**

While discounting has its place, and often unavoidable in a competitive market such as tourism, be very wary about continually discounting your prices to stimulate demand – it can become a rocky road to reducing profitability or even missing that vital break-even point. Be selective with last minute pricing deals – don't make every day reduced, just select those where you really do need extra bookings. Consider adding conditions to a discounted price like a minimum stay or number of travellers in the booking. While a booking is better than no booking at all, customers do become used to a certain price level and you therefore run the risk of not only making it hard for you to charge your normal rack rates, but it will also devalue your product – remember perception is everything in tourism!

### **Package Deals**

Developing packages with complimentary tourism partners in your area or with value added components is a good way to stimulate demand without having to discount. Strike up deals with local businesses to provide a full package and share business with each other – you should be able to get their products or services at a “net” rate so the package pricing is better than if they had purchased each component separately. Packaging can also be used to target niche markets effectively e.g golf weekend, food and wine tours, pampering packages etc.

### **Commissions**

Many bookings will come via some sort of third party who will charge you a commission such as a retail travel agent, wholesaler, inbound tour operator or online travel agent (OTA). Many tourism operators are tempted to add the value of the commission on to the pricing for these providers, but this should actually be considered in the setting of your rack rates anyway – if you have different pricing across different distribution channels it just confuses both travellers and can jeopardise industry relationships, so keep it simple.

### **Recommendation**

- During the festival seasons, holiday periods the demand for the travel is very high and the private travels are price very high, which is very difficult for the common man to afford. Hence price ceiling must be initiated on the private travels so that the lower class people can be benefitted.
- Inclusion of IRCTC train tickets booking through this website through Make My Trip can make the prospective customers happy.
- MMT Should have an option of confirming the bookings over the phone during the emergency because not in all places and all-time customers will have access to internet.

### **Recommendation for Practical Limitation**

- Coming to the point of corporate deal while other travel agents provides NIL cancellation charges and offers seat and meal with free of cost while MMT offers with nominal charges.
- Even though cancellation is easy process rescheduling is not user friendly while we must access customer support & cancellation charges are higher when compared to travel agents available in market.



- Even though we find in website that cash discount is available with an airline partner it is not so when we compare on rates available in airline website. This might result in loosing reliable customers.

Even though MMT is in to oligopoly since there are homogeneous services available in the market, if the services are more than equilibrium price MMT may tempt to lose its prospective customers to their competitors. Therefore, it is advisable to check for equilibrium price before fixing the price.

## **Group 22: Micro Economic Analysis of HDFC Bank**

### ***Executive Summary***

*India's Rs 77 trillion (US\$ 1.25 trillion)-banking industry is the backbone to the economy. The sector emerged strong from global financial turmoil and proved its mettle when the developed economies were shaking.*

*India's banking sector is on a high-growth trajectory with around 3.5 lakhs ATMs and less than seven bank branches per 100,000 people, according to a World Bank report. The statistics are going to improve in near future as the Government aims to have maximum financial inclusion in the country. Policymakers are making all the efforts to provide a facilitating policy framework and infrastructure support to ensure meaningful financial inclusion. Apart from that, financial institutions are collaborating with other service providers (in the fields of telecom, technology and consumer product providers) to create an enabling environment.*

*The basic motive behind such an initiative by the bank is to take the formal banking experience to people in unbanked and under-banked areas. A mini branch, manned by one, two or three persons, offers the entire range of products and services including savings and current accounts, fixed deposits, recurring deposits, credit card, instant debit card and also ATM facility. Products such as two wheeler loan, commercial vehicle loan, agricultural and commodities loan among others are also offered.*

*HDFC being one of such banks has excelled in banking sector by their strategies, one of them being management of bad loans. HDFC growth is remarkable in urban and semi urban area beating the top ranked ICICI in 2017.*

*In this report we are going to discuss about Indian Banking sector and how HDFC over the course of years has acquired the top spot in Industry. Our analysis is based on various tools of ME analysis.*

*The data to investigate and provide our recommendation has been based on reports on official HDFC website and RBI data base. News article and share market data has been used as reference to project HDFC standing in market,*

## **Introduction**

Every Industry in operation small, medium or big is directly or indirectly is dependent on banking sector of the country. India has become one of the fastest growing nations in world. The financial and economic conditions in the country are far superior to any other country in the world. Credit market and liquidity risk studies suggest that Indian banks are generally resilient and have withstood the global downturn well (Reference 2).

The Indian Banking sector before 1991 had poor infrastructure, highly regulated, and high interest rate resulting in monopoly like situation. The Indian Banking sector was being governed by Public Sector Banks with a market share of approximately 90 %. Another reason for the monopoly of the Public Sector Banks was the nationalization of private sector banks to public sector. Other scenario leading to necessity of 1991 reforms was weak regulatory involvement of RBI and stringent policy towards foreign investment.

The Economic Reforms of 1991 had major counterpart reforms of Indian Banking Sector towards goal of globalization and liberalization. The focus contained improving standards, procedure to meet BASIL Standards (Switzerland) and increasing competition in Indian Banking Sector.

Various Agendas from monitoring of reforms and policies implementation, allowing entry to foreign firms, moving to era of digitization, complete structural and operational changes, decontrol of interest rates and credit all in cause and effect for increasing competition giving benefits to end consumer.

One of key figures in industry is the Housing Development Finance Corporation (HDFC), leading the board and supporting the Indian Economy and Citizen through various financial services.

## **History and evolution of HDFC over the years**

The Housing Development Finance Corporation (HDFC) was amongst the first to receive an 'in principle' approval from the Reserve Bank of India (RBI) to set up a bank in the private sector, as part of the RBI's liberalization of the Indian Banking Industry in 1994. The HDFC Bank was incorporated on August 1994 by the name of 'HDFC Bank Limited', with its registered office in Mumbai, India. HDFC Bank commenced operations as a Scheduled Commercial Bank in January 1995.

HDFC Bank is headquartered in Mumbai. The Bank at present has an enviable network of over 1416 branches spread over 550 cities across India. All branches are linked on an online real-time basis. Customers in over 500 locations are also serviced through Telephone Banking. The Bank also has a network of about over 3382 networked ATMs across these cities.

The reforms of 1991 led to series of strategic tie-ups, acquisition making HDFC one of premier banks in India. HDFC played key role in acquisition and taking various initiative to be lead the competition. Few Major acquisitions were , May 23, 2008, the amalgamation of Centurion Bank of Punjab with HDFC Bank was formally approved by Reserve Bank of India to complete the statutory and regulatory approval process. As per the scheme of amalgamation, shareholders of CBoP received 1 share of HDFC Bank for every 29 shares of CBoP.

The merged entity now holds a strong deposit base of around Rs. 1, 22,000 crore and net advances of around Rs. 89,000 crore. The balance sheet size of the combined entity would be over Rs. 1,63,000 crore. The amalgamation added significant value to HDFC Bank in terms of increased branch network, geographic reach, and customer base, and a bigger pool of skilled manpower.

In a milestone transaction in the Indian banking industry, Times Bank Limited (another new private sector bank promoted by Bennett, Coleman & Co. / Times Group) was merged with HDFC Bank Ltd., effective February 26, 2000. This was the first merger of two private banks in the New Generation Private Sector Banks. As per the scheme of amalgamation approved by the shareholders of both banks and the Reserve Bank of India, shareholders of Times Bank received 1 share of HDFC Bank for every 5.75 shares of Times Bank.

### **Key Initiatives & Milestones**

HDFC Bank has entered the banking consortia of over 50 corporates, including some leading multinational companies, flagship companies of local business houses and strong public sector companies. The Certificates of Deposits were awarded a PP1+ rating which is the highest rating for short term instruments indicating superior capacity for repayment.

In 1997 HDFC Bank has become the first private sector bank to conclude a structured interest rate option deal, connectivity of all its branches on single portal.

Taking early advantage of reforms and phased entry of foreign investment HDFC Bank entered into strategic alliances with 10 overseas banks to provide customers with a wide range of derivatives including interest rate and foreign currency swaps.

HDFC Bank also has launched an account in all its 28 branches in 1997 across India that seeks to free depositors from minimum balance requirement, for the first time in the country.

HDFC Bank has become the first bank in India to link up its automated teller machine (ATM) network with all the three major payment systems world-wide, also the first bank in the Asia-Pacific region to connect the American Express (Amex) payment system.

HDFC over the years tied up with Airtel, ITC Threadneedle Mutual Fund., Sony India Ltd (SIL), Maruti Suzuki, BPL Ltd, Maxtouch, CricketNext.com, LTtrade.com etc to provide comfort and assurance to customer of all in one service through latest technology such as internet banking, discounts on loan, minimum balance account, Mobile banking etc..

Over the years in 2017, HDFC Bank replaced ICICI as Number 1 private retail bank in India. In 2017 HDFC Bank surpasses TCS to become 2nd most valued company -HDFC Bank launches SmartUp Zone in Hyderabad.

### **Methodology**

Here in our analysis we are going to cover reforms leading to growth, modernization, competition, and current market scenario and detail analysis of Indian Banking Sector and effect on HDFC in comparison to other banks.

### **Banking Sector an Oligopoly?**

Banking sector has been present since ancient times, over the course of years there has been significant structural changes moving from monopoly to oligopoly. In early days most of financial transactions were carried out by one lender and multiple borrower, mostly the lenders were rich of community charging hefty interest resulting in monopolistic behavior. Over the years the sector was reformed in institute run by state. The state run were structure monopolies, limited entry was given to new player. For India after independence the resilience towards foreign investment and privatization was not favored till 1991 economic reforms. "There was extensive financial repression, reflected in detailed controls on interest rates, and large preemption of bank resources to finance the government deficit through the imposition of high statutory liquidity ratio (SLR), which prescribed investment in government securities at low interest rates." (Reference 1)

Indian government to boost the financial system of country required large banks to operate and achieve National Objectives. During the Era of 1969 to 1985 State Bank of India amalgamated

with Bank of Bihar (1969), National Bank of Lahore in 1970, a bank of Cochin (1985) to increase market share which resulted in decrease in competition among local and nationalized banks.

Introduction of 1991 reforms led to licensing of private banks, the deregulations of lending rates for commercial banks were followed by the deregulation of interest rates on deposits.

The effect of reforms saw increase in number of national private banks, foreign banks. Each bank facing the competition was either acquiring or getting acquired. HDFC, SBI and ICICI acquired a majority of weaker firms. This reflected in development of strong financial sector moving at a fast pace exceeding international standards.

The measure of Indian banking sector was visible during the global economic slowdown of 2008. The change of banking sector from monopoly to oligopoly i.e. increase in competition.

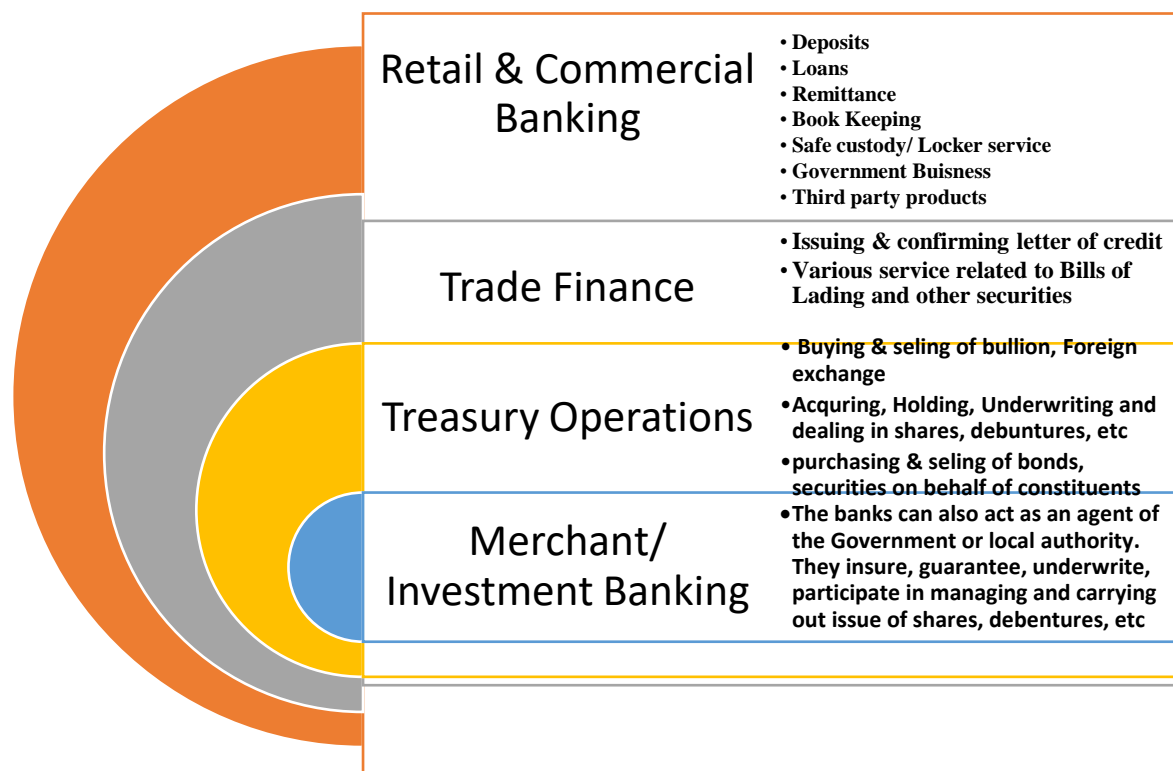
In terms of 4 basic parameters to measure type of sector industry is, we have tried to substantiate our claims of banking sector as Oligopoly.

- a) Homogenous product: The banking product may or may not be homogenous. This is primarily because of personal banking solution provided on individual level by each bank. The Product is customized to needs of individual.
- b) Free Entry and Exit: The Entry into sector is not too complicate only requires an entity to meet all standards, norms to open a bank. Same goes for exit; the Bank is required to meet all financial obligations to its customer and community & to declare closure of its service, which is highly unlikely for any banking institutional in current era.
- c) Currently there are not too many or too less buyer/seller (banks) to provide service. Enough for competitive market.
- d) Perfect Information: This growth, flexibility to operate can be seen because unlike other East Asian countries to consolidation & implementation of banking process; Indian Government plays role in laying down reforms and checks for compliance. Letting bank strategize at own internal terms while operating under policy let by RBI to provide product to consumer/borrower. Thus, perfect information on operation is not available.

