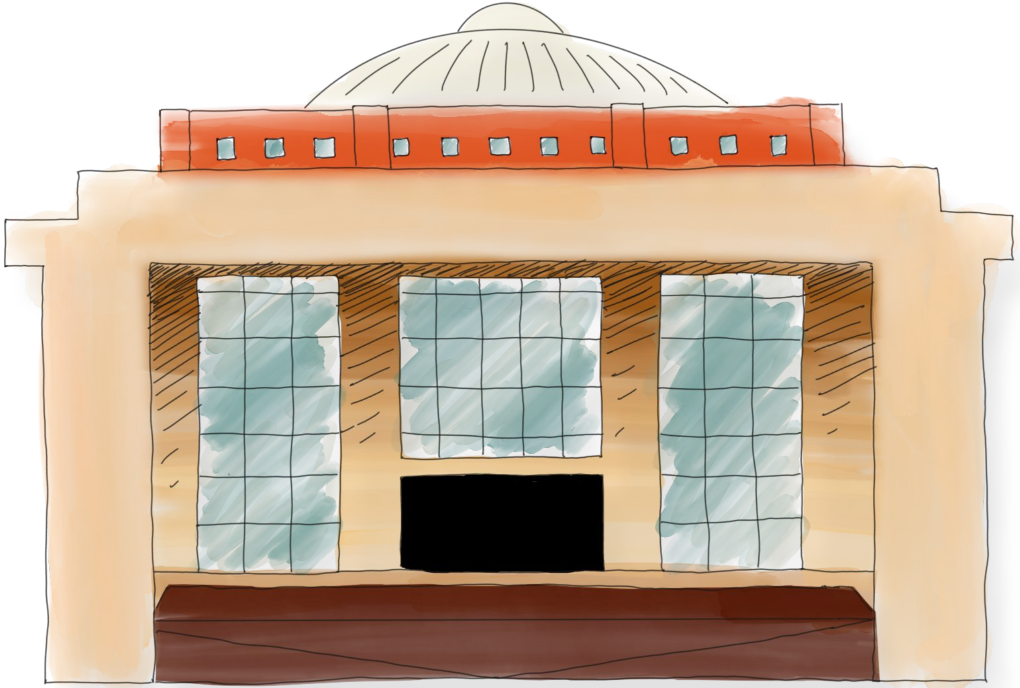
Consulting Case Book

2022



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All the contents used in this deck is accurate to the best of our knowledge. In case of any discrepancy, please contact us at: bhcg@hyderabad.bits-pilani.ac.in

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Second edition: August 2022

Introduction

It gives us immense pleasure to present to you the second edition of the BHCG Consulting Casebook.

This casebook contains various case frameworks, industry analysis and cases solved by our club members itself. With an increasing interest in the Consulting and Product domain, we believe this can serve as a good starting point to all the enthusiasts. We've tried to make this book easy to understand, with a structured approach and carefully crafted frameworks. The casebook starts with 9 mini frameworks which can come handy in any business case. The next in the line are industry analysis done by secondary research. We then move towards guesstimates and different business situation frameworks one by one. We have also included a list of additional resources for your reference.

The club members have put in a lot of efforts into making this a successful project. We hope this serves handy for beginners to foster into consulting.

Acknowledgments

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Part A - Mini Frameworks

MECE Segmentation Principle

Mutually Exclusive and Collectively Exhaustive

Elements should
- “exclude” each other, i.e. be distinct.
- “exhaust” the relevant field, i.e. contain everything that belongs to it.

MECE as a method should be used when you craft an issue tree for your case structure.

Mutually Exclusive

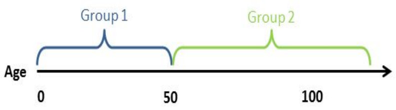
‘Avoiding Overlaps’

- You need to make sure that the possible solutions or groups are not accidentally considered twice.
- Proving exclusiveness forces you to carefully look at each option, consequently leading you to a much deeper understanding of the issue.

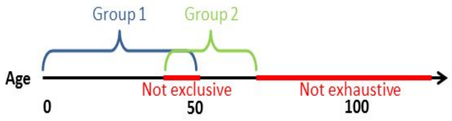
Collectively Exhaustive

‘Comprehensive collection without leaving alternatives’

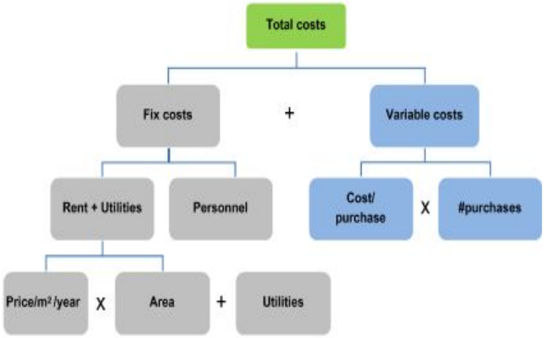
- Exhaustive means that all possible options have been considered.
- The trick is to divide a problem into categories with a finite number of general groups.



MECE



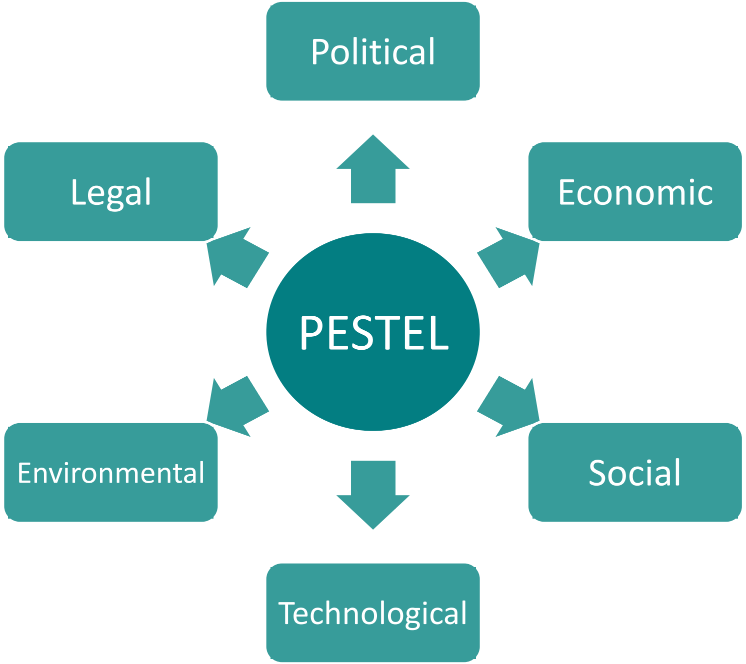
Not MECE



Breaking costs in MECE way

PESTEL Analysis

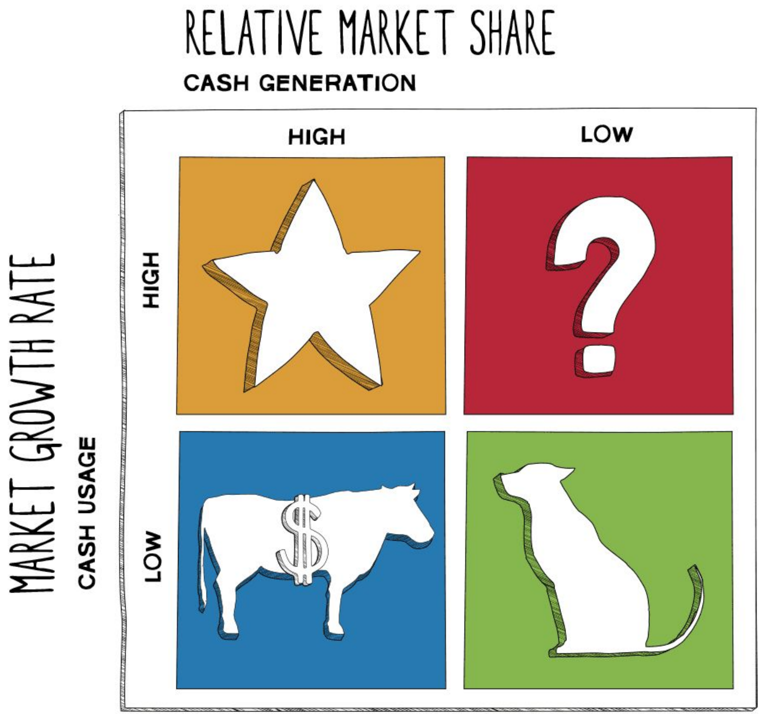
A PESTEL analysis helps an organization identify the external forces that could impact their market and analyze how they could directly impact their business.



Political	Government Policy Tax Policy Labour Law Trade Restrictions
Economic	Economic Growth Exchange Rates Inflation Rates
Social	Population Growth Rate Age Distribution Career Attitudes Cultural Barriers
Technological	Technology Incentives R&D Activity Automation Level of Innovation
Environmental	Weather Climate Pressures from NGOs
Legal	Discrimination Laws Antitrust Laws Consumer Protection Laws

Growth Share Matrix (BCG Matrix)

According to this matrix, business could be classified as high or low according to their industry growth rate and relative market share. Used to examine different businesses in a portfolio on the basis of their related market share and industry growth rate.



Each of the four quadrants represents a specific combination of relative market share, and growth:

1. **Low Growth, High Share -** Companies should milk these "cash cows" for cash to reinvest.
2. **High Growth, High Share -** Companies should significantly invest in these "stars" as they have high future potential.
3. **High Growth, Low Share -** Companies should invest in or discard these "question marks," depending on their chances of becoming stars.
4. **Low Share, Low Growth -** Companies should liquidate, divest, or reposition these "pets."

Read More: [What Is the Growth Share Matrix? | BCG]

Value Chain Analysis

Value chain analysis (VCA) is a process where a firm identifies its primary and support activities that add value to its final product and then analyze these activities to reduce costs or increase differentiation.

Company's Value Chain (Manufacturing)

Industry's Value Chain

Porter, in his book 'Competitive Advantage' suggested that,

- activities within an organisation add value to the service and products that the organisation produces, and
- all these activities should be run at optimum level if the organisation is to gain any real competitive advantage.