## Type of Products and services

HDFC offers various type of financial products and services which varies from Retail products to commercial or wholesale banking, various services which varies from remittance, investment, payments, cash operation, cash managements, etc

Here is a categorical representation for the same:



Overall Banking Industry offers homogenous product with difference in interest rate of lending and deposit. Example and comparison of saving account for top3 companies given below:

| Overview                        | SBI   | HDFC Bank  | ICICI Bank   |
|---------------------------------|---|--|--|
| Interest Rates                  | 3.50% - 4.00%   | 3.50% - 4.00%  | 3.50% - 4.00%  |
| Minimum Account Balance         | Rs 3,000 in urban areas &Rs 2,000 semi-urban andRs 1,000 rural areas. | Rs. 10,000 for metro urban branches Rs. 5,000 For Semi urban branches Rs. 2,500 for Rural branches is required to open a Savings Regular Account | Rs. 10,000 in metro and urban locations, Rs. 5,000 in semi urban and Rs. 2,000 in rural locations                                |
| Cash Withdrawal Limit           | Maximum 4 withdrawals in a month                                      | Unlimited  | Unlimited  |
| Minimum Age to Open Account     | 18 years  | 18 years   | 18 years   |
| <b>Saving Account Charges</b>   |   |  |  |
| Balance Non Maintenance Charges | None  | Rs. 150 to Rs. 600   | Rs 100 and 5 percent of the shortfall in required MAB  |
| ATM Transaction Charges         | NA  | NA   | First 5 transactions in a month are Free After that, Rs. 20 per financial transaction and Rs. 8.50 per non-financial transaction |



## SWOT Analysis of HDFC Bank

### Strengths

- HDFC bank is the largest private bank in India having 2,201 branches and 7,110 ATM's
- HDFC bank is located in 1,174 cities in India and has more than 800 locations to serve customers through Telephone banking
- The bank's ATM card is compatible with all domestic and international Visa/Master card, Visa Electron/ Maestro, Plus/cirus and American Express. This is one reason for HDFC cards to be the most preferred card for shopping and online transactions
- HDFC bank has the high degree of customer satisfaction when compared to other private banks
- The attrition rate in HDFC is low and it is one of the best places to work in private banking sector
- HDFC has lots of awards and recognition, it has received 'Best Bank' award from various financial rating institutions like Dun and Bradstreet, Financial express, Euromoney awards for excellence, Finance Asia country awards etc

### Weaknesses

- HDFC bank doesn't have strong presence in Rural areas, where as **ICICI** bank its direct competitor is expanding in rural market
- HDFC cannot enjoy first mover advantage in rural areas. Rural people are hard core loyals in terms of banking services.
- HDFC lacks in aggressive marketing strategies like ICICI
- The bank focuses mostly on high end clients
- Some of the bank's product categories lack in performance and doesn't have reach in the market
- The share prices of HDFC are often fluctuating causing uncertainty for the investors

### Opportunities

- HDFC bank has better asset quality parameters over government banks, hence the profit growth is likely to increase
- The companies in large and SME are growing at very fast pace. HDFC has good reputation

### Threats

- HDFC's nonperforming assets (NPA) increased from 0.18 % to 0.20%. Though it is a slight variation it's not a good sign for the financial health of the bank
- The non banking financial companies and new age banks are increasing in India

|   |  |
|---|--|
| <p>in terms of maintaining corporate salary accounts</p> <ul style="list-style-type: none"> <li>• HDFC bank has improved it's bad debts <u>portfolio</u> and the recovery of bad debts are high when compared to government banks</li> <li>• HDFC has very good opportunities in abroad</li> <li>• Greater scope for acquisitions and strategic alliances due to strong financial position</li> </ul> | <ul style="list-style-type: none"> <li>• The HDFC is not able to expand its market share as ICICI imposes major threat</li> <li>• The government banks are trying to modernize to compete with private banks</li> <li>• RBI has opened up to 74% for foreign banks to invest in Indian market</li> </ul> |
|---|--|

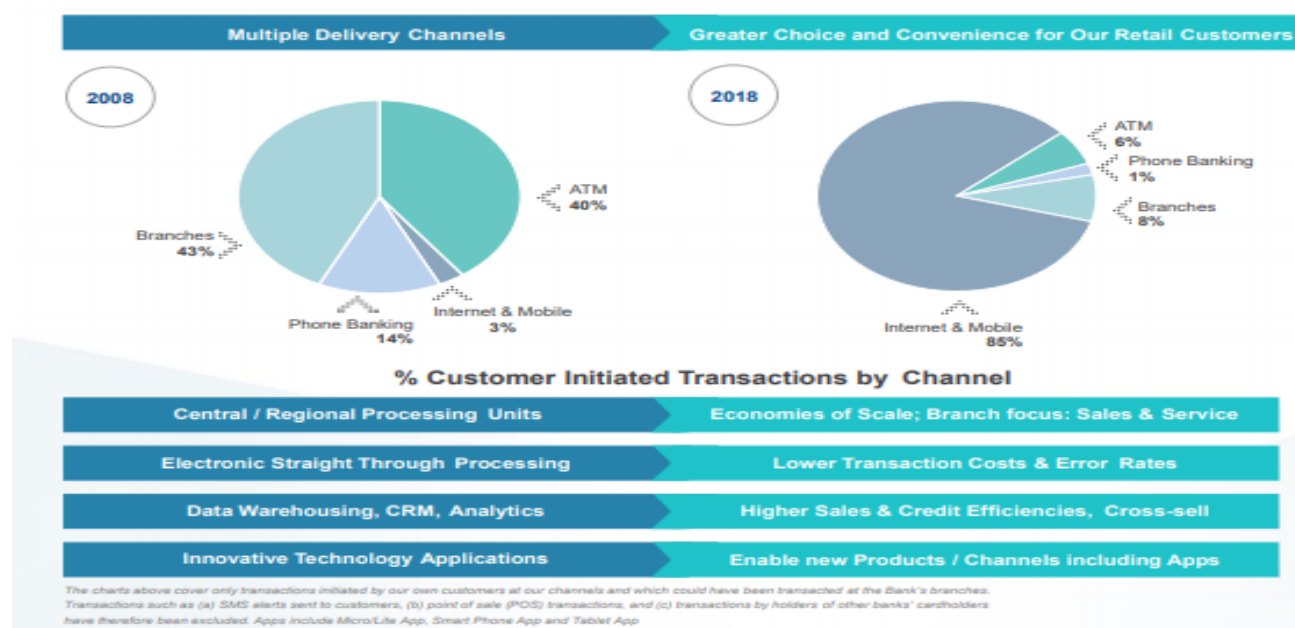
### Economies of Scale

HDFC bank took concept of Economies of scale and pictured it by expanding at very fast paced rate than any other bank in terms of increasing asset (offices). Comparison to SBI and ICICI over the years has been expanding operation at steady rate. The increase in no. of SBI Branch population is due to merger of various government Banks in last two years.

| Bank-wise and Population Group-wise Number of Functioning Offices of Commercial Banks |                     |        |        |        |        |
|---|---------------------|--------|--------|--------|--------|
| Bank Group  | Bank Name           | 2018   | 2017   | 2016   | 2015   |
|   |                     | Total  | Total  | Total  | Total  |
| SBI and its Associates  | STATE BANK OF INDIA | 24,489 | 18,232 | 17,836 | 17,375 |
| Private Sector Banks  | HDFC BANK LTD.      | 4,815  | 4,776  | 4,581  | 4,078  |
| Private Sector Banks  | ICICI BANK LIMITED  | 4,868  | 4,851  | 4,451  | 4,068  |
| All Banks   |                     | 37,933 | 31,254 | 29,860 | 28,196 |

## Economies of scope

Currently every other bank is in race to provide better & safe technology to customer has increased use of digital transaction. HDFC bank has customised their services with the current requirement. Below is statistics data of user as per HDFC and its service focusing on that value chain.



## Market Structure and Competition

ICICI Bank has ruled the private banking industry for many years; however HDFC growth led to become the country's largest private sector lender in terms of standalone assets. The Gap was closed by over few quarters. ICICI Bank's total asset base, the key parameter to measure a bank's size, stood at Rs7.87 lakh crore as of September 2017. That's 19% less than HDFC Bank's Rs9.33 lakh crore. ICICI may still be largest bank on basis of consolidated asset of subsidiaries, securities, asset management etc but typically, for an objective bank-to-bank comparison, only standalone assets are taken into account as per various analysts in industry.

In the last two years, the volume of bad loans on ICICI books has ballooned, requiring it to set aside a higher sum to provision for these. Resulting in decrease of profitability, restricting its focus to cleaning up the books rather than increase asset.

At the end of September 2017, its gross non-performing assets stood at 7.87% of the total gross advances. This led to a steep 30% decline in its consolidated net profit from Rs2,979 crore a year ago to Rs2,071.38 crore. Meanwhile, most Indian lenders are bogged down by bad loans.

At Rs7.29 lakh crore in March 2017, these toxic assets were equivalent to 5% of the country's GDP.

HDFC Bank, on the other hand, is among a select few lenders that have managed to keep their bad loans under check. At the end of September, its gross NPAs stood at 1.26% of its total gross advances.

Another factor at HDFC Bank is its focus on retail loans. At a time when the business environment is still sluggish, corporate borrowing from banks has taken a beating, while it has traditionally been a strong business for ICICI Bank. But retail loans—auto, personal loans, credit cards etc—continue to grow at a robust pace, allowing HDFC Bank to get ahead.

HDFC Bank is expected to grow at a faster pace compared to ICICI Bank for the next two years. In September 2017, the Reserve Bank of India gave a vote of confidence to HDFC Bank by including it in its “too big to fail” category. Being a part of this list means that a crisis at these banks can signal an economic disaster. The State Bank of India, the country's largest lender, and ICICI Bank are the other two members of this club. Also known as D-SIB.

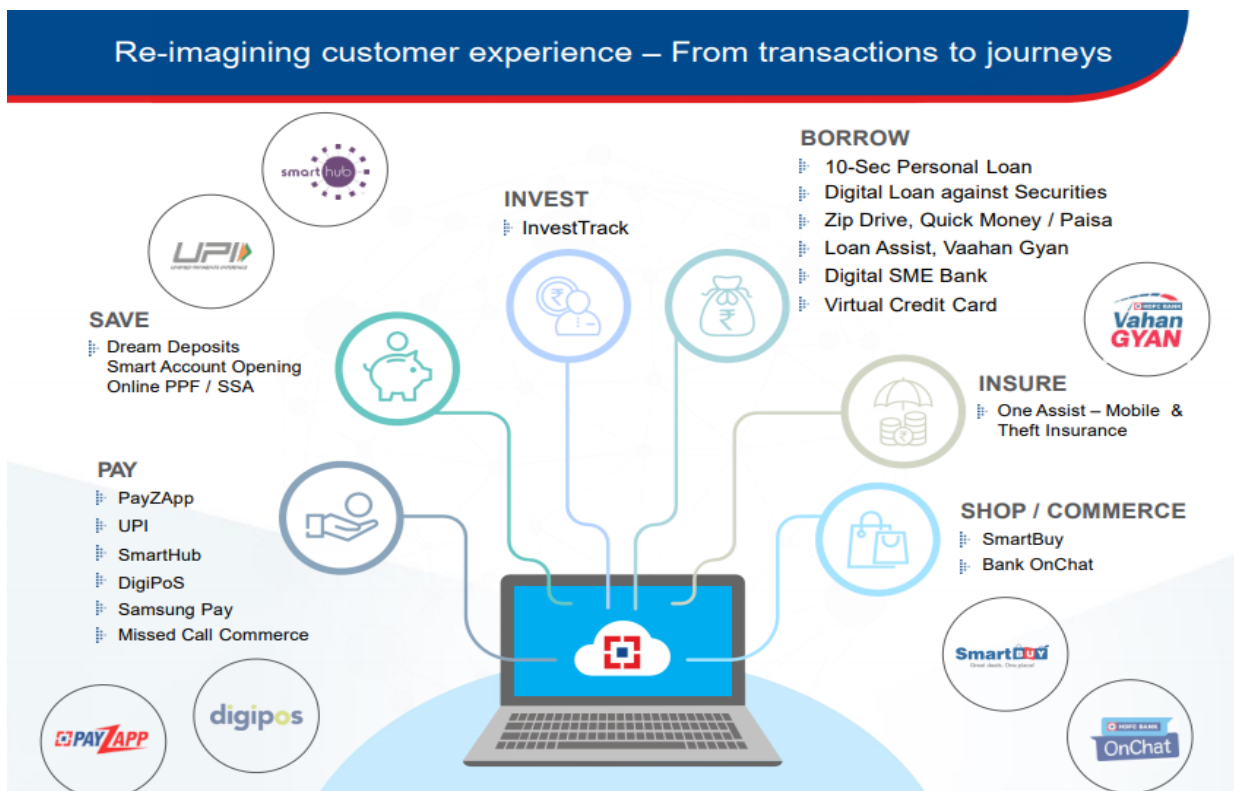
Here is current Market Capitalization of top 10 firms, where currently HDFC leads the market.

| <b>BANKS</b>     | <b>MARKET CAP.(Rs m)</b> |
|------------------|--------------------------|
| HDFC BANK        | 4,963,093                |
| ICICI BANK       | 2,279,619                |
| SBI              | 2,196,866                |
| KOTAK MAH. BANK  | 2,090,558                |
| AXIS BANK        | 1,463,966                |
| INDUSIND BANK    | 893,494                  |
| BANDHAN BANK LTD | 827,860                  |
| YES BANK         | 521,200                  |

| BANKS          | MARKET CAP.(Rs m) |
|----------------|-------------------|
| BANK OF BARODA | 256,683           |
| PNB            | 132,879           |

### HDFC Key growth strategy

With recent development of digitization of financial service, HDFC might not be leading the industry but has set dedicated plan to capture market share in no time. Currently HDFC has planned to increase its digital footprint by following services and offering value on these platforms.



**Figure 1: From HDFC Investor Report**

### Recommendation/Conclusion

Its True HDFC has gotten advantage of having very low bad debt and is currently enjoying the fruits of vigil, and letting it focus on increasing its asset. If it needs to lead the Banking industry it needs to maintain the pace of vigil and invest more in technology advancement; since payment banks like airtel, paytm are inches away to grab attention of user and provide one step

solution for their everyday financial needs swaying away potential lot of customer. Also being late entry in rural areas, it needs to aggressively strategize for untapped market and bring banking structure to the remote area. ICICI may be wounded but still has consolidated asset more than HDFC, also has advantage of first entry in Rural Market. Another threat to HDFC is governance change & technology advancement in public sector bank like SBI which has backing & funding of government.