Read More: Competitive Advantage, by Michael Porter

Porter's Five Forces

BARGAINING POWER OF SUPPLIERS

Increases when :

- Few suppliers but many buyers
- Few substitute raw materials
- Suppliers hold scarce resources
- Cost of switching raw materials is high
- Suppliers are large and threaten to forward integrate

THREAT OF NEW ENTRY

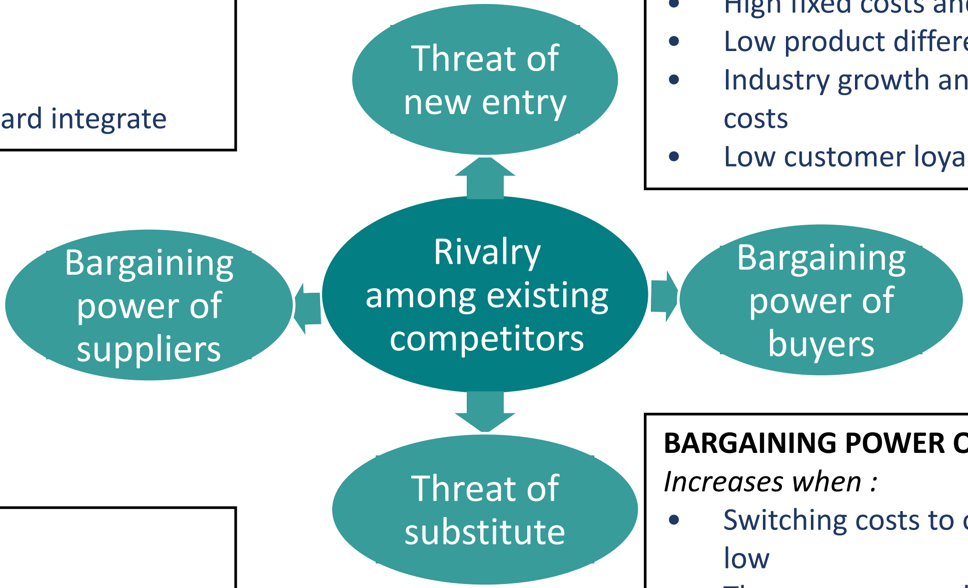
increases with :

- Economies of scale
- Low initial capital investment required
- Access to suppliers and distribution channels is easy to obtain

THREAT OF SUBSTITUTE

increases with :

- Low switching costs
- Higher buyer propensity to substitute
- Better quality and performance of substitute product



RIVALRY AMONG EXISTING COMPETITORS

increases with :

- Number competitors
- High fixed costs and exit barriers
- Low product differentiation
- Industry growth and low switching costs
- Low customer loyalty

BARGAINING POWER OF BUYERS

Increases when :

- Switching costs to other supplier are low
- There are many substitutes
- Buyers are price sensitive
- Buyers threaten to backward integrate
- Only few buyers exist

9P Marketing Mix

Price	Place	Promotion
The amount it costs a customer to purchase your product . It depends on packaging, discounts, timing, location, shipping & other offer-related elements.	The method of distribution for your product. It includes retail, digital, phone, chat, fax & multi-channel options	The channels you use to communicate about your product. It consists of content, communications & messaging to persuade audience to buy
People	**Product**	**Process**
It includes everyone your business touches.	The primary way you satisfy customer's needs. It includes design, packaging, quality, features, colour & size options.	How you deliver your product to the customers. It focuses on technologies to improve customer experience
Partners	**Physical environment**	**Positioning**
Other organizations who help you build or sell your product.	The space in which you interact with customers to deliver your product.	Your business must stand for something more than making a profit.

SWOT Analysis

It's a simple visual representation, which gives you a judgement about the client's position. It provides a sophisticated way to track the risk and get to know what is working well.

Strengths	Weaknesses
Opportunities	Threats

1. **S(Strengths)** - This includes the USP of the client. Try describing what distinguishes your client from the competition.

2. **W(Weaknesses)** - These are the places where the client lacks and need to improve. These may be hindrance for growth of the client.

3. **O(Opportunities)** – These are the factors that give an competitive advantage. A proper use of these chances can help in development.

4. **T(Threats)** – These are the factors that can harm our client and has a negative impact of efficiency. You should focus on finding solutions for these problems.

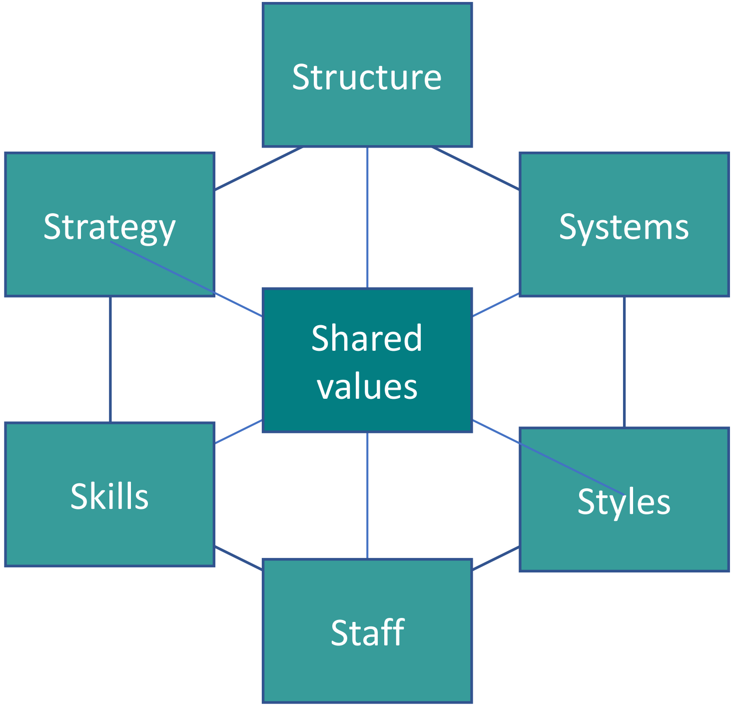
McKinsey 7-S Model

It's a tool that gives visual representation of structure of an organization. It depicts the connection between the elements

Elements are of 2 types:

Hard S's - Strategy, Structure and Systems;

Soft S's – Shared values, Skills, Staff and Styles.



1. Strategy – It's the business plan of the client to have a competitive advantage.
2. Structure – It's the way company is organized, this includes departments and units.
3. Systems – It's the schedule that staff follows.
4. Styles – It's the type of interaction by senior employees.
5. Staff – This includes the quality of recruitment and efficiency of HR department.
6. Skills – It deals with the skills possessed by the employees and their ability to complete tasks.
7. Shared values – It states the mission and objective of the organization.

The 3 C's

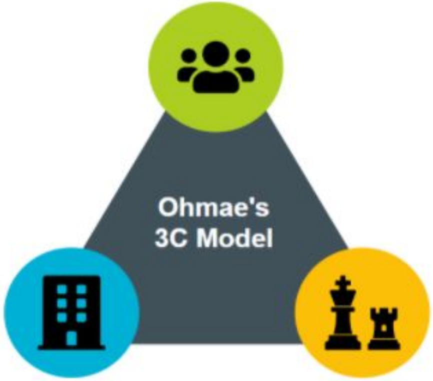
The 3Cs model is a framework designed to help companies compete successfully within a market.
The idea is to focus exclusively on the following 3Cs: Customer, Competitors and Company.

The **customer** is at the heart of the 3C model. It's important that one understands and develops a product/service with the customer in mind.

Some key questions include:

1. How are your customers segmented?
2. What are your target customers?
3. What are the customers' needs/wants?

Customers



Company **Competition**

This C is all about looking inwards at one's business and understanding the key factors that will ensure success.

Some questions may include:

1. What are your company's capabilities & expertise?
2. What is the company's brand & culture?
3. How is its financial situation?

It is important know where one stands in relation to the **competition**.

Some questions may include:

1. What is the market share and growth potential of each competitor?
2. What are the competitors' USPs?
3. How have the competitors performed?

Part B - Industry Analyses

Airline Industry

Industry Overview

- An airline can be defined as a company that offers regular services for transporting passengers or goods via the air.
- These companies are said to make up the airline industry, which is also regarded as a sub-sector of the aviation sector and the wider travel industry.

Product

- **International airlines** are a group of the largest, most high-profile and most successful airlines. These majorly cater global services, carrying passengers and cargo over large distances.
- **National airlines:** They will typically offer both medium-sized and large-sized jets and will often focus on offering services to areas within their home country, but many will offer access to international destinations too.
- **Regional airlines** are the smallest of the three main types and focus on offering services within specific regions.

Competition

- **SpiceJet Market share:** 16.0 %.
- **Indigo Market share:** 47.9 %.
- **Air India Market share:** 11.8 %.

Porter's 5 Forces

1. The Threat of Entrant is Low:

a. Huge capital investment. **b.** Economies of scale for profitability. **c.** Strong competition **d.** Regulations and need for licensing

2. The Threat of Substitutes is Moderate:

a. Indian Railways. **b.** Buses and local transportation. **c.** Car rentals and aggregators such as Ola and Uber.

3. The Bargaining Power of buyers is high:

a. Low switching cost for customers. **b.** Customers have choices. **c.** Airlines focus on brand building, brand positioning In the aviation industry, every individual customer is important.

4. Rivalry among Existing players is very high:

a. Saturated market. **b.** Few long term competitors. **c.** High exit cost

5. The Bargaining Power of Suppliers is Low:

a. Few suppliers – Boeing and Airbus. **b.** Long term contracts, loan agreements. **c.** Manufacturing costs are high

KPIs

- Departure Punctuality.
- Arrival Punctuality
- Delay Reasons
- Regularity

Alcohol Industry

Industry Overview

- India is one of the fastest growing alcoholic beverages markets globally.
- The sector is open to foreign investments and many states offer subsidies for local manufacturing (for example, Maharashtra and Karnataka for wines).
- Alcoholic beverages are among the top three sources of revenue earning across most states.
- During Covid-19 most of the states imposed additional excise duties and also included corona fee in some states which shot the prices by 25%.

KPIs

- Operating Margin
- Yield

Porter's 5 Forces

1. Threat of new entrants is low:

a. Barriers to entry into the market are higher in the liquor industry compared to the beer Industry. **b.** Competition is restricted by the regulation of Federal, State and local governments. **c.** High amount of capital is required to become a major player in the Market. **d.** Customer switching costs are low. **e.** Customer loyalty can be swayed.

2. Bargaining power of Suppliers is low:

a. The need to produce or outsource main ingredients. **b.** Ingredients are produced by many different suppliers. **c.** Bottling, labeling and distribution are provided by outsourced suppliers.

3. Bargaining power of Buyers is high:

a. Buyer choice. **b.** Many potential buyers around the world. **c.** Change cost is minimum. **d.** Product is not an essential part of life.

4. Threat of substitute is very high:

a. Many different types of alcoholic beverages customers can choose from.

5. Industry rivalry is very high:

a. Many rivalries. **b.**Market is consistently growing. **c.**Low switching costs for buyers.

Alcohol Industry

Competition

- United Spirits
- United Breweries
- Radico Khaitan
- Globus Spirits

Product

- Alcoholic drinks can be segmented into three categories - beer, wine, and spirits.
- Beer is the most consumed alcoholic drink across the globe and contains around 4-7% of alcohol.
- Wine is the second largest segment after beer and has 6-20% of alcohol in it and spirits contain 40-80% of alcohol.
- Increasing demand for craft beer is also driving the beer sales.
- Distilled Spirits is the top investment pocket in the alcoholic beverages market, attributed to boom in premium/super premium whiskey consumption, and the demand shift from beer.

Auto Industry

Industry Overview

- The Automotive sector comprises the Original Equipment Manufacturers(OEMs) at the top of the supply chain for vehicle manufacturing and the Ancillary industry, including Tier-1, Tier-2, Tier-3 manufacturers, and intermediaries.
- Currently, the automotive sector contributes 7% of India's GDP
- In 2020, India was the 5th largest auto market.
- The Indian auto sector employed over 1.36 million people year 2018.

Used Car Market

- **Ratio of new to used cars:** 1:2.2
- **Average ownership life of new car:** 4-5 Years
- **Competition:** Historically majorly unorganised sector with the recent success of eCommerce models of Droom, Ola, Cars24.
- **Recent growth:** Increased social acceptance of used cars, reduced ownership period of new cars/

KPIs

- Inventory Turnover Ratio
- Operating Margin
- SAAR
- Utilisation rate

Porter's 5 Forces

1. Existing Competition:

a. Highly competitive. **b.** Brand preference in the higher range. **c.** Price sensitivity in the lower range and ancillary market.

2. Threat of New Entrants:

a. Low. **b.** High capital requirements. **c.** Long break-even time. **d.** High sunk costs **e.** Difficulty to establish brand image.

3. Bargaining Power of Suppliers:

a. Low. **b.** Consolidated vehicle manufacturing market results in low switching cost.

4. Bargaining Power of Buyers:

a. Passenger vehicle segment consumers have moderately high bargaining power as they can switch at minimum cost. **b.** While the commercial vehicle segment with corporations as buyers have high bargaining power in the sense they can negotiate the prices.

5. Threat of substitutes:

a. As an industry, no foreseeable substitutes for owning commercial vehicles. **b.** Cab rentals and public transportation could substitute passenger vehicles. **c.** No product differentiation and high R&D cost for new technologies pose a threat of substitution among the industry players.

Auto Industry

Competition

- **Two-wheelers:** Hero, Honda and TVS
- **Passenger vehicles**; Maruti, Hyundai, Tata, Mahindra
- **Commercial:** Tata, Mahindra, Ashok Leyland-80%
- **3 wheelers:** Bajaj auto,piaggio and mahindra -60%

Product Types

- The Indian automobile market could be divided into four main segments - two-wheelers (motorcycles, geared and ungeared scooters), three-wheelers, passenger vehicles (cars and utility vehicles), and commercial vehicles (light, medium and heavy).
- The two-wheelers segment dominates the market in terms of volume.

Growth Drivers

- Increased availability of credit and financing.
- Increase in income
- Vehicle Scrappage Policy

Future prospects and government policies

- **BS-VI**- Emission control, fuel efficiency and engine design improvements.
- **EVs**: Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India, (FAME India) Scheme Phase II to promote electric vehicles.
- **Digital Presence:** In-car Digital services, including entertainment, navigation, upgrades, servicing and customisations as a significant revenue driver.

Defence Industry

Industry Overview

India has the world's 2nd largest military force and world largest volunteer military, with 1.44 Mn active members.
It has the 3rd largest yearly spending next to the US($732 Bn) and China($261 Bn).
The Indian military has a budget of Rs. 5.25 lakh crore for 2022-23, and is also worlds 2nd largest defence importer, and imports only from Saudi arabia.80% of This sector is owned by the government and will open up 25% of RnD budget for collaboration with the private sector.
Major companies under the sector are,

- Hindustan aeronautics limited
- Bharat electronics limited
- Bharat dynamics LTD
- BEML limited
- Mazagon dock shipbuilders limited
- Hindustan shipyard LTD.
- Private sector: tata advanced systems limited, mahindra defence systems.

Porter’s 5 Forces

Players in the defence manufacturing:
Hindustan Aeronautics Limited(HAL): It was founded in 1940, it builds and assembles aircraft and engines using licence. It also develops and designs domestic aircrafts.

Bharat Earth Movers Limited(BEML): It was founded in bengaluru in 1964, and manufactures railway coaches, spare parts, and mining equipment. These products are exported to more than 67 countries and the company’s 54% stock is owned by the government.

Bharat electronics limited(BEL): it was established in 1954, and manufactures specialised electronic equipment for defence services which are used for communication, weapon system, telecom and broadband system, etc.

Mazagon Dock Shipbuilders: also called the ‘ship builder of the nation’, mainly works on construction of warships and submarines and have facilities in Mumbai and Nhava.

Service wise capital outlay,

- Army - Rs.32,015 cr
- Navy -Rs. 47,590 cr
- Indian Air Force - Rs. 55,586 cr

Defence Industry

PEST CONTROL ANALYSIS

1. **Political and policy**
- It has government support, political stability and regulatory effectiveness
- There may be corruption prevailing within the sector
- Defence is the highest priority of the natio

2. **Economical**
- It's one of the fastest growing economy in the world
- There is an annual increase in the budget of 8% on avg
- Largest importer of arms

3. **Social**
- Constant threats from terrorist, international disputes
- Low cost labour
- 2nd largest army
- Skilled manpower required is available

4. **Technological**
- Facilities available for development of industrial base of RnD, MRO, eg, DRDO,HAL
- Experience of producing defence equipment at low cost
- Talented workforce suitable for the industry is available

Electrical & Electronics Industry

Industry Overview

- The electrical and electronics industry is the economic sector that produces electronic devices.
- It emerged in the 20th century and is today one of the largest global industries
- India has developed as one of the world's greatest marketplaces for electronic items, with per capita disposable income and private consumption having doubled in the last seven years.
- Major Competitors: Apple Inc,Samsung Electronics, Hon Hai Precision Industry ,Huawei,Dell Technologies,Hitachi,Sony etc.

KPIs

- Market share and price protection
- Cost of Raw Materials
- Working capital management
- Inventory Turnover Ratio
- Current ratio

Major Product Types

This industry can be classified into two categories:

- 1. **Consumer electronics:** They are electronic (analog or digital) devices designed for regular usage in private residences. Devices utilized for amusement, communication, and recreation are referred to as consumer electronics. Examples include Televisions, personal computers, smartphones, laptops, etc.
- 2. **Consumer appliances**: They are machines that help with domestic tasks such as cooking, cleaning, and food preservation both for domestic and industrial purposes. Examples include Washing machines, Fans, microwaves, refrigerators, ACs, etc.

Electrical & Electronics Industry

Porter’s Five Forces

- **Competition in the industry**: The electronics industry is a very competitive one. The competition has increased recently to new heights due to the saturation of products in the region and worldwide. Established firms use aggressive pricing and marketing strategies to protect their market share. Newer players are diversifying their product line.

- **The Threat of New Entrants:** If the new venture can offer a high-quality product at a lower cost to the customer, it will have an easy time breaking into the market. It may compel a current member to reduce their earnings in order to keep their clientele. Due to the sector's capital-intensive nature, the threat from domestic producers is modest. New players from China and Taiwan are continually entering the Indian market (particularly in the mobile devices category). E-commerce makes it simple to create a brand and also serves as a sales platform.

- **Bargaining power of customers:** The buyer's power is high in this case. When there are numerous options accessible on the market, and they can quickly switch, the consumer has the upper hand. Additionally, the availability of both online and offline sales channels expands the alternatives. Buyers have access to a wealth of product information that aids in comparison.

- **Bargaining power of suppliers**: The electronics industry relies on suppliers for raw materials and parts. The sector is horizontally connected. If the supplier's future integration with the company and alternative supply choices are available, the supplier can exert its authority. Bargaining power is currently low. At the component level, product differentiation is minimal. Competition from neighboring countries such as China, Taiwan, Malaysia, and others is fierce.

- **Threat of Substitutes:** With the passage of time, the electric industry evolves. Companies continue to develop new technology in order to provide customers with new items. They must create new products to compete with those already on the market. It may reduce their profit margin, but it will keep them ahead of the competition. In the immediate term, the threat of substitution is minimal, but Chinese enterprises could offer a higher-level concern in the long run.

FMCG Industry

Industry Overview

- Fast-moving consumer goods (FMCG) sector is India's fourth largest sector. The urban segment (accounts for a revenue share of around 55%) is the largest contributor to the overall revenue.
- Semi-urban and rural segments are growing at a rapid pace and FMCG products account for 50% of the total rural spending.The rural FMCG market is expected to expand to US$ 220 billion by 2025.
- Final consumption expenditure is set to increase at a CAGR of 25.44% during 2017-2021.The Indian processed food market is projected to expand to US$ 470 billion by 2025, up from US$ 263 billion in 2019-20.
- Favourable demographics and rise in income level will boost the FMCG market. Demand for quality goods and services is on an upward trajectory in rural areas.

KPIs

- Out of stock rate
- Average time to sell and inventory cost
- Sold products within freshness date
- Supply chain cost vs sales
- On shelf availability

Porter's 5 Forces

1. <u>Bargaining power of Suppliers:</u>

a. Small and fragmented suppliers have limited bargaining power. Larger FMCG companies can negotiate better rates during times of high input cost inflation. b. Ample number of substitute suppliers available so the bargaining power of the suppliers is low in this industry.

2. <u>Bargaining power of Buyers:</u>

a. The low switching costs make it easy for consumers to transfer from one company's products to other products. b. Bargaining power of Buyers is high.

3. <u>Competition in the Industry:</u>

a. With more MNCs entering the country, the industry has become highly Fragmented and competitive for domestic players. b. Competitiveness among Indian FMCG players is high.

4. <u>Threat of Substitute Products:</u>

a. The low switching costs enable consumers to easily use substitute products. b. Narrow product differentiation and hence, high threat.

5. <u>Potential of New Entrants:</u>

a. Huge investments are required in establishing brand identity and setting up distribution networks. b. The threat of new entrants would not affect the already present big players.