## Group 23: Microeconomic Analysis of “Xiaomi”

### *Executive Summary:*

*With the rapid development of China's mobile communication industry, the total number of mobile phone users in China reached 900 million. China has become the world's largest mobile phone market. Having huge market capacity for mobile phone environment and competitiveness, Xiaomi mobile phone rose as the new power suddenly in the domestic mobile phone market. With the help of a group of excellent marketing strategists this action caused a strong reaction among people. Western Giants like Apple and Google are increasingly looking at East for growth opportunities, giving countries like India a significant influence over the sorts of features they build into their phones. For any perfect competition and emerging markets, big players try to leapfrog others in terms of forging ahead. With this competitive market how a China originated company Xiaomi rose as a smartphone band defeating other players and became China's 4th largest company.*

*Today, Xiaomi is being called a “Chinese phoenix.” The company has grown so fast in the past few years that research firm Strategy Analytics says Xiaomi could overtake Oppo, Huawei, and Apple in the next year to become the world's second-largest smartphone vendor, behind Samsung. The main purpose to have microeconomic analysis of Xiaomi is to understand whether Xiaomi's renewed success is sustainable in the competitive market, or will it lose importance under the relentless margin pressures of the phone business? And can Xiaomi do what no homegrown Chinese phone maker has done to crack the US market successfully?*

*We have considered primary data available on the Xiaomi's official profiles and also used secondary data or case studies done on Xiaomi. Also we have considered their demand and price analysis and also their elasticity in price range. We have studied their production and manufacturing processes. We have reviewed their costing methodology giving this vast variety of products and even considered their market structure. How they are working on their marketing strategies to have better customer acquisition and to beat others. The slump on supply-chain problems was blamed on company's rapid growth. This forced Xiaomi to retreat from several overseas markets, including Brazil and Indonesia. There were organizational problems as well, prompting the restructuring of the smartphone hardware, R&D, supply chain, and quality-management teams. But perhaps the biggest source of Xiaomi's troubles was its exclusive reliance on online sales, which left it unable to reach millions of less tech-*

*savvy customers in China's smaller cities and rural areas. In a classic case of "turning a bad thing into a good thing," however, Xiaomi used its near-fatal stumble to fashion a radical new business model. With sales rebounding, and the company expanding globally, it's worth examining the inner workings of that unusual model, and how it helped to power the company's remarkable resurgence.*

*This report will cover the brief introduction on Xiaomi mobile phone industry, followed by factors influencing demand and supply of Xiaomi's phones. Then further analysis on the marketing strategies of Xiaomi mobile phones being currently used. The establishment and implementation of the whole marketing system of Xiaomi mobile phone is expounded in various aspects like advertising strategy, promotion strategy, product strategy, pricing strategy and channel strategy.*

## **Introduction**

This report deals with the microeconomic analysis of Xiaomi, specific to mobile phone business which is the highest source of revenue for Xiaomi. It is the world's 4th largest smartphone manufacturer with its manufacturing units set up in some major markets such as China, India, Singapore, Malaysia and South Africa. It has gained very high popularity in the emerging markets such as India. With India being a highly cost-commodity oriented market, its success story revolves around its product pricing and perfect execution of its highly crucial business decisions.

### **➤ Xiaomi's**

### **Evolution:**

With bigger screen size and better RAM core specifications, Xiaomi launched phones such as Redmi 1s which had great specifications with low prices and higher durability. At the initial stage, these phones were not available easily through online vendors as well, where Xiaomi continued to work on its demand-to-manufacture strategy. Slowly with the technology evolving and specifications like dual core and quad core started taking over, Xiaomi's phone started getting popular. Sensing the demand in the developing markets, Xiaomi also increased its flash sales resulting in a higher sales and popularity in these upcoming markets.

### **➤ Xiaomi's Expansion**

In the first quarter of 2014 Xiaomi had already shipped over 11m smartphones, more than they sold in the entire 2012 and just over half the 2013 sales numbers. Demand



continues to increase due to the high specification hardware of their devices and the price they sell their products at.

Xiaomi has seen similar demand in China, Malaysia, Philippines, Thailand, Indonesia, India and international markets such as Hong Kong, Taiwan and Singapore. This has eventually lead to an official European launch. Xiaomi has also launched electronic gadgets other than phones. Some of the examples of these gadgets are tablets, pen drives, smart watch, smart TV and even Air purifier. Thus, Xiaomi offers a range of different products with changes and updated features.

### **Methodology and Analysis: Result of analysis, interpretation and presentation:**

#### **Microeconomics of the venture:**

Here we are studying factors influencing demand, influencing supply, SWOT Analysis, Competitive price analysis.

##### **➤ Factors influencing Demand:**

- **Quality of the product:** Having a cheap price in the market does not always refer to low quality. Xiaomi's prices are lower than their two big competitors Apple and Samsung. Presenting self as the good quality phone maker with the low prices is the good strategy that drives Xiaomi to the top spot in the smartphone industry. The phones consist of good quality, robust case, high-resolution screen, good battery life and runs on the android OS. Xiaomi smartphone runs on Snapdragon processors, which are considered to be the best smartphone processors.
- **Price:** Xiaomi sells its phones at a price that just covers the cost of the device rather than its cost of production. Xiaomi is focusing more on selling its phones at a low price today but gaining more in the future from selling contents such as applications, services and accessories. Moreover, they mostly sell products online which can reduce the costs of opening stores, hiring staff, and inventory keeping and also may lessen the problems in communication when dealing with distributors and retailers. Cost never compromises the specifications of its smartphones.
- **Promotions:** Xiaomi uses flash sales, a mean of selling their product in limited quantities within a limited period as part of their sales strategies. This enables them to save money from advertisement because it creates the anticipation and urgency in consumers. Only limited quantities are available in the market and they will be sold out quickly which means

many people have to wait for the next slot, this grabs a lot of consumer's attention and makes advertising less important for Xiaomi in promoting the new products.

- **Models:** Xiaomi takes the user's feedback and refines the software to complete those needs regularly. MIUI available in Xiaomi phones is the highly customizable android based OS.

It is the most customizable ROM out there. You have hundreds of themes to change the look of the whole UI. You can move and navigate between apps faster. The default security app

- **Giving full play to the role of SNS:** Before launching a smartphone, Xiaomi developed MiChat, similar to Facebook, and attracted many members (Mi fans). Blogs written by Xiaomi's management team, including Lei Jun, also played a major role in expanding the number of Mi fans. Making full use of SNS created an environment that supported the launch of Xiaomi smartphone. Moreover, even after launching its smartphone, Xiaomi keeps track of users' reviews, communicates with consumers in real-time, and continues improving its product.

➤ **Factors influencing supply:**

Xiaomi has recently tripled its Indian manufacturing base by opening three new factories in the country in partnership with Taiwanese electronics firm Foxconn. The company will also start making circuit boards for its devices in India and is trying to convince more of its component suppliers to set up shop. Government policies have also encouraged local manufacturing in India. It is now closer to the consumer, closer to the market, cheaper than to import from China. Making smartphones in India has also allowed Xiaomi to slash its prices, giving it a huge competitive advantage over importers in a country where demand is exploding but the average annual income is still less than \$2,000.

➤ **SWOT Analysis:**

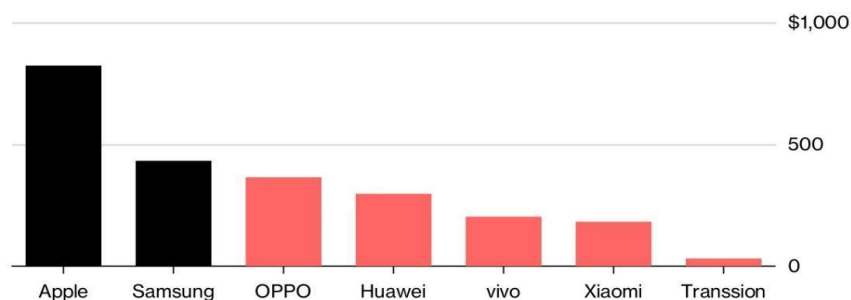
|   |  |
|---|--|
| <b>Strengths</b> <ol style="list-style-type: none"> <li>1. Skilled and experienced workforce</li> <li>2. Competent and experienced</li> <li>3. Business Units Providing Quality</li> <li>4. Strong Management Team</li> <li>5. It generates high profitability and handsome revenue successfully.</li> </ol>  | <b>Weaknesses</b> <ol style="list-style-type: none"> <li>1. Word of Mouth advertisement is not that effective.</li> <li>2. Lack of consistency in bringing more professionals.</li> <li>3. Sloppy after sales support</li> </ol>         |
| <b>Opportunities</b> <ol style="list-style-type: none"> <li>1. Adopting offline sales channel</li> <li>2. Explore new and existing markets with vast product line</li> <li>3. Huge product line creates a great internet ecosystem.</li> <li>4. Can maintain their business with the maintenance of their income level at the constant speed</li> </ol> | <b>Threats</b> <ol style="list-style-type: none"> <li>1. Face strict government regulations.</li> <li>2. Many competitors coming up with affordable products with handsome specs.</li> <li>3. Non availability of spare parts</li> </ol> |

➤ **Price elasticity:**

Xiaomi hasn't been shy about aping Apple in almost everything from the appearance of its phones to the look of its flagship stores. Like Apple, Xiaomi has tried to create its own ecosystem, operating its own app stores and music-streaming apps.

**Competitive Price**

Chinese smartphone makers are selling products at a lower averaged price



2018 Q1  
Source: IDC

**Bloomberg**

(Fig.1)

Xiaomi phones are also a lot cheaper than the big names. Its latest model — the MIX 2S - sells for around \$500, has a dual camera, a ceramic body and what's known as a bezel-less screen.

As we have seen time and again, the demand for the iPhone is inelastic. Not completely but quite inelastic compared to other platforms. The price elasticity of the iPhone demand tends to be more vertical. This means that whenever Apple increases the price, demand is not affected that much. In contrast, the demand for android smartphones is much more elastic, meaning that a small change in price has a huge impact on demand. Price sensitivity goes hand in hand with the budget conscious mindset of the average android user. A user can switch from one android manufacturer to another with ease, taking all the apps and subscriptions along to a familiar system. So for Xiaomi to compete in this market, the product has to be the best among the peers in the similar price range and Xiaomi has done that again and again. The flagship Redmi Note 4/Note 5 phones are the best in terms of their features at the similar price segment. Any other phone brand with same features is at least Rs.3000-5000 costlier and that is the reason they have been able to capture almost 30% of the Indian smartphone market, toppling Samsung from the top position.

Xiaomi also continued to be the number one smartphone vendor in the online smartphone market with 55.6 percent market share for the seventh consecutive quarter. Other than smartphones, the company has forayed into the Smart TV's now. Competitors Samsung and Sony should be concerned as Xiaomi is offering much more in the TV space. It promises the same level of quality in software, hardware, design and picture quality as Sony and Samsung, but at a much lower price. The quality vs affordability dilemma is more blurred than ever before, thanks to Xiaomi's aggressive approach to the market. For a brand that has built its reputation on affordability, it was initially surprising to see Xiaomi bring its flagship TV. Not only did Xiaomi venture into the TV segment but went a step further by pricing its most premium TV at the same price that Sony or Samsung would charge for entry-level options.

- **Xiaomi Manufacturing, production and supply chain strategy:**

With market entry in August 2011, Xiaomi gained rapid market share in China and in the Asia region. It is world's 4th largest smartphone manufacturer with its manufacturing units set up in some major markets such as China, India, Singapore, Malaysia and South Africa.

➤ **The Manufacturing and Supply chain Strategy:**

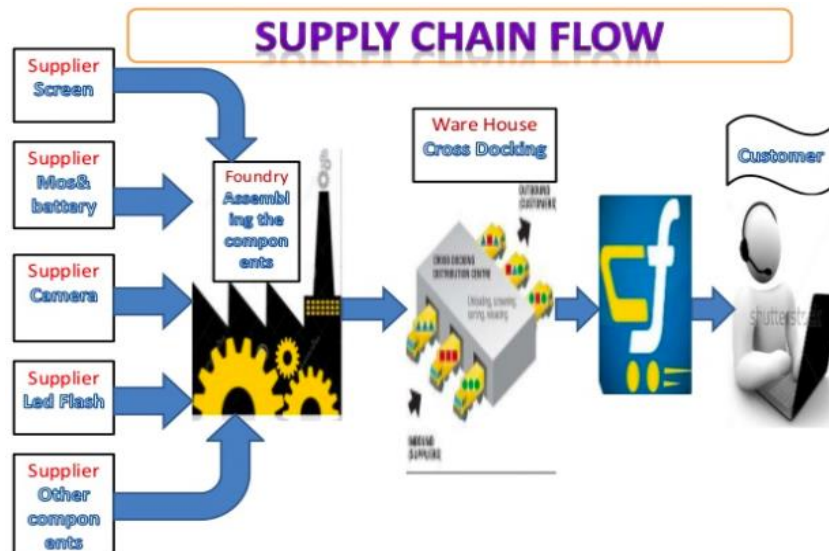
To gain a bigger market size, Xiaomi has restrained itself from producing in bulk. With its very high dependency on online registrations and sales forecasting, Xiaomi manufactures phones on user-requirement basis, which means depending on the demand, the company plans its manufacturing quantity. This strategy has helped Xiaomi gain a considerable market size in the Asian region within a very small time-span.



Demand – Manufacturing information flow of Xiaomi (Fig.2)

Since it follows a model of distributed manufacturing, the information flow is as shown in the above flowchart. Once a user registers on the e-commerce website for a phone delivery, the information is received and stored. Based on the user registrations and interests, demand is forecasted considering various data points and scenarios. Once the demand is fixed, Xiaomi then initiates its manufacturing process through various vendors and its self-maintained manufacturing units. Once the product is assembled through the combined process, it is then shifted to the warehouse, further to the distributor and finally reaches to the customer. This ensures an efficient process for Xiaomi avoiding bulk production.

Xiaomi has successfully avoided the Bullwhip effect by its strategy for production and supply chain. They have decreased the demand-supply variance which has indeed resulted in efficient and lean manufacturing. Distributed Supply chain from Vendors and cross-docking in the assembly process:



(Fig. 3)

A distributed vendor approach has helped Xiaomi in reducing its production cost. The flow chart above shows how different parts which are required for production are collected from different vendors and then assembled further in the assembly unit. Also in the warehousing, using the cross docking strategy, Xiaomi has also been able to maintain its product quality and timely delivery.

➤ **Economics of scale and costing:**

Many companies ignore the economics of scale and costing. But Xiaomi on the other hand has successfully implemented their strategy of scale and costing. The company has set-up quick and large sized production units across the most promising and emerging mobile markets. They have set up a perfect combination of demand and costing. With its manufacturing process costing lower than the other smartphone manufacturers and increasing the supplier base, they have significantly lowered the production prices. Apart from the unique manufacturing strategy, Xiaomi also has a lower number of employees as compared to other smartphone manufacturers. With some tactical inclusions such as cross docking and outsourcing, Xiaomi has maintained a lower head-count ensuring a higher efficiency and lower expenses on the human resources.

➤ **Substitutes and Complements:**

Since Xiaomi is majorly operating in the mid-range market of smartphones, it does face stiff competition from a wide range of substitutes that are available. These include the likes of

Samsung, Oppo, Vivo, Huawei and others. As visible from the chart below, Xiaomi gathered lead in the first quarter of 2018 and is all set to topple Samsung from 1st position in Year 2018.