FMCG Industry

Value Chain

- Manufacturing: Production planning and efficiency, Quality assurance
- Logistics: Inventory management, Location analytics, Supply chain analysis, Resource and route optimization
- Marketing: Brand marketing, Pricing, ROI, Competitor knowledge
- Business Management: Workforce and finance management, business process and sustainability.

Product

- food and beverages, which accounts for 19% of the sector; healthcare, which accounts for 31% of the share; and household and personal care, which accounts for the remaining 50% share.
- F&B: health beverages, staples, bakery products, snacks, chocolates, vegetables and fruits, ice cream, dairy products, tea coffee, soft drinks, etc.
- Healthcare: includes OTC products and ethicals.
- Household and Personal Care: oral care, skin care, hair care, cosmetics and toiletry.

Growth Drivers

- Growing awareness, easier access, and changing lifestyle are the key growth drivers for the consumer market.
- Organised sector is expected to grow as the share of the unorganised FMCG market has seen a fall with increased level of brand consciousness.
- Rural consumption has increased, led by a combination of increase in income and higher aspiration levels.
- Availability of products has become way easier as the internet and different channels of sales have made the accessibility of desired products to customers more convenient.

Trends

- Consumers are becoming more conscious of climate change and its impact on the environment. Thus, they pay more attention to companies' social activities and seek those that offer more responsible product choices.
- Social media also plays a significant role in the world of e-commerce as more items are sold via social platforms such as Instagram. To this end, FMCG startups actively incorporate diverse media, leveraging mobile and headless commerce, to market their products.
- AI-powered solutions, such as Machine Learning (ML) and Natural Language Processing (NLP) are gaining popularity and creating opportunities for the FMCG industry.
- FMCG companies leverage 3D printing for prototyping, designing, tooling, and scaling production in a sustainable manner.

Hospitality & Tourism Industry

Industry Overview

- The Indian tourism and hospitality industry has emerged as one of the key drivers of growth among the services sector in India. This industry in India has become one of the largest Foreign Exchange Earners. The hospitality and Tourism industry refers to a variety of businesses and services linked to leisure and customer satisfaction. It needs effective revenue management strategies to maximize profits with an added revenue optimization method. Technology and marketing trends and customer loyalty play very important roles in this sector.

KPIs

- Foreign Tourist Arrivals
- Non-Resident Indians arrivals
- International Tourist Arrivals
- Domestic Tourist Visits to all States/UTs
- Indian Nationals' Departure
- Foreign Exchange Earnings from Tourism
- International Tourism Receipts
- Revenue per available room
- Hotel occupancy rate

Porter's 5 Forces

1. **Bargaining power of Suppliers** - Low; a Large number of service providers, Low and indirect pressure on competitiveness, this industry is demand-driven.
2. **Bargaining power of Buyers** - High; There are many substitutes available, it is a demand-driven industry
3. **Rivalry among existing competitors** - High; a large number of hotels, tour operators, High capital costs, pressure to sell capacity by price-cutting is high.
4. **Barriers to entry** - Moderate; generally high capital costs, existing players have advantages like brand image and customer loyalty.
5. **Threat of substitutes** - HIgh; players provide products in all price ranges, with variations in the levels of service and the amenities. Large availability of attractions, packages, and hotels

Hospitality & Tourism Industry

Competitors

- Major competitors in hospitality are Taj Hotels, The Oberoi Group, ITC Hotels, Marriott International, Airbnb, OYO Rooms.
- Key players in the tourism market are - MakeMyTrip, Thomas Cook, Cox & Kings, Yatra, Kuoni, SOTC, Akbar Travels of India, Clear trip, Expedia, Goibibo, Easy My Trip

Trends

- Staycation is seen as an emerging trend were people stay at luxurious hotels to revive themselves of stress in a peaceful getaway.
- The industry is also looking forward to the expansion of e-Visa scheme, which is expected to increase the tourist inflow in India.
- Cloud kitchen is emerging as an alternative as it can be setup with a very low Capital Expenditure as compared to a Cafe or Restaurant and helps in the operation of a chain of restaurants; Dark Kitchen, also known as virtual kitchen are also seen in increasing numbers.

Product

The industry has four significant sub-sectors:

1. Hotels
2. Facilities management
3. Restaurants
4. Tour and travel

Hotels are divided into 3 major categories based on -

1. Location 2. Service 3. Themes

Facilities management is mainly divided into 2 categories-

1. Soft services - Focuses on human interaction and division of labour
2. Hard services - Focuses on physical structures which consist of water management, energy management, etc.

Tour and travel is subdivided into categories like -

1. Wellness Tourism
2. Religious Tourism
3. Heritage Tourism
4. Medical Tourism
5. Sports & Adventure Tourism
6. Niche Tourism
7. Nature, Eco & Rural Tourism
8. Wildlife Tourism
9. MICE (Meetings, incentives, conferences and exhibitions).

IT Industry

Industry Overview

- In a general term, this sector is related to any stock that is involved in research and development and distribution of technology-based services.
- They are often looked upon as indicators that tell us how the economy and stock market are performing.
- The IT-BPM sector stood at 191 billion USD in India in FY 2020.
- India is the number one sourcing destination for IT globally and has the largest market share in the sourcing industry globally
- This sector offers some of the highest returns on all market sectors and carries little to no inventory/ assets.
- They offer a large number of investment opportunities or issue large amounts of debt to fund their R&D requirements.
- They need to frequently adapt and innovate due to changing technologies. Most seek to be acquired instead of generating profits.

KPIs

- IT ROI
- Number of critical bugs
- Projects delivered on time and budget
- Server downtime
- New developed features

Porter's 5 Forces

1. Bargaining Power of Suppliers:

a. There is a large supply in the IT sector (especially low-end) which is a little less in high-end areas accompanied by high competition. **b.** Due to this, suppliers highly lack bargaining power

2. Bargaining Power of Buyers:

a. Due to minimal entry barriers for new entrants, the IT sector has a substantial number of players in India as well as across the world. **b.** Consumer or buyer become dependent on the companies upgrades, additional features, and technological requirements leading to high switching costs (unique products) and hence it becomes hard for them to switch. **c.** Thus, buyers have medium bargaining power.

3. Competition in the Industry:

a. There is global competition. **b.** Low initial capital and investment. **c.** High competition.

4. Threat of Substitute Products:

a. IT sector is constantly coming up with new technologies. **b.** Medium Threat

5. Potential of New Entrants:

a. Low initial capital, as well as government policies such as software parks, low taxes, etc., and high availability of venture capitalists and angel investors favor entrepreneurs and new players in this sector. **b.** High demand and margins also favor new entrants **c.** However, a certain threat to the new entrants is brand image and company scalability. **d.** Players who have a bigger, better brand image and have been in the game for longer have an advantage. **e.** However, on balance the potential of new entrants is high.

IT Industry

Value Chain

- **Plan**: Strategy to portfolio
- **Build:** Requirement to deploy
- **Deliver:** Request to fulfill
- **Run:** Detect to correct

Growth Drivers

- Strong increase in domestic and export demand.
- Adaption and promotion of technologies such as blockchain, cloud computing, AI/ML by various other sectors as well as government.
- Benefitting government policies such as tax advantages and established SEZs.
- Availability of huge manpower. India has 50% of the world's Global Capacity Centers.

Product

- Broadly the products include software, computers and hardware, electronics, websites, and other products related to information technology.
- IT Software: Software for documentation, various services like banking, security, etc.
- ITES Business Process Outsourcing - Back office operations which are outsourced elsewhere then done in house
- Hardware and Peripherals: Products such as laptops, monitors, etc.
- Education: Certification courses and Training

Trends

- Blockchain, Cybersecurity, and Artificial Intelligence are growing hugely in terms of employment. Internet of Things and Machine Learning are seeing huge market penetration and growth.
- With data volumes and sources exploding, businesses will look for modern platforms and approaches, such as data fabrics, that bring the composable stack and distributed data together. Finding ways to integrate siloed data for actionable insights will be top of mind for businesses in 2022.
- We can see more and more technologies that integrate sustainability at their core. It is becoming critical for companies to build products and services that serve environmental and sustainability goals.
- Virtual Reality is gaining huge interest, both from customers and providers. Major players such as Google, Samsung, Oculus along with many startups are investing in this line.

Pharmaceuticals Industry

Industry Overview

- The pharmaceuticals industry is the framework that supports the medical world, drip-feeding medicine and treatment to hospitals, pharmacies, and patients in need to maintain our country's fighting fit. Over the last five decades, the Indian pharmaceutical industry has seen substantial growth in both home and international markets. As one of the top ten industries in lowering trade deficits and attracting Foreign Direct Investment, the pharmaceutical industry has made a substantial contribution to India's economic growth (FDI).
- Competitors:Major players in the pharmaceutical industry are Johnson & Johnson, Pfizer Roche,Novartis ,Merck & Co,GlaxoSmithKlin etc.
- In India the industry is dominated by Sun Pharma,Dr Reddy ,Cipla Industry and Divil's Laboratories.

Important Project types

Different pharmaceutical businesses specialize in different sorts of pharmaceutical formulations. Furthermore, these formulations utilize a variety of active ingredients, fillers, and additives. As a result, the most common forms of pharmaceutical items that pharma companies concentrate on are Oral medications, Formulations for parenteral administration ,Medicines for use on the skin,Formulations for modified release,Oncological Formulations and Formulations for New Drugs.

Pharmaceuticals Industry

Porter's 5 Forces

New Entrants: The pharmaceutical industry's long-term viability is dependent on its concentration on research and development. Furthermore, the government's tight rules and regulations governing the approval of new pharmaceuticals must erect a significant barrier in terms of expensive capital expenditure. Other hurdles, including developing effective distribution strategies, selecting the correct goods to research and invest in, and anticipating competition, among others, are preventing new entrants from entering the pharma business.

Bargaining power of suppliers: In the market, suppliers have very little bargaining power. Because pharma is such a well-established sector, many suppliers have limited their ability to affect price through bargaining. Chemicals are treated as commodities in the pharmaceutical sector, which leads to a high rate of moving between suppliers without incurring a substantial cost. Supplies, on the other hand, can opt for forward integration and become a pharmaceutical company.

Substitution: One of the pharmaceutical industry's biggest benefits is the availability of alternative products. Pharmaceutical products continue to be in high demand, and the business is thriving.Because the cost of producing generic drugs is so low, the pharmaceutical business confronts a lot of competition in terms of substitute products. If the patent on the original product has expired, customers can discover a generic drug to replace it. Generic medicine makers will have excellent potential for utilization and volume trends in the next few years.

Bargaining power of buyers: Purchasing a product is influenced by two types of people: the influencer and the customer. In many businesses, buyers and influencers are interchangeable; but, in the pharmaceutical industry, the ultimate user of the product is distinct from the influencer. Patients, family members, the PBAC (Pharmaceutical Benefits Advisory Committee), the PBPA, finance departments, hospital boards, tender boards, chief pharmacist, and a variety of other buyers, depending on the specific business, are among the buyers, with the doctor prescribing the drug being the main influencer. Consumers have little choice but to buy what the doctor suggests, thus influencers play a critical role.

Competition: Since the adoption of a new method in the pharma sector, which must result in a very low entry barrier, competition amongst industries has intensified. If competitors are vying for market share, rivalry can be fierce; however, if the entire market is growing or the company's position is secured by patents, rivalry is likely to be mild. If there are no prospective "blockbusters" in the pipeline, weak, small businesses frequently go out of business (bankruptcy).

Power Industry

Industry Overview

- Power is one of the most important components of infrastructure, as it is essential for a country's economic growth and welfare.
- The availability and development of suitable infrastructure are critical for the Indian economy's sustained, long-term growth..
- The Indian government's aim of achieving 'Power for All' has sped up capacity addition in the country..
- At the same time, both the market and supply sides are becoming more competitive (fuel, logistics, finances, and manpower).

Competitor Analysis

- This sector is mainly dominated by PSUs like NTPC, Power Grid Corporation of India Ltd (PGCIL), NHPC, and SEBs (State Electricity Boards).
- Other than these there are some private sector players like Adani Power, Tata Power, JSW Power, Torrent Power.

Porter's 5 Forces

- 1.Bargaining power of Suppliers - High; a small number of suppliers enjoys monopoly which adds to supplier power. However, because the tariff structure is largely regulated, bargaining power is not very high.
- Bargaining power of Buyers - Low; Customers do not frequently change their electricity supplier, despite the fact that switching costs are modest and electricity is an undifferentiated product.
- Rivalry among existing competitors - Low; as there are a small number of players. New entrants have been deterred by a lack of inputs and regulatory barriers.
- Barriers to entry - High; It is a highly capital-intensive industry and so demands vast investment. Particularly in the transmission and distribution portions, which are generally monopolised by the government. High fixed costs, fuel connections, and payment assurances from state governments buying power and retail distribution licenses are also obstacles.
- Threat of substitutes - Although there is no alternative for power, it may be created through a variety of energy sources. In India, thermal power is currently dominating, with coal serving as the primary raw material. Because coal is limited, electricity from nuclear, hydro, and other renewable resources might be utilised to replace thermal power in the future.

Power Industry

Products

- India's power sector is one of the world's most diverse.
- Traditional sources of power generation include coal, lignite, natural gas, oil, hydro, and nuclear power, as well as feasible non-conventional sources including wind, solar, and agricultural and domestic waste.
- Thermal power is the predominant type and renewable energy is the second-leading energy source in India.

Government Initiatives and Policies

- Ujjwal DISCOM Assurance Yojana (UDAY) -
- Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA)
- Integrated Power Development Scheme
- Deen Dayal Upadhyaya Gram Jyoti Yojana
- SHAKTI Scheme
- Green Energy Corridor Project
- The Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM)
- These are some of the initiatives by the government of India to provide energy supply across India and to promote the use of renewable sources of energy.

Value Chain

- Generation - PSUs are ahead of private players in power generation. Coal accounts for the majority of power generation. Thermal power constitutes a big part of the total generation capacity followed by renewable sources and nuclear power
- Transmission - Transmission is carried out primarily by central and state companies and largely remains a government-controlled activity. Power Grid Corporation of India (PGCIL) is the main entity in this area
- Distribution - Distribution includes maintenance of the distribution network and retail supply of electricity to the consumers. It is mostly carried out by state-owned distribution companies (Discoms) but some private players do exist. Discoms purchase power from generation companies through power purchase agreements (PPAs) and distribute it to their consumers (in the area of distribution).
- Trading - Power trading is the practice of purchasing and selling electricity at Power Exchanges that have been approved by the Central Electricity Regulatory Commission (CERC). IEX and PXIL are energy exchanges in India

KPIs

- **Efficiency Indicators:**
- Power Cuts & Average Duration
- Consumption by Sector
- Total Shareholder Return
- Operating Cash Flow
- Per Capita Power Consumption
- Production Costs
- Energy Production Distribution

Retail Industry

Industry Overview

- India has the 4th largest retail market, which contributed 800 Bn to India's GDP in FY20, and has employed 8% of the country,and is expected to create 25 Mn new jobs by 2030.
- Market is estimated to reach 1.5 tn by 2030, with ecommerce to grow by 84% till 2024.
- Organized market has increased by about 50% in the period from 2012 to 2020, and the industry is expected to grow at a CAGR of 15% and reach to 18% by 2025.
- This will be fueled by the growing spending capacity of consumers from $1.5tn today to $6tn by 2030.
- This rising demand has led to 96% of precovid sales in September 2021.
- Online shoppers are expected to reach 500Mn in 2030, and Rural per capita consumption will grow 4.3 times by 2030, and Urban Per capita consumption 3.5 times.

KPIs

- Price to earning ratio:
- Debt to Equity Ratio (D/E)
- Return on capital employed
- Price to book ratio
- Return on total assets
- Return on invested capital
- Return on revenue

Porter's 5 Forces

Threat of new entrants: The unorganized sector of Indian retailing consists of retailers who are close and connected to the consumer and have better understanding of the needs, but are easy to enter into due to their weak financial position. Building and developing sustainable supply chain, land and location, marketing and workforce management is capital intensive, and needs the entrants to have financial strength. The increase in market size, and growth offered by industry, along with the user acceptance, provides a possibility of market entry by financial strong foriegn firm.

Threat of substitutes: according to joseph et al(2008), the retail market is expected to have coexistence of organized and unorganized retailing. But such coexistence often brings the threat of substitution. A hypermarket can substitute supermarket or specialty stores, even though it is more evident in recent time that ecommerce sites have become strong alternatives for many store based retailers, thus the Indian retail industry has a high threat of substitutes.

Bargaining power of suppliers: due to high threat of new entrants and substitutes, the existing retailers have low bargaining power.

Bargaining power of customers: It is feasible for the consumer to switch to different brands and with the growth of ecommerce, consumers have more bargaining power.The consumers are more informed about the products and price, giving them the edge and more bargaining power.

Competitions: The industry has a medium competitive rivalry. There is a lot of untapped market and the competition present today is between the urban and organized players who are planning on expanding business.

Retail Industry

Important Aspects to look into for client

1. **Position:** the position or the location of the store of the client has a major influence on the revenue generated and the labor cost.
2. **Store layout:** and appearance of the store plays a prominent role in deciding the movement and the thoughts of customers when they enter the store, and this can be exploited to generate better profits for the client.
3. **Storage:** is important for a client in the retail industry and depending on the efficiency of the client to handle storage, the profits may vary, one should try to keep the costs low by improving the management of the storage.

Product

- Food and grocery retail:Indian households spend about 48% of income on food and beverages which is highest in the world. Food consumption of the country is Rs. 9,000 Bn with Rs.3,300 consumed by urban population. Large food players are able to tap only 5% of the total market and 15-20% of the urban market.
- Pharmaceutical retail: About 15% of the 51 lakh retail stores in India are chemists. The pharma retailing market is estimated at Rs 300 Bn.
- Consumer durables retail: This sector is estimated to have a size of US $4.5 Bn, and have 5% captured by organized retailing. The sector can be categorized into consumer electronics and appliances.

Competitors

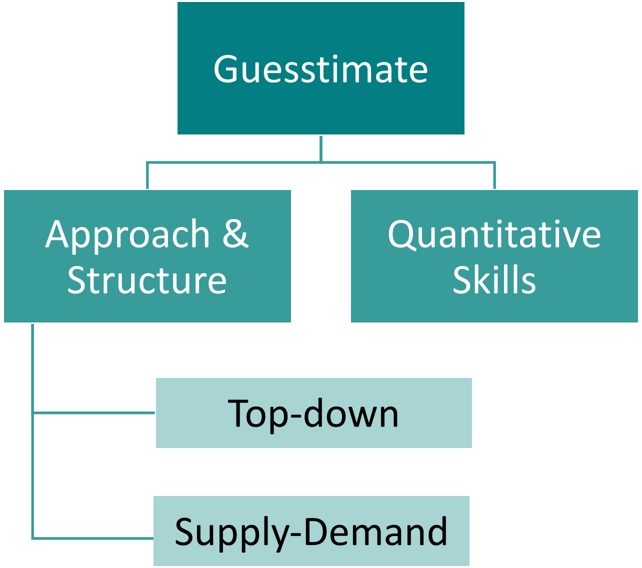
Major competitors/players in

- **Food and grocery retail:** Big bazaar, DMart, Reliance Fresh, Star Bazaar, more retail.
- **Pharmaceutical retail:** Apollo Pharmacy Private Limited, Emami Frank Ross Limited, MedPlus Health Services Private Limited, Netmeds Marketplace Limited, RWL Healthworld Limited and The Himalaya Drug Company Private Limited.
- **Consumer durables retail:** Bajaj Electricals Ltd, Blue Star Ltd, Crompton Greaves Consumer Electricals Ltd, Godrej & Boyce Manufacturing Company Ltd, IFB Industries Ltd, Johnson Controls-Hitachi Air Conditioning India Ltd, Philips India Ltd, TTK Prestige Ltd, Voltas Ltd, Whirlpool of India Ltd

Part C - Guesstimates

Structure and Approach

Steps:
1. Clarify the question
2. Break the Problems
3. Solve each part
4. Combine and consolidate into final results.
5. Think of alternatives
6. Do a sanity check
7. 4 key factors to split
    1. Rural-Urban
    2. Age
    3. Gender
    4. Income



G1 - Number of cups of tea drunk in India in a week

Considerations

- Take into account that tea drunk by end-consumers and not used for further industrial processing.

Assumptions

- 30 % percent of our population do not drink any beverages because they are under the age of 18.
- 20 % percent of our population prefer different beverages such as coffee , green tea etc.