The price elasticity of phones in this segment is very elastic as even a small change in price sometimes combined with bank offers when buying from online sites can push the scales in a particular company's favour. Xiaomi practically invented the concept of flash sales in India when its flagship phone Redmi Note 3/4 was launched. The flash sales were very popular and the phones went out of stock within minutes of launching.

| India Smartphone Shipments Market Share (%) | 2017Q2 | 2017Q3 | 2017Q4 | 2018Q1 | 2018Q2 |
|---|--------|--------|--------|--------|--------|
| Samsung                                     | 23%    | 23%    | 23%    | 26%    | 28%    |
| Xiaomi                                      | 16%    | 22%    | 25%    | 31%    | 28%    |
| vivo  | 13%    | 9%     | 6%     | 6%     | 12%    |
| Oppo  | 10%    | 8%     | 6%     | 6%     | 9%     |
| Huawei                                      | 1%     | 1%     | 1%     | 3%     | 3%     |
| Others                                      | 37%    | 37%    | 40%    | 28%    | 20%    |

The thing that might be hurting Xiaomi currently is the after sales service. Even the authorized centers unable to fix the issues relating to OS, internal circuits are something that might keep the average customer from buying their devices. But the aggressive pricing does help Xiaomi in making big sales even in tough markets like India.

#### ➤ **Complements:**

Complements for the Xiaomi phones can be electric chargers, headsets, power banks, selfie sticks, mobile phone covers. Any rise and fall in the demand of phones will have a direct impact on the demand for these products too.

#### **Market structure:**

Xiaomi has pulled ahead of Samsung for the number 1 position in India over the past few quarters and has now closed the gap with Samsung as it ramped up its local production to address the increased demand, while also expanding its online channel presence and opening up more Mi home stores in the country. The rate at which Xiaomi is growing is alarming to Samsung and Apple as the company has almost managed to position itself as the top Smartphone spot in China.

In India, due to the components of market, smartphone market falls under the oligopoly competitive market. An oligopoly is a market structure in which a small number of interdependent firms compete (Hubbard and O'Brien, 2015) and cannot act independently of each other. This market structure has only few firms and lies between competitive industries. In this oligopoly competitive market, there are a few of large firms in India, such as Xiaomi, Lenovo and Huawei. There are three competitive forces were developed by Michael Porter of the Harvard Business School which are competition from existing firms, the threat from potential entrants and competition from substitute goods or services

➤ **Competitors:**

1. Samsung
2. Apple
3. Huawei
4. Oppo
5. Vivo

➤ **Products in the marketing Mix of Xiaomi:**

1. Smart home devices
2. Smartphone & mobile phones
3. Laptops
4. Tablet computers

➤ **Places in the marketing Mix of Xiaomi:**

Xiaomi has strong base within its Homeland-China. As at now, the company is also emerging in 11 other countries. These include Turkey, Malaysia, Mexico, Thailand, Philippines, Russia, Singapore, Indonesia, Brazil, India, and Vietnam, with most of the countries being found in the BRIC and South East Asia regions. In spite of it trying to go international, Xiaomi's main focus is still in China as this is where it already has a formidable consumer base.

Most of Xiaomi's sales are done online rather than on the physical stores. As a result, a win-win situation is realized by both the manufacturer and the consumer. The company saves lots of money from building and managing stores as customers easily access products without having to pay the distributor, wholesaler, and retailer.



➤ **Price in the Marketing Mix of Xiaomi :**

Most of the money spent on Xiaomi products are strictly spent on design and production. The company tries to save as much as it can, thus offering products to the market at an affordable rate. In other words, on average, Xiaomi products are lowly priced. The company mainly employs marketing strategies that don't cost a lot. In addition, most of the products are sold online thus reducing the cost that would have been spent to set up offline stores.

The company employs a pricing strategy that will help them get profits in the future. It is a sell-low-today but gains later strategy. They, therefore, sell their devices at the exact cost that only covers production costs. Their profit generation focus is on the accessories, apps, and services that are to be used with their phones and computers etc. Xiaomi has proven that cheap pricing doesn't always mean cheap products. So you can in a sense say that they are going for economies of scope rather than scale.

➤ **Promotions in the Marketing Mix of Xiaomi :**

Xiaomi is an active use of the social media among other marketing channels to not only broadcast their messages and agenda but also to actively get and remain in touch with their customers as well as their potential customers. The company's engineers also make good use of the social media especially Facebook, to routinely communicate to users for feedback. Such feedbacks are used in the development of new products.

The use of flash sales helps the company to sell to sell their smartphones and other products in limited numbers and within very limited time periods. This is an important sales strategy that enables the company to save money that would have been used in advertisements as the strategy does create urgency and anticipation on consumers. Just a limited number of products are produced and sold quite fast thus making others to wait for the next batch. The wait is always with a lot of anticipation and urgency. Many people end up talking especially on social media thus unknowingly promoting Xiaomi products

Xiaomi has a very big and formidable fan base that has successfully been able to show their support for the Xiaomi products. These are fans that are always present whenever a new product is being launched. The presence of such a fan base alone is enough applause and noise to attract the attention of potential customers.

➤ **Customer retention, experience and sentimental analysis:**

The use of Facebook by Xiaomi to communicate to users on a regular basis, with the aim of getting feedbacks, has played an important role in the development of new products that would meet the consumer needs. Such use of social media positions Xiaomi as a unique company as very few other companies in the world do such a thing. In other words, the company is more consumers oriented.

**Recommendation:**

Xiaomi as a company believes that technology should be priced such that it is affordable to all. That only a few rich people shouldn't have access to latest technology. The company is well on its way in realizing the same with the aggressive pricing they have on their phones. They need to focus more on opening up more service centers and making sure those employees are well trained to fix majority of the issues arising from their phones.

Currently Xiaomi are getting saturated in Chinese and South Asian markets. For having better stability, they should focus on expansion to western countries and try to build their manufacturing units there too. If they are able to replicate the same pricing in those markets, the Europe & North American region can be a big market for them. They can use the retail channel in addition to the online one to boost sales. It will add more consistency to Xiaomi's presence in the markets. Currently they are facing issues with supply constraints and gray shipments of their popular models, both of which negatively impact their local pricing strategies and market demand. Product serial numbers, warranty cards, and factory rebate programs can help track the product's movement to unsanctioned resellers and generate information valuable in gauging the magnitude of these sales and fix this issues which are deeply concerning as an organization.

A majority of Xiaomi phones are not that highly rated when it comes to build quality. While it might seem a tradeoff that the average customer is willing to do in the short run in return for low pricing, but in the long run the other companies will catch up and if they provide better quality phones then it could lead to big problems.

For better customer acquisition, Xiaomi can increase the frequencies of flash sales labeled as 'Smartest phone at low price'. Also they should start loyalty programs for MIUI cloud users. Also they can start promoting more complement product with the same brand to acquire customer attentions. It will help Xiaomi to retain their customers.

## Group 24: Microeconomic Analysis of Tata Steel Industry

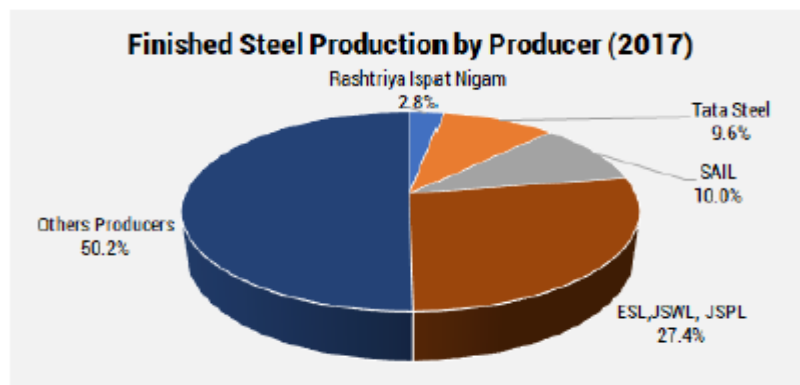
### *Executive Summary*

*During 2017, global steel consumption registered a growth of 2.8%, driven by strong demand from China. Most of the large steel consuming nations registered an acceleration in demand on account of rapid urban population growth, substantial government investment in infrastructure, housing and urban development and the expansion of the manufacturing sector.*

*During 2017, crude steel production reached 1,691mt, up 5.3% y-o-y. Production increased in all the major regions with China producing 832mt of steel, up 5.6% y-o-y. India remains one of the fastest growing markets with production rising 6.2% to 101mt. But going forward, China's steel production is projected to gradually decline due to slowdown in construction activities, stricter environmental policies and supply side reforms. India and other large emerging economies are expected to increasingly drive production growth in world steel.*

*The STEEL industry in India is classified on the nature of the manufacturing companies into Integrated Steel producers (ISP) and Secondary producers. Integrated steel producers are companies that are present throughout the steel value chain – starting from steel extraction of Iron Ore to manufacturing and marketing of finished steel. Secondary producers are generally smaller manufacturers who manufacture steel from sponge iron and scrap. In the aftermath of the Coal Scam in 2012-13, the ISP's could better cope with the economic uncertainty and saw a growth of 41% in production as against Secondary producers who saw production decline by 11.4% in the corresponding period.*

*The largest steel integrated steel producers in India include Steel Authority of India, Rashtriya Ispat Nigam (Vizag Steel), Tata Steel, JSW Steel & Power, Electrosteel & Essar Steel.*



*In this document we review the microeconomic factors that Tata Steel has tackled to grow at CAGR of 8%.*

## **Introduction**

Iron and steel sector is the backbone of an economy. According to Pandit Jawaharlal Nehru, "Steel is a symbol of strength of the economy and a portent of the glory of India of the future". India has always been seen as a potential for significant steel market expansion. In the recently adopted steel policy of the government of India, it has stated that India's crude steel production capacity will have to reach 300 Mt by the year 2030-31, from the current level of about 125 Mt. Steel production in India began with the setting up of Tata Iron & Steel Company (TISCO - now Tata Steel) in 1907. In 1947, India had a fledgling private steel industry with only 3 significant steel companies with a total capacity of 1.0 MT. Tata Steel Limited manufactures and sells steel products in India and internationally. The group has manufacturing operations in 26 countries, including Australia, China, India, the Netherlands, Singapore, Thailand and the United Kingdom. It is one of the top steel producing companies globally with annual crude steel production of 24.5 MT (in FY17), and the second largest steel company in India (measured by domestic production) with an annual capacity of 12.5 MT. Tata Steel primarily serves customers in the automotive, construction, consumer goods, engineering, packaging, lifting and excavating, energy and power, aerospace, shipbuilding, rail and defense and security sectors.

| TATA STEEL LIMITED      |             |
|-------------------------|-------------|
| Headquarters            | Mumbai      |
| Employees               | >50,000     |
| Incorporated            | 1907        |
| Market Cap (8/Nov/2018) | 70079.78 Cr |

| KEY MANAGEMENT |                  |
|----------------|------------------|
| Chairman       | N Chandrasekaran |
| CEO            | T V Narendran    |

## FINANCIAL INFORMATION (FY2017)

Revenue

EBITDA 9,354.50

PAT (4,240.80)

Debt 83,014.50

Shareholder Equity 35,544.30

**Methodology & Analysis**

In this study, we review the data from the government and reputed news/media agencies to understand the market dynamics in a quantitative manner. We also look at the inputs from industry experts and study the growth priorities of the GOI to provide the microeconomic outlook and forward recommendation for the STEEL industry.

**Scope & Data Inputs**

The data sets considered for this study are Secondary data sets which have been taken from the following sources.

- [www.steel.gov.in](http://www.steel.gov.in)
- [www.cci.gov.in](http://www.cci.gov.in)
- [www.ibef.org](http://www.ibef.org)
- [www.tatasteel.com](http://www.tatasteel.com)
- [www.indiastat.com](http://www.indiastat.com)
- [www.financialexpress.com](http://www.financialexpress.com)

## **Microeconomics Of Venture**

### **Demand Study**

#### **Iron & Steel Industry in India**

- Infrastructure, oil and gas and automotive would drive the growth of the industry
- As of 2017, India is the world's 3rd largest producer of crude steel. India's steel production in 2017 stood at 101.4 MT.
- Steel production in India is forecast to double by 2031, with growth rate expected to go above 10 per cent in FY18
- India's finished steel consumption grew at a CAGR of 5.69 per cent during FY08-FY18 to reach 90.68 MT.

### **Factors influencing demand of Steel**

#### **Capital goods, Consumer durables & automobile sector**

- Over 2017-22F, the appliances and consumer electronics (ACE) sector will expand at a CAGR of 9 per cent as growth in disposable income is expected to result in increase in demand for such products.
- The appliances and consumer electronics market is estimated at US\$ 31.49 billion in 2017 and is forecasted to reach US\$ 48.37 billion by 2022.
- Automobile production in India expanded at a CAGR of 7.08 per cent during FY13-FY18.

#### **Policy support**

- 100 per cent FDI through the automatic route is allowed in the Indian steel sector
- 20 per cent safeguard duty on steel imports
- Indian Government imposed Anti-Dumping Duty on 47 steel products for five years beginning from August 2016.
- An export duty of 30 per cent has been levied on iron ore (lumps and fines) to ensure supply to domestic steel industry

## Substitutes for Steel

📊 Aluminum, Plastic, wood & bamboo etc.

Material substitution has been one of the toughest challenges facing the steel industry. Plastic, aluminum, wood and bamboo have been replacing steel in various application areas.

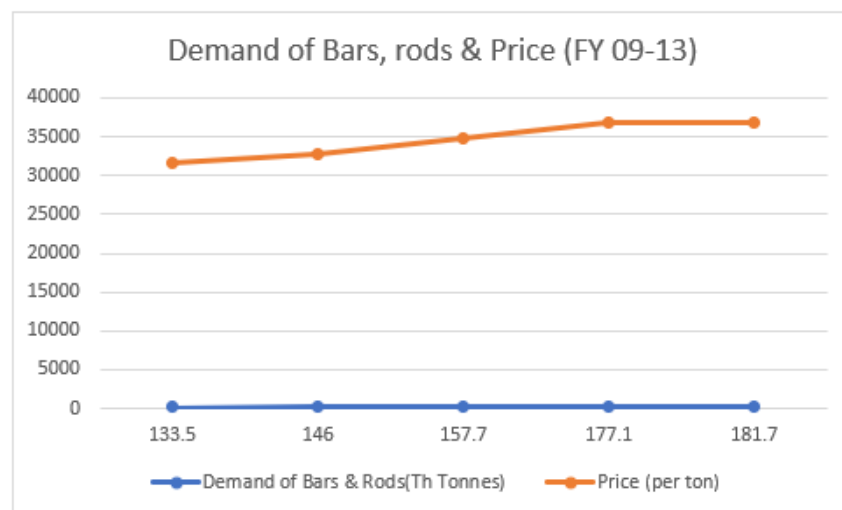
## Complements for Steel

📊 Steel and coal are complementary goods

📊 All steel products like steel, shower jet, spray balls, rotary jet, screws, shafts etc. are also complementary goods

## Price elasticity of Demand

The data were extracted from indiastat.com. The below chart is description for only steel bars & rods. We consider only data from FY 09 to FY 2013 (composite data were not available for year 2013 onwards).