1. **Therefore remaining 50 % can be broken down into three categories**
    - **A quarter drink 1 cup per day.**
    - **Half drink 2 cups per day,**
    - **A quarter drink 4 cups per day**

2. This averages out to 2 × 0.5 + 4 × 0.25 + 1 × 0.25 = 2.25 cups per tea drinker per day.

3. Population of India = 1.4 billion people.

4. Hence the calculation would be **.50 * 1,400,000,000 * 2.25 = 1.575 billion** cups per day.

5. Hence on a average no. of cups of tea drunk in a week is 1.575 billion *7 =11.025 billion cups.

Number of cups of tea drunk in India = 11.025 billion / week

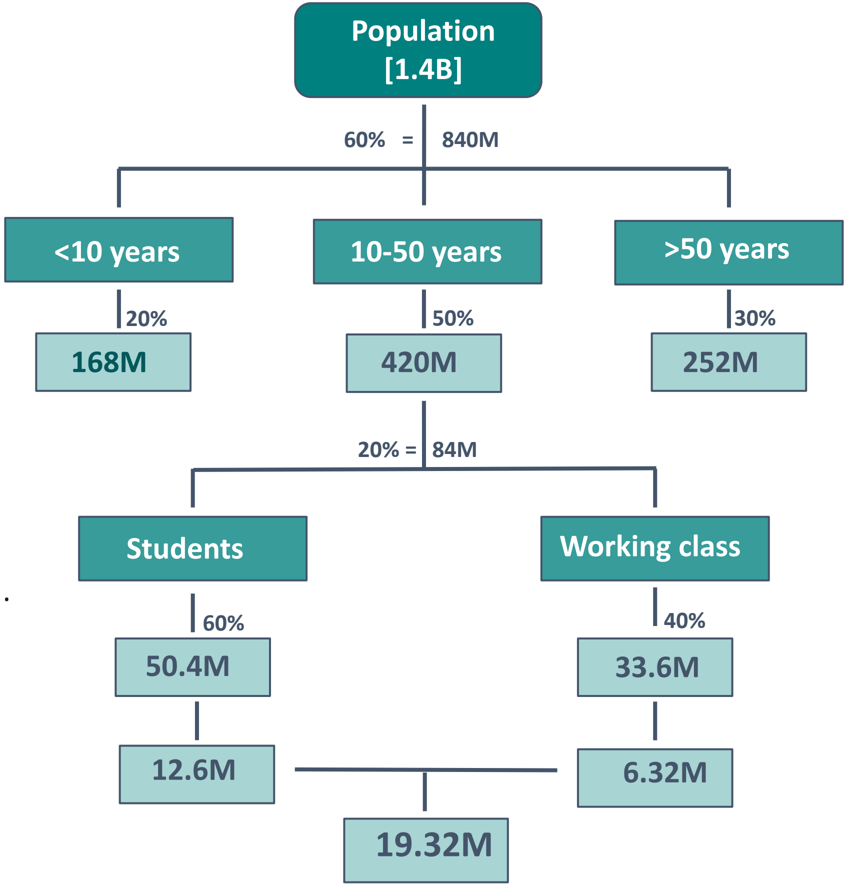
G2 - Calculate the number of daily active BGMI players

Easy

Assumptions

- Population of India = 1.4 billion
- Playing BGMI is directly associated with Internet penetration = 60% in India = 840 million

- We divide the population of India into 3 different age groups
  <10 years - 20% - 168 million
  10 - 50 years - 50% - 420 million
  >50 years - 30% - 252 million
- The main demographic for bgmi is the age group of 10 to 50 years. This age group can further be divided into students and working class.
  In this pacific age group,
  Students - 60%
  Working class - 40%
  There are similar games to BGMI that have existed for a greater part and have thus a similar playerbase. Similar other games include Free Fire, CODM.
  We consider : 20% of the total database = 0.2 x 420 million = 84 million
  Students - 50.4 mil
  Working Class - 33.6 mil
- **Assuming 25% of students and 20% of adults play BGMI daily,**
  Total player base acquired = 0.25 x 50.4 + 0.20 x 33.6 = 19.32 million



G3 - Number of times biryani is sold per day in Hyderabad

Easy

Assumptions

- Number of restaurants in Hyderabad = 1000
- Number of restaurants providing dine in/ take away service = 30% = 300
- Number of restaurants providing online services along with dine-in and take away = 70% = 700

Biryani sold by each restaurant per day only providing takeaway/dine in=20 (Morning) + 50 (Noon) + 20(Night) = 90
Biryani sold by these restaurants= 90*300 = 27,000

Biryani sold by restaurants per day providing both delivery and dine in=25(morning)+70(noon)+35(night)=130
Biryani sold by these restaurants=130*700 = 91,000

Total number of restaurants in Hyderabad [1000]

Only Take-away/Dine-in

30%

300

Take-away/Dine-in and delivery

70%

700

Total number of times biryani is sold per day in Hyderabad=91000+27000= 118,000

G4 - Daily data consumed by students of a college in online classes

Medium

Do we consider B.E students or ME/PhD's as well?
Only the B.E students including the dualities.

It is a weekday or Saturday (half-day)?
Weekday

1. **Number of students:** 1200 (Year 1) + 1100 (Year 2) + 1000 (Year 3) + 600 (Year 4 and 5) = 3900
2. Percentage of students attending lectures :
   - Year 1 : 90%
   - Year 2 : 25%
   - Year 3 : 25%
   - Year 4&5 : 25%
3. Average number of lectures per day : 5 (25-30 per week)
4. Data consumed per meet in an hour : 350 MB

Year	Total Students	% Attendance	Net students
1	1200	90	1080
2	1100	25	275
3	1000	25	250
4 & 5	600	25	150

1755 ~ 1800

Total amount of data used by BITSians in online lecture is :
1800 * 0.35 * 5 = 3,150 ~ 3200 GB

Total data consumed by BITSians per day : 3200 GB

G5 - Number of surgical mask consumed in an hospital everyday

Medium

- There are a couple of things I'll like to clarify,
  Where is the hospital located, what type of the hospital, and at what scale does it operate?

- You can consider it to be a govt. Hospital in a metropolitan city.

- Is the guesstimate calculated based on situations post covid?

- Yes, you have to consider covid- 19 while calculating the number.

- Should I consider it on a weekday or weekend, as footfall is considerably reduced during holidays?

- You may proceed with a weekday.

Let's assume the total number of people present in the hospital at a time to be 2000, and 40% be medic and non-medic staff, 15% covid patients and 25% noncovid patients, and the remaining 20% visitors.

I will now define the time spent by the category wearing mask inside the hospital,

1. Medic and non medic -> 24 hours
   // Considering their constant interaction with patients
2. Covid Patients -> 24 hours
   // As a securing measure to stop the spread within the hospital
3. Non covid patients -> 4 hours
   // As precautionary measure to avoid contact
4. Visitors -> 4 hours
   // Assuming a visitor spends 4 hrs on an average during the visiting hours (9 to 5)

- Looks fine, you can now calculate the number of masks sold.

Assuming that all of the above categories use only surgical masks bought in the hospital and the average duration of a surgical mask used in the hospital to be 2 hours
The total number of masks used by each category is,
Medic and non medic -> (40% of 2000)*(24hrs / 2 hrs) = 9600

G5 - Number of surgical mask consumed in an hospital everyday

- Covid Patients -> (15% of 2000)*(24hrs / 2 hrs) = 3600
- Non covid patients -> (25% of 2000)*(4 hrs / 2 hrs) = 1000
- Visitors -> (20% of 2000)*(4 hrs / 2 hrs) = 800

- This seems good, please conclude.

Considering a constant footfall of 2000 on a weekday in the hospital, my calculation leads to 15,000 surgical masks sold in the hospital per day.

G6 - Amount of petrol consumed in Hyderabad in a day

- **I would like to clarify a couple of things.**

- Yes, sure.

- **Petrol has various uses, including industrial power. Do you want me to estimate petrol usage only for vehicles or for other purposes as well?**

- You can calculate petrol usage only for vehicles.

- **Thanks, should I consider a regular office/ school going a day or a weekend, as both of them will have vast differences.**

- Proceed with a weekday.

- **Okay, I will state some assumptions initially. Buses run on diesel while, autos run on CNG. Hence we'll be considering cars and bikes only.**

- Sounds good, continue.

- The population of Hyderabad is around 7 million. Out of this, we'll remove the 30% lower income and 30% lower-middle income population, resulting in a figure of approx **2.8 million.**
- Out of them, around 2.1 million (30% of 7 million) lie in the upper-middle-income group while the remaining 700k people constitute the higher income group.

- Looks fine, you can go ahead.

1. We can say that every person in the higher income group owns 2 or more cars. However, for the purpose of our calculation, we'll consider only 1 car, assuming that on a given day, an individual uses 1 car only. This gives us **700,000 cars.**
2. Out of 2.1 million upper-middle-income people, 80% of them own a car, giving us a figure of around **1.7 million cars.**
3. Our total count of cars is now **2.4 million**.
4. On a random day, we can say, approx 50% of these cars hit the road and travel 30 km on average. That is 1.2 million*30km, giving us a total distance of **36 million kilometers.**

G6 - Amount of petrol consumed in Hyderabad in a day

But these are both, petrol and diesel cars. Petrol cars constitute approximately 70% of the division. Hence, we get our required distance to be around **25 million kilometers.**
The average mileage of a petrol car is 18 kmpl. Thus we get petrol usage for cars to be approximately **14 million liters**.

- Fair enough. You can now do the same for bikes.

1. When considering bikes, we will bring the lower-middle income group into the picture. Out of their 2.1 million population, we can assume around a million of them have bikes. Further, 30% of upper-middle income groups can be considered to have bikes, giving a figure of approximately **600k.**
2. We have a total of 1.6 million bikes. On a random day, say 70% of bikes hit the road; that is, **1.1 million.**
3. Considering 30km per bike, we get a total distance equal to 33 million kilometers. The average mileage is 70 kmpl and hence total petrol used here will be around **50k liters.**

- This seems to be right. Anything else to add?

- In the above calculations, we have not considered the taxi service. Knowing that the population of Hyderabad is 7 million, we can estimate the number of taxis to be around 3% of that figure, giving us a value of around **200k taxis.**
- These taxis can be estimated to travel 100km a day → **20 million kilometers.**
- Again, 70% of this value (traveled on petrol and not diesel) will be **14 million km.**
- Considering the average mileage of 18 kmpl, we get petrol usage to be approximately **800k liters.**

- Great, any concluding remarks?

Adding our estimates for both cars and bikes, we get a figure of 14.85 million liters of petrol used in Hyderabad in one day for travel purposes. Thank you

- **I would like to start by asking a few clarifying questions.**

- Sure, go ahead.