Depending upon the variant of steel product, price elasticity of demand is both elastic & inelastic in nature. In the international market steel of the price changes day to day and accordingly the demand also shows the changes with the supply and price with other market factors.

## **Production Study**

### **Production process- Steel**

Methods for manufacturing steel have evolved significantly since industrial production began in the late 19th century. Modern methods, however, are still based on the same premise as the original Bessemer process, which uses oxygen to lower the carbon content in iron. Today, steel production makes use of recycled materials as well as traditional raw materials, such as iron ore, coal, and limestone. Two processes- Basic oxygen steel making (BOS) and electric arc furnaces (EAF), account for virtually all steel production.

Modern steelmaking can be broken down into six steps. Ironmaking, which is the first step, involves the raw inputs of iron ore, coke and lime being melted in a blast furnace. The resulting molten iron, also referred to as hot metal, still contains 4 to 4.5 percent carbon and other impurities that make it brittle. Primary steelmaking has two primary methods: BOS (Basic Oxygen Furnace)

and the more modern EAF (Electric Arc Furnace) methods. BOS methods add recycled scrap steel to the molten iron in a converter. At high temperatures, oxygen is blown through the metal, which reduces the carbon content to between 0 and 1.5 percent. EAF methods, however, feed recycled steel scrap through use high-power electric arcs (temperatures up to 1650 C) to melt the metal and convert it to high-quality steel.

Secondary steelmaking involves treating the molten steel produced from both BOS and EAF routes to adjust the steel composition. This is done by adding or removing certain elements and/or manipulating the temperature and production environment. Depending on the types of steel required, the following secondary steelmaking processes can be used:

- Stirring
- Ladle furnace
- Ladle injection
- Degassing
- CAS-OB (composition adjustment by sealed argon bubbling with oxygen blowing)

In primary forming, the steel that is cast is then formed into various shapes, often by hot rolling, a process that eliminates cast defects and achieves the required shape and surface quality. Hot



rolled products are divided into flat products, long products, seamless tubes, and specialty products. Finally, it's time for manufacturing, fabrication, and finishing. Secondary forming techniques give the steel its final shape and properties. These techniques include:

- Shaping (cold rolling)
- Machining (drilling)
- Joining (welding)
- Coating (galvanizing)
- Heat treatment (tempering)
- Surface treatment (carburizing)

### **Costs & Economies of Scale**

A thumb rule for investment requirement for a mini-steel plant is \$250 to \$300 per ton of steel. In India the cost is on the higher side. So if you are going for a 1 million ton steel plant, the investment requirements would be in range of 300 million dollars. Typically you would need an area of around 15,000 m<sup>2</sup> to 25,000 m<sup>2</sup>. Arc furnaces in mini-steel plants consume huge quantities of electrical energy and introduce a lot of harmonics.

The rule of thumb is that the capital cost of a mini-steel plant is in the range of \$250 - \$300 per annual ton of capacity. So, a plant with an annual capacity of 500,000 tons (a small plant) would cost \$125 million to \$150 million. For behemoths like Tata Steel, the establishment costs and economies would be an exponential number of the figures mentioned above.

### **Market Structure**

#### **Competition**

The first large scale production of steel in India was made in 1829 by Josiah Heath, but due to the capital crunch it couldn't progress and the credit of initiating the Iron and Steel industry in a full-fledged manner goes to late Jamshedji Tata, who in 1907 had set up TISCO which is now Tata Ltd. Post-Independence Iron & Steel production increased quite rapidly.

By 1991-92 the control regime of the Iron & Steel industry got replaced by liberalisation and new economic policies, and the industry started maturing and shown rapid growth.

Performance of this industry is being increased and is measured by various factors such as

- Favourable Government Policies
- Desirable external environment
- Increased Competition

This leads us to analyse the Competition of firms in Iron & Steel industry. The competitiveness of the firms can be achieved by using models and indices. The approach using “Models” is a tough way and the ideal way is to use “Indices” which is nothing other than construction of a composite competitive index. These are all theoretical aspects and let’s move on to the application side of the concept we just mentioned.

The competitiveness of a firm can only be measured within various types of market territories at the sub-national, national and supra-national levels. And we identify the competitiveness in various contexts such as

- Economy Competitiveness
- International Competitiveness of the firms
- Domestic Competitiveness of the firm

The below mentioned 8 firms are the Competitors of Tata Steel

| # | Company                  | Leader          | CEOScore (100) | Employees | Funding | Revenue |
|---|--------------------------|-----------------|----------------|-----------|---------|---------|
| 1 | Tata Steel               | TV Narendran    | 79             | 65000     | \$0     | \$20.4B |
| 2 | Thyssen Krupp            | Guido Kerkhoff  | 81             | 158739    |         | \$51.8B |
| 3 | Essar                    | Prashant Ruia   | 50             | 50000     | \$330M  | \$22B   |
| 4 | Posco                    | Ohjoon Kwon     | 77             | 32287     |         | \$56.4B |
| 5 | Essar Steel              | MadhuVuppuluri  | 63             | 316       |         | \$71.5M |
| 6 | RashtriyaIshpatNagam Ltd | P.Madhusudhanan | 75             | 187       |         | \$32.8M |
| 7 | United Steel Corporation | David B Burritt | 61             | 17200     |         | \$12.9B |
| 8 | Hyundai Steel            | Yu Cheol Woo    |                |           |         | \$16.4B |
| 9 | Jindal Steel and Power   | Naveen Jindal   | 90             | 6071      |         | \$2.7B  |

ThyssenKrupp is one of Tata Steel's top rivals. ThyssenKrupp was founded in Essen, North Rhine-Westphalia in 1860. Like Tata Steel, ThyssenKrupp also competes in the Steel space. Compared to Tata Steel, ThyssenKrupp generates \$31.3B more revenue.

Essar is Tata Steel's no 2 competitor. Essar was founded in 1969, and is headquartered in Mumbai, Maharashtra. Like Tata Steel, Essar also operates in the Diversified Metals & Mining space. Essar generates \$1.6B more revenue vs. Tata Steel

POSCO is a top competitor of Tata Steel. POSCO's headquarters is in Pohang-si, Gyeongsangbuk-do, and was founded in 1968. Like Tata Steel, POSCO also works within the Diversified Metals & Mining sector. POSCO generates 275% of Tata Steel's revenue.

### **Strategy**

Tata Steel is among the world's top steel makers today, but 20 years ago Tata Steel went through a dark period. Steel was considered to be a sunset industry and the Tata group actually contemplated selling it off. Fortunately, that did not happen and instead, the company invested in a quality and business excellence movement that has successfully transformed the Indian steel major into a world-class company.

Today Tata Steel is bigger, better and leaner: its global workforce of 70,000 now produces 30 million tonnes of steel annually in plants across the world. It is one of the lowest cost producers of steel in the world, one of the biggest adopters of IT in the steel industry and among the top 10 steel makers in the world.

Diversity in buyers industry – Tata Steel's caters to industries like Infrastructures, Automobiles, Aviation, Energy etc.

Costing – Tata Steel is said to be the lowest cost steel maker in the world as it follows lean management

Very Low threat of new entrants as the investment is very high

Total Quality Management - The company adopted Total Quality Management (TQM) in 1990 and, the first TBEM assessment was an eye opener — the flagship of the Tata group achieved a miserable 201 points on a scale of 1,000. This was just the shock that was needed to propel a companywide makeover. Results started to show soon and the company's productivity improved as much as 15 times. In 2000, Tata Steel became the first Tata company to win the JRD QV award. Then, after working its way up to the 700 mark.

**Bargaining Power of Suppliers** – Tata Steel enjoys greater autonomy in raw materials supply as they own mines for raw material supply. However, other steel producers, who don't have their own mines, have to rely on raw material suppliers. They must buy raw material at market prevailing price and pass that hike to consumers which makes them less competitive.

## **Pricing**

A pricing strategy must be conceived in relation to overall business objectives and marketing strategy. The success of any business depends upon a blend of long run profit, growth and survival objectives. Price, because of its influence on unit sales volume and profit margins, affects long run profit objectives. And maintaining profitability through sound pricing practices is necessary to ensure the firm's survival over time.

Tata Steel is a leading steel manufacturer not only in India, but in the world. In steel industries there are various factors that affect the pricing of the products. Like other companies, the pricing strategy of Tata Steel is also dependent on various factors. Some of the major factors are as follows:

1. Cost of production
2. Competitions
3. Government regulations
4. Demand in the market

Tata steel is well known for keeping its production cost very low. This gives Tata Steel a competitive advantage over others. There are various reasons as to why the company's production is so low compared to other competitors. Few of them are:

- Tata Steel acquires its raw materials and other products required both from the domestic market as well as globally. The company has coal mines in Jharia and Bokaro. The mines in Bokaro has reserves of around 196 million tonnes. It also owns iron ores and chromite's mines in other parts of the country.
- Tata steel has used technologies which help them keep the production cost low thus helping it maintain the good quality as well as keep the price low.

Tata Steel has adapted Market Penetration as their pricing strategy. They assume that the demand of the product is highly elastic. So, capability of Tata Steel to maintain low price helps

them maintain a huge customer base. It has kept prices lower than its competitors and discouraged competition from rival companies.

### **Other Strategies**

The profitability of the steel industry in India is generally linked to business cycles, reaping profits when economy is going well and eroding them when it is in depression. In the late 1990s, the Indian steel industry was experiencing a glut in the market which strongly affected the profit margin of all related companies. To reduce its dependence on the external environment and business cycles, Tata Steel adopted a strategy which stressed the following two points:

1. Branding its products
2. Moving to high value-added products.

### **Recommendations**

India is expected to experience sustained growth in short to medium term driven by growth in steel consuming sectors, revival of rural demand, increased spending on infrastructure amongst others. Further, the conducive government stance towards the steel industry through policies focusing on 'Make in India' and Smart City Mission reinforces India's stance as an attractive place for the steel industry. India continues to be an attractive region for steel given its low per capita consumption of approximately 65 kg (world average of 208 kg, China 493 kg). This shows that there is significant headroom for consumption growth. The Tata Steel should take advantage of the growth opportunity provided by the Indian economy.

Tata Steel has to seize the opportunity to acquire distressed assets in the steel industry under the Insolvency and Bankruptcy Code, 2016 and leverage these acquisition opportunities on possibilities for synergies, broadening customer base, access to raw materials, manufacturing facilities, infrastructure, new geographic locations, advanced technology and growth.

India's iron ore reserves and competitive labor costs give steel manufacturers based in the country a distinctive cost advantage. Tata Steel should leverage this advantageous position and strengthen its status as a low-cost and high-quality producer of steel.

The competitive business environment makes innovation imperative for success of the business. Recognizing the need to improve, expand and innovate, the Tata steel should concentrate efforts on research and development of alternate materials and new products.

Steel is a completely recyclable material making it ideal for achieving a circular economy in India which need to be organized where Tata steel should take the lead. Also, The Company expects the demand for steel products to be strong in the developing economies and the Company should utilize the Tata Group's existing network to meet this increased demand.

## Group 25: Microeconomic Analysis Of Stable Bleaching Powder Industry: Aditya Birla Chemicals / Grasim Industries Ltd.

### Executive Summary

#### The big goal

*To be a leading customer-focused global chemicals business that delivers best-in-class products and specialty solutions using safe, sustainable and innovative processes.*

#### Background

- Stable Bleaching Powder (SBP) is widely used in Disinfections, Sanitation, Bleaching Oxidation, etc. It is manufactured by Chlorination of high-grade Hydrated Lime (Slaked Lime) using liquid chlorine. Handling and storage of the product become a Herculean task due to two imperative factors; i.e. to ensure effective stability and preventing fire and explosion hazards. The article highlights factors affecting the stability of the product and explains an effective way to store SPB in go downs.
- The chlorination reaction is carried out in a jacketed cylindrical drum mounted horizontally and fitted with moving scrapers. The drum can be cooled (by circulating cooling water) or heated (by steam) as per process requirement. It is operated under vacuum. Chlorination of hydrated lime is a batch process.
- A good quality bleaching powder should show good stability; i.e. low loss of available chlorine during storage over long duration in properly packed conditions and under changing climatic conditions.

#### Factors affecting

- High moisture content in the product.
- Presence of heavy metals in hydrated lime.
- Exposure to air.
- Storage temperature

#### Key learnings

- In FY16-17 and FY 17-18 then we found that in FY 16-17 production was 36935 MT and Cost of production was Rs. 6812 per MT while in FY 17-18 this was Rs. 7365 per MT. This shows that when production has decreased by 21% then cost of production increased by 8%.
- The principal consumers of bleaching powder are paper industries, textile industries, oil installation, fertilizer units, tea gardens, PHE, railway, hospitals and municipal corporations. The global calcium hypochlorite market was valued at around US\$ 5 Bn in 2016 and is anticipated to expand at a CAGR of more than 3% from 2018 to 2026.
- Calcium Hypo Chlorite and Sodium Hypo Chlorite are the by-product of Stable Bleaching Powder. Calcium hypo Chlorite is used as a disinfectant (Recently 2 years back when Mahakumbh organized in Ujjain then it was used in Shipra river for purification (50 MT per day), apart from it is supplied for treatment of sewage water and local drainage). Sodium hypo is also saleable in the market. It is used in textile or rayon industry for bleaching purpose.

## Introduction

The report contains microeconomic analysis of Stable Bleaching Powder (SBP), a major product of Aditya Birla Chemicals Pvt. Ltd. Aditya Birla Chemicals is a leading manufacturer of bulk and specialty chemicals and viscose filament yarn. The business is spread across multiple manufacturing locations in four countries – India, Thailand, Germany and China. The business is creating a strong footprint in the chemicals industry – it is a market leader in the chlor-alkali segment in India; at number two position in viscose filament yarn and is the third largest manufacturer in the world in sulphites. The Chemicals business has 16 manufacturing sites – nine in India, five in Thailand, one in Germany and one in China. These operations are handled through three companies in India – Aditya Birla Nuvo, Grasim Industries and Tanfac; two companies in Thailand – Aditya Birla Chemicals (Thailand) and Thai Peroxide Company and one company in Germany – Aditya Birla Chemicals (Europe) GmbH. In China, the business operates through Aditya Birla Grasun Chemicals (Fangchenggang). Aditya Birla Chemicals (India) Limited ("ABCIL") was merged with Grasim with effect from 01st April 2015. This merger consolidated Grasim's leadership position in the domestic chlor-alkali industry with its capacity increasing from 452,500 tpa to 884,200 tpa. The Chemicals business manufactures a wide range of products using advanced technology and ensuring stringent quality control. The product portfolio includes:

- |                                  |                         |
|----------------------------------|-------------------------|
| • Chlor – Alkali                 | • Sulphites             |
| • Chlorine derivatives           | • Peroxides             |
| • Epoxy resins                   | • Fluorine Chemicals    |
| • Phosphates and Phosphoric Acid | • Viscose Filament Yarn |

These products are used in a wide range of industries that include metal treatment, textiles, water treatment, pulp and paper, paint and coatings, civil engineering, food and food processing, personal care products, wind energy, composites, electrical industry and detergents. The products are sold in 63 countries across the globe.