- **By the phrase in a day, do you mean a regular weekday or weekend?**

- We would like you to calculate for a regular weekday.

- **Okay. We know that the Indian population is around 1.4 billion people. However, 40% population of the nation is deprived of the internet.**
  We will be considering that those 560 million people can hear music on radios while the other 840 million do so using the internet.

- Sounds fine. You may continue.

I will now divide this remaining population into 3 different age categories.
Children below 10 years can be said to not hear music.
Remaining Population: 720 million

1. **Category 1: 10-30 years → around 180 million**
2. **Category 2: 30-60 years → around 480 million**
3. **Category 3: 60+ years → around 60 million**

The 3 groups have been divided to accommodate the general trend of higher inclination towards listening to music in the respective categories in the respective order.

- Fair enough.

All three categories can be further divided into people who listen to music for at least 15 minutes or less than that.
Since we are considering a regular weekday, the factor of time spent on work/ classes will have to be considered in our calculations.

1. **Category 1: 55% of 180, giving us 100 million people**
2. **Category 2: 35% of 480, giving us 170 million people**
3. **Category 3: 20% of 60, giving us 10 million people**

- Good. Now do the radio part.

- First, we will deduct 20% of people considering they do not own a radio → **440 million**
- Out of these, I would like to remove 15% of people (below 10 years) → **380 million**
- The remaining 380 million people can be subject to similar analysis as done before. Hence, we'll get a number of around **120 million.**

- Great. Any concluding remarks.

We will get a total number of 400 million people approximately in India who listen to music for at least 15 mins. This value seems fair considering the total population of India, the number of people with access to music streaming services, and the non-tangible factor-like fondness for music amongst the Indian population.

- Well done. Thank you.

G8 - Total time spent in watching ads on Instagram in India

Hard

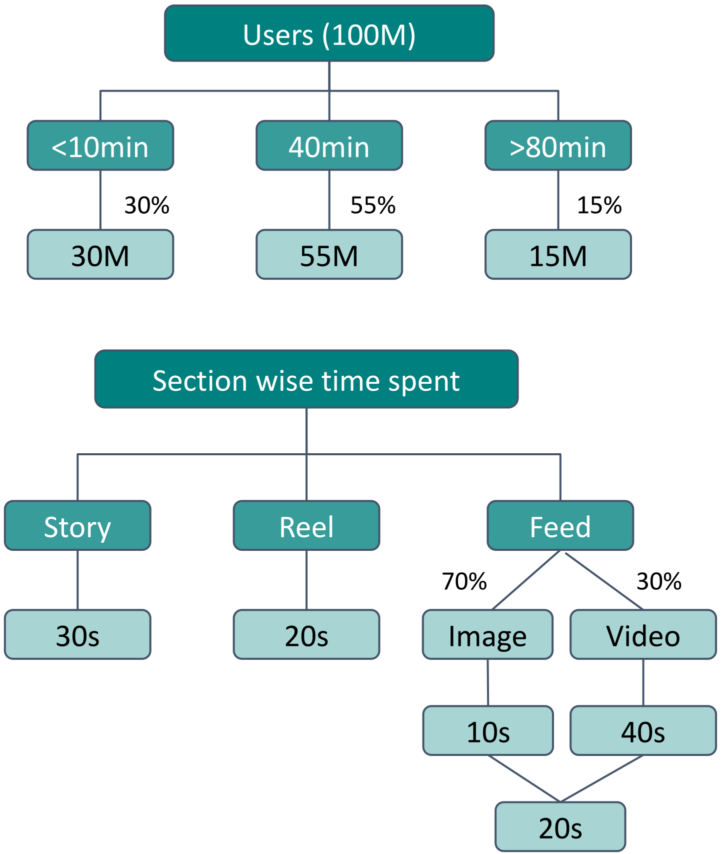
Assumptions
Monthly active users = 200M
Daily active users = 50% of MAU = 100M

Each user can spend time on feed, stories, explore , reels , instant messaging and others.
Different type of ads displayed only in stories, feed and reels.

Stories- 1 in 3 is an Ad, i.e. one ad per 60s
skip ratio 80%;avg reel time = 30s so time spent= 6s
Ads time to total time ratio = **1:11** = **9.09%**

Feed - Individual ads could be image or video since skipping or viewing images takes negligible time considering video ads only
90% skip rate and each video of 20s = 2s
Each ad after 3 posts i.e after 60s
Ratio = **1:31** = **3.22%**

Reels - each ad after 4 Reels after 80s
Skip ratio 50% ; avg reel time 10s
Ratio = **1:9** = **11.11%**



G8 - Total time spent in watching ads on Instagram in India

Hard

Category wise Time Breakup in different sections

Category	Stories	Feed	Reel	DM
10min	2m = 120s	2m=120s	2m=120s	4m=240s
40min	10m=600s	10m=600s	10m=600s	10m=600s
80min	15m=900s	25m=1500s	20m=1200s	20m=1200s

Category	Stories (seconds)(9%)	feed (seconds)(3%)	reels (seconds)(11%)	total per user(s)	total per type (in M seconds)
10min	10	5	15	30	30*30M= 900M
40min	50	25	75	150	150*55M = 8000M
80min	80	50	140	270	270*15M ~ 4000M

13B seconds ~ 3.6M hrs ~ 411 years, per day

G9 - Number of light bulbs used in India

Hard

Assumptions

India total population=1.3 Bn

1. Rural population (70%)=910 Mn
2. Urban population(30%)=390 Mn

- Rural
  - Residential
  - Shops
- Urban
  - Residential
  - Office/Factories
  - Public spots

Number of light bulbs used in Rural India

1. Average household size =5
2. Total number of families in rural India=910/5=182 Mn

Residential -

each household has 1 house equipped with 1 room(2 light bulbs), 1 kitchen(1 light bulb) and 1 washroom(1 light bulb)

Shops -

If every household on average has 1 earning member and require 1 light bulb for work

Total number light bulbs used in rural India = ((2+1+1)+(2))*182 Mn=1.092 Billion

Number of light bulbs used in Urban India

1. Assuming average household size =4
2. Total number of families in urban India=390/4=97.5 Mn

Residential -

each household on average has 1 house equipped with 2 room(6 light bulbs), 1 kitchen(2 light bulb) and 2 washroom(2 light bulbs),1 Hallway(4 light bulbs)

Total number of light bulbs=14*97.5=1365 Mn

Office/Factories -

Considering 1.5 earning member each household and 1 light bulb is required for their work,

For every 10 individual,2 light bulb is required for other amenities in their workplace.

Total number of light bulbs=97.5*1.5*1+(97.5*2)/10=165.75 Mn

Public Spots -

Considering 1 public spot per 100 people and 20 light bulbs for each public spot

Total number of light bulbs used in urban India= 1.608 Billion

Total number of light bulbs used in India = 1.092+1.608 = 2.7 Billion

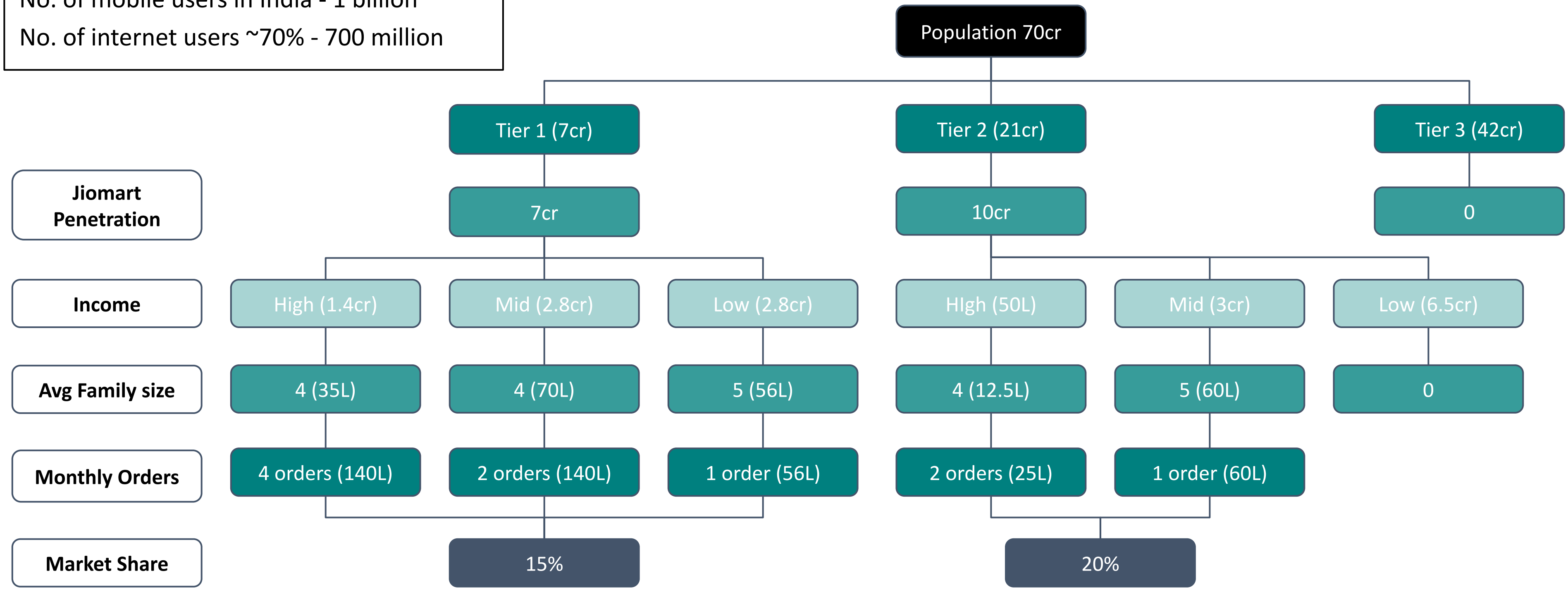
G10 - How many orders are placed on jio mart per day?