Stable Bleaching Powder (SBP) is widely used in disinfections, sanitation, bleaching oxidation, etc. It is manufactured by chlorination of high-grade hydrated lime (slaked lime) using liquid chlorine. Handling and storage of the product become a Herculean task due to two imperative factors; i.e. to ensure effective stability and preventing fire and explosion



hazards. The article highlights factors affecting the stability of the product and explains an effective way to store SPB in godowns. Among the various uses of chlorine, an important one is for the purpose of sanitation. The quantity of chlorine required for sanitation is small and the place of application keeps on changing. The persons employed for this purpose are mostly unskilled. Therefore, we need a chemical which can be handled in small quantity, should be safe for persons who are handling it and can be taken easily at places to be sanitised. Stable Bleaching Powder meets all these requirements as discussed above and has been found to be the best option. In addition to small sanitation jobs in the municipalities, it plays a very major role in the control of epidemics when there are natural calamities i.e. earthquake and floods etc. A good quality bleaching powder should show good stability; i.e. low loss of available chlorine during storage over long duration in properly packed conditions and under changing climatic conditions.

## Methodology and Analysis

- **Microeconomics of Aditya Birla Chemical's Stable Bleaching Powder**

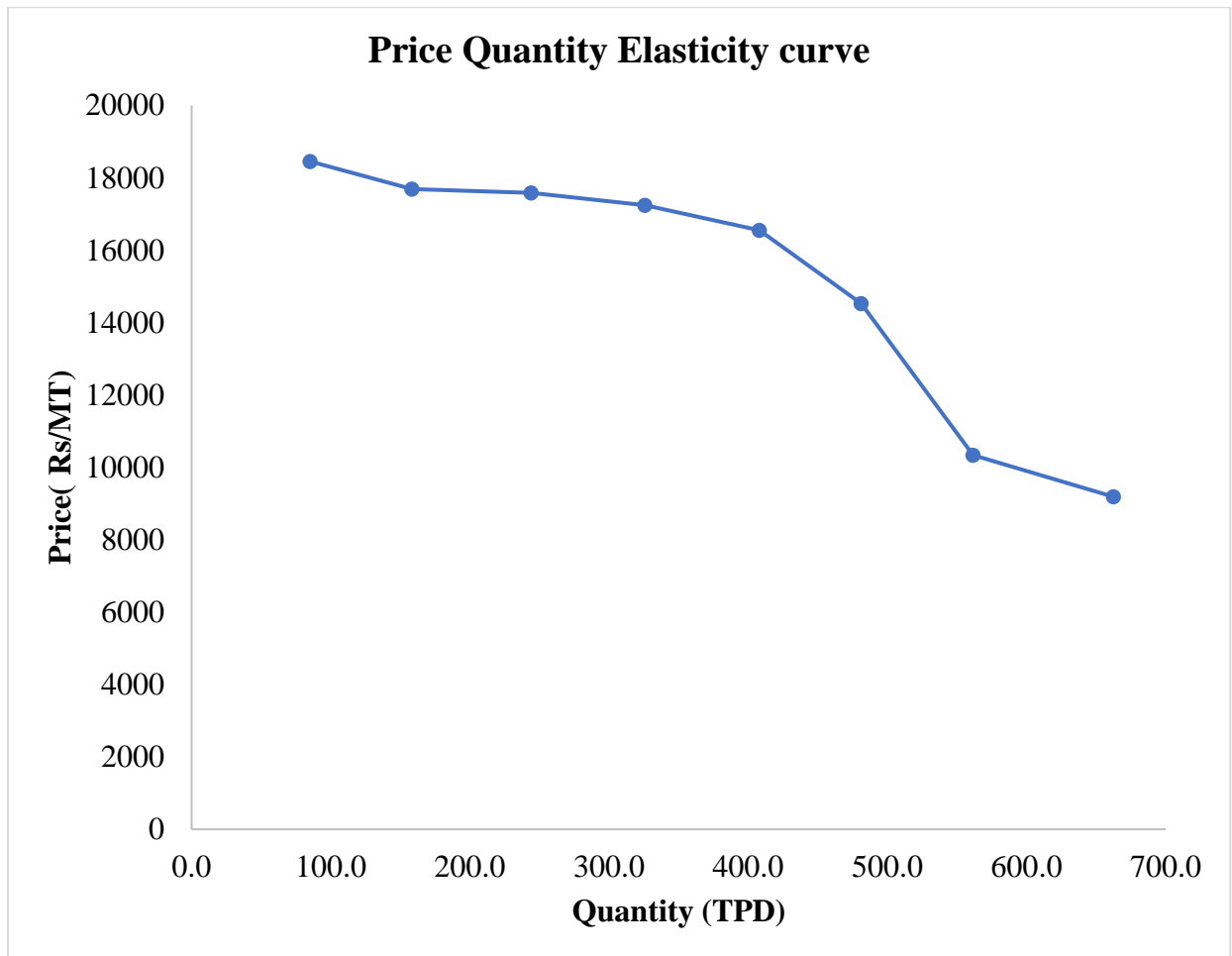
- **Demand for The Product:**

The demand for SBP (Stable Bleaching Powder) is stable. As per the environment norms, the market players are limited to produce a fixed quantity so that the price gets increased. The following table represents the sales and quantity of SBL:

| <b>Particulars</b> | <b>Sales</b> | <b>Sales</b> | <b>Cumulative Qty</b> | <b>Realization</b> |
|--------------------|--------------|--------------|-----------------------|--------------------|
| <b>UOM</b>         | <b>MT</b>    | <b>TPD</b>   | <b>TPD</b>            | <b>Rs/MT</b>       |
| <b>FY 16-17</b>    | 36843        | 100.9        | 662.5                 | 9187               |
| <b>FY 17-18</b>    | 29300        | 80.3         | 561.6                 | 10335              |
| <b>Apr'18</b>      | 2198         | 73.3         | 481.3                 | 14524              |
| <b>May'18</b>      | 2550         | 82.3         | 408.1                 | 16548              |
| <b>Jun'18</b>      | 2455         | 81.8         | 325.8                 | 17245              |
| <b>Aug'18</b>      | 2655         | 85.6         | 244.0                 | 17584              |
| <b>Jul'18</b>      | 2268         | 73.2         | 158.3                 | 17687              |
| <b>Sept'18</b>     | 2555         | 85.2         | 85.2                  | 18452              |

- **Price Quantity Elasticity Curve:**

Price quantity elasticity curve depicts the quantity demanded as follows:



- Factors influencing demand for the product:**

| Sl. No | Factors Affecting Demand  | Relevant or Not Relevant | Why it is Relevant or Not Relevant   |
|--------|---------------------------|--------------------------|--|
| 1      | Income                    | No                       | It's a cheaper product so which is used in cleaning of water and as a disinfectant. Poly Aluminium Chloride is substitute of SBP which is costlier. So very less effect can be seen in case of increasing or decreasing income of consumers. |
| 2      | Price of Other Goods      | Yes                      | If Alum or Poly Aluminium Chloride (PAC) price will reduce then it will affect the consumption of SBP. Because people will go for PAC rather than SBP.   |
| 3      | Taste                     | Yes                      | Main content is SBP is Chlorine %. Different customer wants different proportion of Chlorine (30-52%). And price will also vary as Cl <sub>2</sub> % varies. Higher Cl <sub>2</sub> %-higher price of SBP.                                   |
| 4      | Population                | Yes                      | This is used majorly in coastal area where water treatment is needed regularly. Recently during Kerala Flood, Government used SBP as a disinfectant.   |
| 5      | Composition of Population | No                       | Its use is specific and in limited application. So, composition of people will affect lesser.  |
| 6      | Seasonal Effect           | Yes                      | During the rains, demand get increasing because of cleaning of cities, pond, drainage etc.   |
| 7      | Expectation               | No                       | SBP price follow a similar price trend. It is not a very essential good  |
| 8      | Availability of Credit    | Yes                      | This is used in bulk in coastal area. So, if we increase credit period then sale will also increase.   |

|    |                |                    |   |
|----|----------------|--------------------|---|
| 9  | Derived Demand | Yes                | In some case like Sea food (Prawns, crab etc.) farming. When demand for sea food will increase then demand of SBP will also increasing. |
| 10 | Others         | Natural calamities | During Flood, the demand of SBP get increased.  |

- **Substitutes and Compliments:** The major substitutes and compliments for SBP are Poly Aluminium Chloride and Alum; the demand of both has been stable during the past five years.
- **Point Elasticity of Demand:**

| Particulars     | Sales | Sales | Cumulative Qty | Realization | Point Elasticity of Demand |
|-----------------|-------|-------|----------------|-------------|----------------------------|
| UOM             | MT    | TPD   | TPD            | Rs/MT       |                            |
| <b>FY 16-17</b> | 36843 | 100.9 | 662.5          | 9187        |                            |
| <b>FY 17-18</b> | 29300 | 80.3  | 561.6          | 10335       | 1.22                       |
| <b>Apr'18</b>   | 2198  | 73.3  | 481.3          | 14524       | 0.35                       |
| <b>May'18</b>   | 2550  | 82.3  | 408.1          | 16548       | 1.09                       |
| <b>Jun'18</b>   | 2455  | 81.8  | 325.8          | 17245       | 4.79                       |
| <b>Aug'18</b>   | 2655  | 85.6  | 244.0          | 17584       | 12.78                      |
| <b>Jul'18</b>   | 2268  | 73.2  | 158.3          | 17687       | 59.93                      |
| <b>Sept'18</b>  | 2555  | 85.2  | 85.2           | 18452       | 10.68                      |

As the Price for stable bleaching powder increases the consumption decreases showing the price elastic behaviour. Therefore we can say that stable bleaching powder is a **price elastic product**.

- Production Process and Inputs for the Process for 8MT of product:**

| Input             | → | Technology            | → | Output  |
|-------------------|---|-----------------------|---|---|
| Lime (6MT)        |   | Chlorination          |   | Stable Bleaching Powder 8MT<br>(Main Product) |
| Chlorine (3.2 MT) |   | Stabilisation         |   | Sodium Hypo Chlorite 0.4MT<br>(By product)    |
|                   |   | Product Pulverisation |   | Calcium Hypo Chlorite 0.8<br>MT(By product)   |

- Substitutes for the Inputs used:**

There are no substitutes and compliments for the inputs (lime, chlorine) for manufacturing of Stable Bleaching Powder.

- Costs involved in Manufacturing of Stable Bleaching Powder:**

| S. No. | Particulars                | UOM       | FY 16-17     | FY 17-18     | Apr'18      | May'18      | Jun'18      | Jul'18      | Aug'18      | Sept'18     |
|--------|----------------------------|-----------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|
|        | <b>Capacity</b>            | <b>MT</b> | <b>52560</b> | <b>52560</b> | <b>4320</b> | <b>4464</b> | <b>4320</b> | <b>4464</b> | <b>4464</b> | <b>4320</b> |
| 1      | Production                 | MT        | 36935        | 29191        | 2450        | 2453        | 2450        | 2455        | 2544        | 2564        |
| 2      | Price of Chlorine          | Rs/MT     | -741         | -1306        | -150        | 177         | 209         | 127         | 359         | 558         |
| 3      | Price of Lime              | Rs/MT     | 3525         | 3737         | 4306        | 4287        | 4332        | 4394        | 4425        | 4401        |
| 4      | Consumption of Chlorine    | MT/MT     | 0.41         | 0.41         | 0.41        | 0.41        | 0.41        | 0.41        | 0.41        | 0.41        |
| 5      | Consumption of Lime        | MT/MT     | 0.75         | 0.75         | 0.75        | 0.75        | 0.75        | 0.75        | 0.75        | 0.75        |
| 6      | Total Chlorine Consumption | MT        | 15106        | 12013        | 901         | 1046        | 1007        | 930         | 1089        | 1048        |
| 7      | Total Lime Consumption     | MT        | 27632        | 21975        | 1649        | 1913        | 1841        | 1701        | 1991        | 1916        |
| 8      | Cost of Chlorine           | Rs in Cr  | -1.1         | -1.6         | 0.0         | 0.0         | 0.0         | 0.0         | 0.0         | 0.1         |
| 9      | Cost of Lime               | Rs in Cr  | 9.7          | 8.2          | 0.7         | 0.8         | 0.8         | 0.7         | 0.9         | 0.8         |

|    |                          |          |      |      |      |      |      |      |      |       |
|----|--------------------------|----------|------|------|------|------|------|------|------|-------|
| 10 | Variable Cost            | Rs/MT    | 5147 | 4979 | 7174 | 7098 | 7426 | 8038 | 7762 | 7583  |
| 11 | Total Variable Cost      | Rs in Cr | 19.0 | 14.6 | 1.6  | 1.8  | 1.8  | 1.8  | 2.1  | 1.9   |
| 12 | CM                       | Rs/MT    | 4040 | 5356 | 7350 | 9450 | 9819 | 9649 | 9822 | 10869 |
| 13 | CM                       | Rs in Cr | 14.9 | 15.7 | 1.6  | 2.4  | 2.4  | 2.2  | 2.6  | 2.8   |
| 14 | Total Fixed Cost         | Rs/MT    | 1665 | 2386 | 830  | 1007 | 1243 | 1238 | 1495 | 1648  |
| 15 | Total Fixed Cost         | Rs in Cr | 6.1  | 7.0  | 0.2  | 0.3  | 0.3  | 0.3  | 0.4  | 0.4   |
| 16 | Cost of Production       | Rs/MT    | 6812 | 7365 | 8004 | 8105 | 8669 | 9276 | 9257 | 9231  |
| 17 | Total Cost of production | Rs in Cr | 25.1 | 21.6 | 1.8  | 2.1  | 2.1  | 2.1  | 2.5  | 2.4   |

- **Economies of Scale:**

As we compare FY16-17 and FY 17-18 then we found that in FY 16-17 production was 36935 MT and Cost of production was Rs. 6812 per MT while in FY 17-18 this was Rs. 7365 per MT. This shows that when production has decreased by 21% then cost of production increased by 8% (Although there were no major change was seen in variable cost, i.e. 3.2%). Fixed cost has been increased by 42%. So if we increase production then it will be benefit for the company. In this case we can see that Chlorine has negative price during FY16-17 and FY17-18. In FY18-19 price became positive. Chlorine is a by product of Caustic Industry which is highly toxic and hazardous, and no one can store beyond the defined limit so to sale this Chlorine in market company had to pay to customer. In these days the utilization of chlorine in market has been increased substantially. Demand of Chlorine is more than supply so company is making money from this product.

- **Economy of Scope:**

As we can see in production function that Calcium Hypo Chlorite and Sodium Hypo Chlorite are the by-product of Stable Bleaching Powder. Calcium hypo Chlorite is used as a disinfectant (Recently 2 years back when Mahakumbh organized in Ujjain then it was used in Shipra river for purification (50 MT per day), apart from it is supplied for treatment of sewage water and

local drainage). Sodium hypo is also saleable in the market. It is used in textile or rayon industry for bleaching purpose.

## **Market Structure**

- **Market analysis**

The principal consumers of bleaching powder are paper industries, textile industries, oil installation, fertilizer units, tea gardens, PHE, railway, hospitals and municipal corporations. The global calcium hypochlorite market was valued at around US\$ 5 Bn in 2016 and is anticipated to expand at a CAGR of more than 3% from 2018 to 2026. Expansion in the global calcium hypochlorite market is driven by the rise in demand for fresh water and increase in demand for calcium hypochlorite in pulp & paper applications. The calcium hypochlorite market in Asia Pacific is anticipated to expand at a CAGR of around 4% during the forecast period. Rapid urbanization in developing economies such as China and India is estimated to propel the calcium hypochlorite market in the region

The following are the major global manufacturers of SBP:

- a. Swastik Chemicals
- b. Olin Chlor Alkali
- c. Aditya Birla Chemicals
- d. Lords Chloro Alkali Limited
- e. GACL
- f. Sree Rayalaseema Hi-Strength Hypo Ltd
- g. Suvidhi Industries
- h. OxyChem
- i. Kuehne
- j. Clorox
- k. Hill Brothers Chemical
- l. Vertex Chemical
- m. HASA

- **Competition analysis**

The stable bleaching powder manufacturers are restricted to a few players. The competition is based on the percentage of chlorine that the SBP has. The more the percentage of chlorine and the lesser the moisture percentage, the more the price and demand the product can fetch. The following are the major competitors for ABC's SBP:

| Sl. No. | Competitors              |
|---------|--------------------------|
| 1       | Reliance                 |
| 2       | DCM Sriram               |
| 3       | GACL                     |
| 4       | Lords Chloro Alkali Ltd. |
| 5       | Punjab Chloro            |
| 6       | Rayaseema Chlor Alkali   |

- **Marketing and pricing strategies:**

The market is as such an Oligopolistic market structure, where in the players are limited. Fixed amount of produce is decided beforehand as per the permissions and supplied to the markets, prices of which is fixed and almost on par with each competitor. Marketing Mix of Grasim analyses the brand/company which covers 4Ps (Product, Price, Place, Promotion) and explains the Grasim marketing strategy.

- **Product:**

Grasim is one of the leading players in the Indian textile industry. Product portfolio of Grasim Industries in its marketing mix includes, Viscose Staple Fibre, Cement, Chemicals, Textiles. Its chemicals department produces Rayon grade caustic soda, Epoxy, stable bleaching powder (SBP) used poly aluminium chloride (PAC) used in effluent treatment; and Chloro sulphuric acid, used in vinyl sulphate.



- **Price:**

Grasim has a diverse product range and hence a wide pricing range. Prices of its varied products are priced differently in its marketing mix as they are catering to different segments. Mostly Grasim uses competitive pricing strategy to attract consumers in its Cement and VSF products as there are many competitors involved and when it comes to Textile Business Its Grasim and Graviera are branded products which are premium priced.

- **Place:**

Grasim's different businesses are having manufacturing facilities at different locations. And it has a strong distribution network to reach a maximum number of customers. Its VSF facilities are located in Madhya Pradesh, Gujarat and Karnataka. Also Grasim has joint ventures with various companies in Sweden, Canada, Laos, China. Chemical plants are located at Madhya Pradesh, Jharkhand, U.P. and Karnataka. Grasim textiles are manufactured at Bhiwani in Haryana and Malanpur in Madhya Pradesh. Grasim also has customers in USA and UK and its products are made available in some of the largest retail stores and chains. Grasim also has a nationwide retail network comprises exclusive showrooms, wholesalers and multi-brand outlets to reach its target consumers.

- **Promotion:**

Grasim uses mass media and above the line activities extensively in its marketing mix. It runs its ad campaigns in print media and Television. Grasim uses hoardings and billboards in strategic locations. It ran campaigns for its new products like Birla White and during the change of its cement name to Ultra Tech. It used mass media and digital media in best ways possible. It also does sales promotions and discounts to its B2B customers which are part of negotiations. Grasim uses Celebrity Endorsements for its branded suiting's like Akshay Kumar, Saif Ali Khan and John Abraham. Grasim uses them for TV, Print, on ground and outdoor promotional activities.

Aditya Birla Chemicals / Grasim Chemicals has the following brands of Stable Bleaching Powder:

- A) **LION brand SBP** has low bulk density, free flowing & fluffy is preferred by all textile bleachers due to superior bleaching characteristics and low sludge when dissolved in water. Good quality raw material, quality control and better process control are the features. It liberates chlorine quickly when dissolved in water. 90-94% of available Chlorine content

becomes free within 15 min allowing faster bleaching process. Leaves little residue due to better reactivity.

B) **SHAKTIMAN brand SBP** when dissolved in water, quickly liberates chlorine and nearly 90-94 per cent of its available chlorine content becomes free within 15 minutes, to take part in the bleaching process. This allows for extra power bleaching. Due to its extra fineness, Shakti man leaves minimum residue when dissolved in water for disinfection / sterilization. This provides extra protection.

C) **VIKRAM brand SBP** is concentrated form of more than 34% available Chlorine when compared to 10-12% available chlorine in liquid Sodium Hypochlorite, which provides savings in logistics, bulk handling and ease in storing. It is more stable when compared to liquid form available.

Pricing strategies are dependent of **product differentiation**, which is as follows:

| Specifications   | Grade I | Grade II | Export Grade |
|--|---------|----------|--------------|
| Available Chlorine (min.)                                  | 34%     | 32%      | 35%          |
| Parts Stability (max.)                                     | 1/15    | 1/11     | 1/15         |
| Moisture (%) (max.)  | 0.30    | 0.50     | 0.30         |
| Particles passing through 1:7 mm (10 mesh) IS Sieve (min.) | 99.5%   | 99.0%    | 99.5%        |

The pricing varies according to the grades. The better the grade, the higher the price. Also, when compared to competitors, the pricing strategy of the company is low price - high sales. Majority of the demand comes from the areas located near to water bodies like sea, oceans and lakes. Such areas are potential sea food producers.

## **Recommendations**

- With the higher grades in the Chlorine (35%), the content attains its optimum value and becomes the premium quality product. This can be achieved by implementing fully automation on the shop floor and improving the ERP systems.
- Chlorine is one of the most useable products in the market and its purity can be measured by having low moisture content i.e.  $<0.03\%$ . This figure can only be attained by improving the drying process by applying the strong thermo plastic insulation across the vessel.
- Six sigma implementations can boost the operational efficiency of the plant which results in RFT (Right first time), Zero defects and eliminates Muda, Mura and Muri.
- Under NMCG (National Mission for Cleaning Ganga), ABCL can sell the by-product Calcium hypo chlorite for the cleaning activity

## **Group 26: Microeconomic Analysis on Ford Motor India Pvt. Ltd.**

### ***Executive Summary:***

*The report presented here summarizes on the micro-economic analysis carried out on Ford Motor India Pvt. Ltd. elaborating on how the auto industry works on the whole w.r.to. the demands, elasticities, factors that affect demand & substitutes and compliments.*

*Also in elaborate, coverage on the automotive market structure is put up with comprehensive details on how the various players in this industry function and the market potential in India. The various strategies adopted by Ford is explained in details w.r.to. how it's not only a sustainable operation in India but also holds a promise of prolonging its operation for its future growth in the Indian market.*

*Apart from the industry insights and market analysis, this report covers the analytics and strategies that makes Ford unique not only in the way they function operationally but also in terms of how it is making way for its sustainability by keeping up with the demands and needs of the local market and evolve into a profitable organization.*

*Finally, at the end of the report is a summarized recommendation to the company so as to pinpoint the various changes and minor corrections that can lead to a growth that would take place in quicker spades rather than the total period of 20 years that the company took in reality to break even and make itself into a profitable organization w.r.to. its nets operating profit.*

### **Introduction:**

Ford India manufactures, and exports vehicles and engines made at its integrated manufacturing facilities in Chennai, Tamil Nadu and Sanand, Gujarat. Since its entry in India in 1995, Ford has invested more than US\$ 2 billion to expand its manufacturing facilities and sales & service footprint to meet the demand in one of the world's fastest-growing auto markets. Ford India's integrated manufacturing facility at Maraimalai Nagar, near Chennai, produces its award-winning range of products including the Ford EcoSport and Ford Endeavour. As part of its overall commitment, Ford has inaugurated its US\$ 1 billion state-of-the-art integrated manufacturing facility in Sanand, Gujarat in March 2015. With Sanand being operational, Ford India has doubled its annual installed manufacturing capacity to 610,000 engines and 440,000 vehicles. The sub-

four-metre compact sedan, Ford Aspire, became the first car to roll out from the new Ford Sanand plant. The plant also manufactures Next-Gen Figo hatchback. Ford's biggest-ever product line-up in India today offers a vehicle to suit the needs of nearly every consumer. In 2016, Ford has also given Indian consumers their first opportunity to own the iconic Ford Mustang. Debuting ahead of the Delhi Auto Expo 2016 and set to hit Indian showrooms later this year, the new Mustang is all set to bring the world-class performance and refinement of Ford's iconic pony car to India's roads.

As part of its strategy to Make in India for India and the World, Ford continues to strengthen India as a center of excellence for small cars and low displacement engines. The company has embarked on an accelerated export strategy and presently, exports Next-Gen Figo, Aspire, and EcoSport to over 40 markets around the world. Ensuring customer convenience, Ford has expanded the availability of Ford Genuine Parts with the appointment of distributors in Maharashtra, Goa, Karnataka, Kerala, Delhi, Tamil Nadu, AP, and Telangana. Driving innovation from India, Ford recently announced plans to build a new global engineering and technology center in Chennai. Besides the establishment of a global engineering and technology center, the new Ford campus spread across 28 acres will host operations of Ford Global Business Services in areas of IT, Product Engineering, Finance and Accounting, Data Analytics, Manufacturing among others.

Ford's commitment to India is not just business centric. At the heart of its business plans are people and communities. Going further with its Better World philosophy, Ford India in association with Ford Motor Company Fund announced, 'Operation Better World,' with the endeavor to address issues related to Education, Sustainability and Auto Safety around communities where it operates.

#### **Demand for Product& Factors Affecting Demand:**

Ford's vehicle production has <sup>(2)</sup>de-grown by 6% in H1 FY19 when compared to H1 FY18 as a whole, But the utility segment which has the Ford Eco-sport and the Endeavour has grown by 8%. This Clearly shows the demand for Ford's vehicles in the utility segment is on an increasing trend and Ford plans to make-up the de-growth in the compact segment by introducing new models in the compact segment and a growth in the compact segment is expected in Q3 FY19.

| SL. No. | Factors Affecting Demand | Why it is Relevant?  |
|---------|--------------------------|--|
| 1       | Income                   | <p>People affordability to buy a car has increased drastically over the last couple of years due to rise Per capita income and moderate inflation of about 3% to 5% in the last three years.</p> <p>As we see the economy in India boom, lifestyle changes and uplift have brought about a trend in the passenger car space for an increased demand for SUV's over hatchbacks and sedans thus putting income as a big contributing factor to Ford's future plans for a certain market in terms of both planning and electrification.</p> |
| 2       | Price of Other Goods     | <p>Raw material prices considerably drives the overall cost of production up resulting in price revision in the half yearly stages causing disruption in the planned retail volumes. Localization of manufacturing also has drastic impact on the streamlining of prices of the finished product vs importing from overseas.</p> <p>Cheap radio taxi and self-drive car rental services are affecting the sale of passenger cars with competitive pricing and less investment.</p>   |
| 3       | Taste                    | <p>Comfort, Safety, Features, Design &amp; Ambience of a car place a vital role in driving demand.</p> <p>In the automotive industry in particular, tastes are driven by many factors, one of them mainly being perception. False perception or bias towards a particular local brand results not only in huge backorders but also in increase of costs over a period of time as the demand increases to more than 2 to 4 times the supply.</p>  |

|   |                           |   |
|---|---------------------------|---|
| 4 | Population                | <p>Population doesn't have a direct correlation except that it depends more on the tier-wise distribution of where the population is settled in.</p> <p>Increase in urban population and nuclear families, the demand and need for cars go up organically.</p>  |
| 5 | Composition of Population | <p>The ratio of old to young and the proposition of office going women drives the demand positively.</p> <p>Composition of population plays a huge role and has a big impact in the automotive industry wherein, the age group or target audience of a particular type of vehicle such as a hatchback or SUV has changed considerably over the last 10 years. Latest trend suggests more youths or people in the age group of 25-35 have the major share of new buyers. As this composition varies from 1 geographic location to another, so does the demand for a particular segment of vehicle.</p> |
| 6 | Seasonal Effect           | <p>Festive season discounts and end of year discounts induce exponential increase in sales.</p> <p>Automotive passenger vehicle demand in lots of markets is driven by seasonal effects such as majority of sales are contributed during festive periods such as Diwali, Dussera, New Year and Financial Year ending during which prices are at an all-time low with add on offers and benefits to the customers.</p>   |
| 7 | Expectation               | <p>IOT driven requirements from end customer stipulate demand.</p> <p>When customers expect price revision to happen in January and April in particularly in India, they tend to buy more vehicles in the Month of December and March where manufacturers too provide huge discounts to lure in customers, in the process increasing the demands. Similar effects are seen during festive seasons where the demand goes high due to huge sale offers put in place. Highly anticipated launches tend to</p>  |

|   |                        |  |
|---|------------------------|--|
|   |                        | gather steam with huge demands as pre-booking orders in an untimely part of the year as well.  |
| 8 | Availability of Credit | <p>Buy now pay later. Easy EMI and simpler loan processing have increased the demand for passenger cars.</p> <p>Availability of credit affect has a substantial effect depending on the market and the economy the market in perspective. During a recession when there are fewer jobs available and there is less money to spend, the price of vehicles tends to drop in-order to lure in more customers with better offers. Also, the availability of credit may be less because of the average person's inability to qualify for a loan. To help encourage those who can afford to buy, prices of more expensive products such as SUV's fall and lower interest rates appear to help boost the sales. When there is an economic boom, unemployment is very low and people are spending money readily, the price of vehicles and other major purchases tends to rise especially for the more expensive products in particular.</p> |
| 9 | Derived Demand         | <p>Government policies for stringent emission norms like BS VI has caused a restlessness in the market. Vehicle scrappage policy also plays a major role in increasing the demand for new vehicles.</p> <p>Derived demand does hit companies with small volumes or drastic drop in volumes over a span of a few years. This factor mainly affects component demand as the sales volumes slouch, demand for spare part and other service components tend to reduce and also results in</p>  |



|    |   |   |
|----|---|---|
|    |   | increasing prices over the long run as the overall demand volumes drop.   |
| 10 | Other Factors:<br>Product Cycle Refresh | Generally passenger vehicles have an average refresh cycle of 3 years after which they undergo substantial changes in interior and exterior design, bump up in equipment and safety features. Due to this cycle, products nearing the end of their cycles relate to customers holding on to purchase the refreshed model. This increases demand as soon as the new refreshed product hits the market. |

### **Different Elasticities:**

Variable Elasticities play a huge role in contributing to the overall mix of the vehicles sold not in India but across the globe, Ford not being an exception. Taking into consideration 2 particular segments in the auto industry in which Ford vehicles compete with other manufacturing giants, which is the hatch segment and the full-size SUV segment, the role played by elasticities is clearly portrayed by virtue of actual sales.

In the hatchback segment, owing to the fierce competition, there are more than 4 options to choose from, from the competitors as compared to the offering that Ford has which is the Ford Figo. The Ford Figo in its current iteration is priced at a slight premium as compared to its competition and for good reason too as it caters to a more stringent safety norm and bigger standard equipment list. However, the target audience for this vehicle is aimed at the cost conscious and budget friendly segment which does not play too well as compared to the competition and hence, there is a whole lot of customers in this compact hatch back segment that will move away from the Figo to the ever so slightly cheaper priced alternative in the market. Here we see how demand is still variable of costs and economies of sustainability.

However, in comparison to the hatchback segment, consider the Premium SUV segment where there are majorly only 4 automakers playing in this space, namely Honda, Toyota, Ford and

Hyundai. Out of all the competition, the well know established players with a global product and proven pedigree is from Toyota and Ford which is the Toyota Fortuner and the Ford Endeavour. Even though the Ford Endeavour is priced at a premium to the Toyota Fortuner, owing to the lack of proven reliable competition in this space has led to massive sales of both the vehicles. And since the Ford Endeavor even though priced at a slight premium to the Toyota Fortuner as well as the competition, garners more likelihood of a consideration due to the fact that it's a size bigger with more equipment and lifestyle features which the target audience in that segment caters to.

This showcases how elasticities play a major role in how the target audience respond to or co-relate to actual vehicle sales.

### **Substitutes and complements:**

Ford's vehicle can be categorized into Compact Segment (Engine CC upto 1.4Litre), Utility Vehicle Segment (Engine CC upto 3.0Litre) & Speciality Segment (Mustang).

In the compact segment, Ford has the following models –

- a. Figo
- b. Figo Aspire
- c. Freestyle

<sup>(3)</sup>Due to the very high competitiveness of the compact segment, there are 10 different competitors namely:

|  |              |                                |                |
|--|--------------|--------------------------------|----------------|
| FIAT INDIA AUTOMOBILES Private Limited | PALIO        | Maruti Suzuki India Ltd        | RITZ           |
|  | GRANDE PUNTO |                                | SWIFT          |
|  | AVVENTURA1   |                                | ESTILO         |
| Ford India Pvt Ltd                     | FIGO         |                                | CELERIO        |
|  | FIGO ASPIRE  |                                | DZIRES         |
|  | FREESTYLE    |                                | BALENO         |
| General Motors India Pvt Ltd           | BEAT         |                                | IGNIS          |
|  | UVA          |                                | DZIRE TOUR     |
|  | SAIL UVA     |                                | TOUR S         |
| Honda Cars India Ltd                   | JAZZ         | Nissan Motor India Pvt Ltd     | MICRA          |
|  | BRIO         |                                | DATSUN GO      |
|  | AMAZE        |                                | DATSUN REDI-GO |
| Hyundai Motor India Ltd                | I10          | Renault India Pvt Ltd          | PULSE          |
|  | GETZ         | Tata Motors Ltd                | INDICA         |
|  | I20          |                                | INDIGO CS      |
|  | GRAND I10    |                                | ZEST           |
|  | XCENT        |                                | BOLT           |
| Mahindra & Mahindra Ltd                | ELITE I20    |                                | TIAGO          |
|  | VIBE         |                                | TIGOR          |
| Volkswagen India Pvt Ltd               | POLO         | Toyota Kirloskar Motor Pvt Ltd | LIVA HATCHBACK |
|  | AMEO         |                                |                |
|  | POLO GTI     |                                |                |

Likewise, in the Utility Segment, the number of competitors and options are also less.

|  |              |
|--|--------------|
| FCA India Automobiles Pvt Ltd                      | JEEP COMPASS |
| Ford India Pvt Ltd                                 | ENDEAVOUR    |
| General Motors India Pvt Ltd                       | CAPTIVA      |
|  | TRAILBLAZER  |
| Hindustan Motor Fin. Corp.Ltd/Hindustan Motors Ltd | PAJERO SPORT |
|  | PAJRO SFX    |
|  | OUTLANDER    |
| Honda Cars India Ltd                               | CRV          |
| Hyundai Motor India Ltd                            | SANTA FE     |
|  | TUCSON       |
| Isuzu Motors India Pvt Ltd                         | MU-7         |
|  | MU-X         |
| Mahindra & Mahindra Ltd                            | REXTON       |
| Toyota Kirloskar Motor Pvt Ltd                     | FORTUNER     |

### Production:

Processes, inputs, substitutes and complements among inputs, costs, economics of scale and scope

### Market Structure

### Market power



<sup>(4)</sup>The Indian auto industry became the 4th largest in the world with sales increasing 9.5 per cent year-on-year to 4.02 million units (excluding two wheelers) in 2017. It was the 7th largest manufacturer of commercial vehicles in 2017.

India is also a prominent auto exporter and has strong export growth expectations for the near future. Automobile exports grew 26.56 per cent during April-July 2018. It is expected to grow at a CAGR of 3.05 per cent during 2016-2026.

### **Market Size**

Domestic automobile production increased at 7.08 per cent CAGR between FY13-18 with 29.07 million vehicles manufactured in the country in FY18. During April-July 2018, automobile production increased 16.69 per cent year-on-year to reach 10.88 million vehicle units.

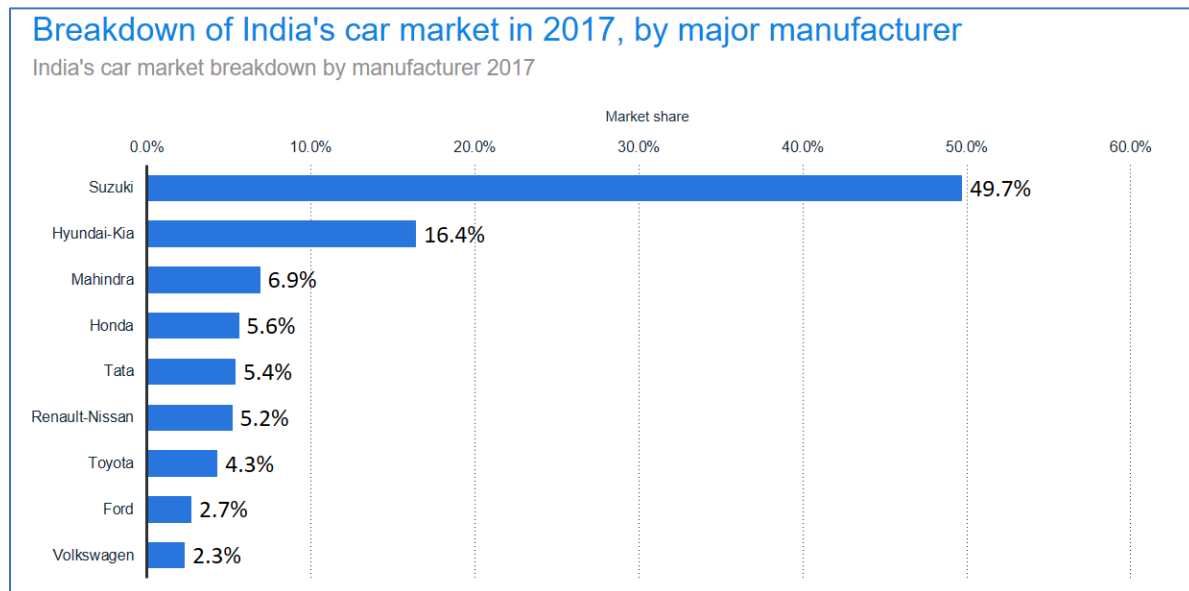
Overall domestic automobiles sales increased at 7.01 per cent CAGR between FY13-18 with 24.97 million vehicles getting sold in FY18. Auto sales in July 2018 witnessed a year-on-year growth rate of 7.9 per cent across segments, driven by 46.24 per cent growth in three-wheeler sales in terms of percentage.

### **Road Ahead**

The automobile industry is supported by various factors such as availability of skilled labour at low cost, robust R&D centers and low cost steel production. The industry also provides great opportunities for investment and direct and indirect employment to skilled and unskilled labour.

Indian automotive industry (including component manufacturing) is expected to reach Rs 16.16-18.18 trillion (US\$ 251.4-282.8 billion) by 2026.

## Competing firms



<sup>(5)</sup>From the above graph, market share for the major auto manufacturers for 2017 have been put up which clearly shows the monopoly and dominance of the big two which are Maruti/Suzuki and Hyundai-Kia which combined have a total market share of near-about 66%. Reason for this monopoly is partly due to the homegrown presence of these manufactures in India plus the huge dealer and service network established over the period of its existence. Other big contributors to the huge numbers is specially contributed by the fact that each automaker has tailor-made products for the Indian market, has the biggest part localization to import ratio and has a product catering to almost every segment of the passenger vehicle space.

Ford India Pvt. Ltd with 2.7% market share is considerably lower down the order of dominating the market share charts, but recent global level strategic and operational changes in late 2018 show fresh insurgence in the business and these figures look highly probable to rise tremendously over the next decade. Big news on this strategic changes include the joint MOU signing of Ford and Mahindra to mass-produce smaller passenger vehicles and engines and technology sharing.

Ford Motor's India operations is close to posting a net profit, driven by strong gains in domestic sales and booming exports that helped the automaker's local unit post a 20% expansion in turnover

for the third consecutive year. In fiscal 2018, Ford India's domestic operations crossed a billion dollars in turnover for the first time. Exports accounted 2.4 times local sales, taking the total turnover to \$3.4 billion. The company has been making an operational profit in India since fiscal 2014 and around the breakeven level in the year ended March 2018.

### **Strategies for competition:**

#### **India's IT advantage**

Ford set up Ford Information Technology Services India (FITSI) in Chennai, which caters to the software requirements of Ford Motor Company in the region and around the world. FITSI develops solutions for Ford worldwide. For example, it developed a web-based customer relationship service for Ford India, Australia and South Africa. In addition, Ford has shifted the CAD/CAM development, e-mail processing and application development from its worldwide operations to India's FITSI.

#### **As an export base for cars and components**

Ford is leveraging the large, high-quality automotive supplier base of India and has made India its component-sourcing base. This has helped Ford to reduce the cost of manufacturing and to increase its exports. Ford India awarded the Q1 supplier status to 10 suppliers, to help them export their products to Ford worldwide.

### **Strategies for pricing:**

#### **Localization:**

Ford manufactures and exports vehicles and engines made at its integrated manufacturing facilities in Chennai, Tamil Nadu and Sanand, Gujarat. As part of its strategy to Make in India for India and the World, Ford continues to strengthen India as a center of excellence for small cars and low displacement engines. The company has embarked on an accelerated export strategy and presently, exports Next-Gen Figo, Aspire, and EcoSport to over 40 markets around the world. For any given Ford vehicle sold in India, parts localization has been maxed out to as much as 88%. Earlier, even the engines for the low volume full sized SUV Ford Endeavour were being imported for a bolt on

manufacturing process which has been completely revamped by manufacturing the same engines in India, in the Chennai manufacturing plant.

The biggest Profit maximizing strategy implemented by Ford is to source talent within India and establish its Global Business Operation Centre in Chennai, which caters to Finance, Operations, Development, Automation technologies, Analytics, Marketing and Service operations which will cater to all Ford entities of the world, all from one Business structure unit based out of Chennai. This massively helps in cost reduction as labor cost is relatively very cheap as compared to outsourcing manpower for the same requirements in individual markets and also help maintain its sustainability over a period of time.

Driving innovation from India, Ford is building its new global engineering and technology center in Chennai. Besides the establishment of a global engineering and technology center, the new Ford campus spread across 28 acres will host operations of Ford Global Business Services in areas of IT, Product Engineering, Finance and Accounting, Data Analytics, Manufacturing among others.

### **Locally sourced talent acquisition for out-sourced job specializations**

Ford in India has multiple entities which work as direct subsidiaries to the Ford Motor Company, USA such as Ford Credit and Ford Global Business Services Ltd. (GBS) which not only cater to Ford India's local operations but also to Ford's Global Operations which include Marketing Services, Global Data Insights and Analytics, Supply Chain Management and also Design & Development.

### **Recommendations:**

#### **1. Ford doesn't cater to all the passenger vehicle segments of vehicles in the industry**

If we look at the segments for passenger vehicles, Ford only cater to the compact hatchback segment, compact utility vehicle, small size SUV, premium SUV and specialty vehicle segments. Based on the demands of the Indian market and the sales numbers across the segments, Ford needs to cater to the premium sedan segment which it withdrew in India recently with the Ford Fiesta due to its highly un-popularity being a European design.

#### **2. Perception of Brand Image and Brand Service capabilities**

In spite of various efforts in its 20 years of existence in India, the brand perception and service costs are considered to be sub-par or lower standard as compared to the competitors even though

a lot of efforts have taken place including a full-blown brand-transformation activity. Main reason for this is due to the lack of visibility to the end consumer / customer in public communication means and lack of outright reach.

### **3. Service Network not as comparable to its competitors**

Even though Ford caters to / has only 2.7% of market share in the automotive industry in India, the service network is nowhere comparable to the market leaders specially when we consider that Ford has existed in India for its operations for near-about 23 years. The tier-3 visibility and penetration of Ford in India is still is a cause of concern and until Ford takes a targeted approach to help push its sales and service network into the remote nook and corners of India where demand is still high specially for compact hatchback segment.

### **4. Marketing Visibility**

Surprisingly enough, Inspite of Ford India existing in India for over 20 years, the public visibility of Ford in India is painfully restricted and subdued since not much visibility exists in terms of a corporate communication footprint and social media presence as well as mass media advertisements or highlights unless in-case there is a new vehicle launch.