Hard

Assumptions

No. of mobile users in India - 1 billion

No. of internet users ~70% - 700 million



Total orders = (140 + 140 + 56)*15% + (25 + 60)*20% ~ 68 Lakh/month ~ **2.25Lakh/month**

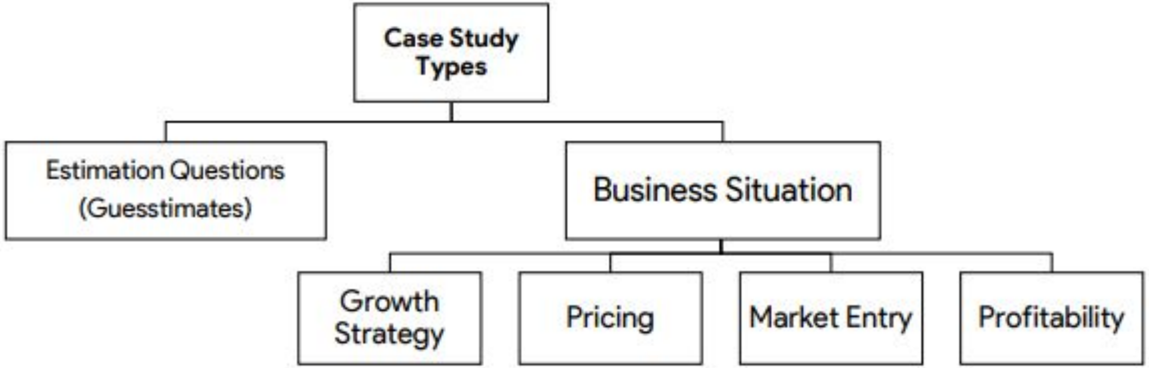
Part D - Cases

Structure and Approach

A 'case' is simply a business problem or a situation which the interviewer expects you to solve. You need to understand the situation and break down the problem in a mutually exclusive & collectively exhaustive (MECE) way.

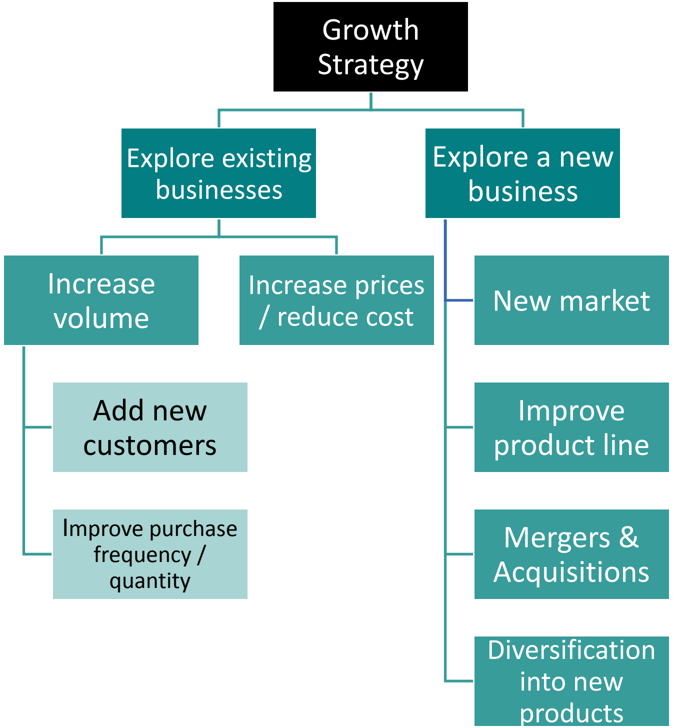
You should think out aloud, ie, discuss the approach, numbers and thoughts with the interviewer. This would help him/her to understand your thought process.

Clarify → Extract information → Structure → Breakdown/ Segment → Conclude



Growth Strategy - Framework

In Growth strategy cases the company's likely aim is a X% YoY growth in Z years. The candidate is to think of ideas that align the growth target, and then validate it by identifying relevant pillars.



- The growth can either take place in company's existing businesses or in new sectors.
- Always clarify the objectives, the growth % (X) and the time period (Z).

Relevant Questions

- Does the company have enough existing capacity to meet the targets, or is an investment required?
- Competition? And market share?
- Price elasticity?

Pricing - Framework(1/2)

In a pricing case the objective is to determine a methodology for pricing of any product.

- Pricing a Product
  - Modifying existing product
  - Similar to existing product
  - Radical Invention

- Pricing Factors
  - Competitive pricing
  - Value-Based Pricing
  - Cost-Based Pricing

Competitive pricing	Value-Based Pricing	Cost-Based Pricing
• Similar product exists in the market. • Trade off b/w supply and demand. • Ask about industry structure (Concentrated or Consolidated)	• Willingness to pay? • Target consumer? • Opportunity cost • Ceiling/maximum limit of the price	• Consider all possible production steps. (R&D, Manufacturing costs, Logistics and distribution, Service costs) • Add profit margin on top of all costs. • Minimum possible price?

Pricing - Framework(2/2)

Identify the problems → Understand the product → Structure the solution → Structure the Solution

- Be clear about the Objective of the company, Product features and market environment.
- Apply a relevant method, justify the pricing recommendation with respect to numbers as well as industrial awareness.
- Pricing cases can often be clubbed with market-entry cases!
- Clarify the market size.

- Never give a single price point, offer a price range. Mention the price fluctuation metrics.
- Innovative solutions, like discount suggestions are a bonus point.
- A supply vs. demand tradeoff approximation is always helpful in such cases (best when demonstrated graphically)

- In case the pricing needs to be done for an old product (rare), the utility of the product w.r.t a new product and the depreciation/salvage value need to be taken into consideration.

Market Entry - Framework(1/2)

Market entry cases ask us to evaluate a specific growth opportunity and decide whether or not the company should pursue it. If the decision of entry is made what would be the best way to enter the market.

Market Entry → Vision → Goals / Objectives

Should they enter?

Product
1. Price
2. Customer expectation
3. Product differentiation

Customers
1. Target group
2. Customer habits
3. Segmentation
4. Size , growth

Capabilities
1. Manufacturing
2. Sales
3. Market share
4. Distribution

Industry
1. Major players and their share
2. Scale and growth
3. Barrier to entry/ exit

Regulations
1. Resource availability
2. Government rules and laws

Entering strategy → If yes how? / No

If yes how?

Entry options
1. Start from scratch
2. Acquisition
3. Joint venture

Growth plan
1. Product expansion
2. Geography expansion

Marketing
Promotional strategies

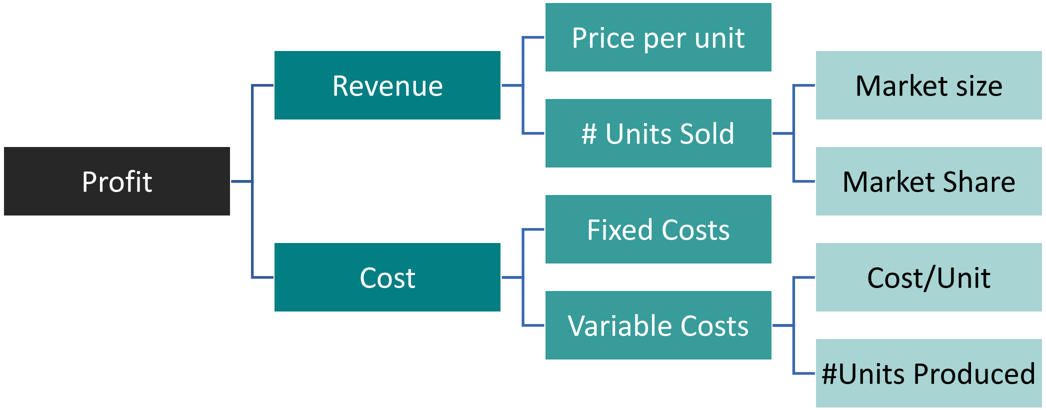
No

Why No?

Market Entry - Framework(2/2)

1. Always ask about company's objective to enter that particular market.
2. Get primitive understanding of company
3. What it does?
4. What product to launch?
    a. Why this particular product launch or geography ?
    b. Its previous history with launches ,etc.
    c. Is the market profitable?
    d. Does the company have the skills needed to compete in the new market?
    e. Does it have the financial resources needed to successfully enter the market?
    f. What regulatory hurdles might they face?
    g. Are there barriers to entry in the market? If yes; then, can the company overcome these barriers on their own or will they need to partner to do so?
5. It is very important to identify where the client would stand in the industry compared to the existing competitors
6. Not every aspect of the framework mentioned will be applicable to all cases. But try to cover as much as you can, so that you get a good idea of the industry and the client's current status.

Profitability - Framework



Note: Profitability v/s profits

Profits are merely a difference of Revenues and Cost, while Profitability refers to profit as a percentage of sales.

The profitability framework states that profit is simply a function of revenue and costs.

1. **Price** is the amount of money charged for the product or service sold.
2. **Quantity sold** is the amount of goods or services sold in a period of time. It depends upon the market size and the market share of the company.
3. **Fixed costs** are the costs that don't change based on the quantity of goods sold (or at least don't change quickly). They include things like: rent , staff overhead.
4. **Variable costs** are the costs that depend directly on the quantity of goods or services sold, for example: raw materials, direct labor, delivery ,etc. They can be estimated as a production cost per unit times the total number of units.

Cases

Growth Strategy

GR1 - Pharma Manufacturer

Your client is a pharmaceutical manufacturer. The company's growth is not at par with the industry. Figure out why.

- So I understand that our client is a pharmaceutical manufacturer with growth less than the industry average. I would like to begin by asking a few questions. Where does our client lie in the value chain? Is this issue being faced by other players in the market?

The client manufactures and sells generic drugs. So it ranges from manufacturing to the supply to retail stores. Only our client is facing this issue.

- Okay, I understand that this is a company-specific issue. So, is the decline in growth due to drop in actual sales?

No, they haven't dropped.

- Alright, the actual sales have not dropped but there is a decline in growth, is this because of the supply side issues like production capacity, product mix or accessibility or the demand side factors like product quality, price, or competitors?

You can check with the supply side and proceed to the demand side. However, there is no issue with the production capacity as we are operating at good efficiency.

- Are the medicines accessible by the customers and do we have any issues from our suppliers?. Also, can I know more about the product mix?

No, we do not have issues with the accessibility, we generally manufacture drugs which are used on day to day basis, like paracetamol, levocetirizine, etc.,

- Have there been any major changes in the manufacture in recent times?

We have discontinued producing antibiotics for a few months.

- May I know the reason for this, also as people there has been an increased demand for antibiotics due to COVID-19, has this been affecting the firm?

Yes, this could be a possible reason for the decrease in growth, the reason for this is that the patent for manufacturing antibiotics has expired.

- So I think renewing the patent would result in a considerable increase in sales, as I understand there has been a growth of the firm but it did not reach the industry average, I hope this would resolve the issue on the supply side.

Your client is a pharmaceutical manufacturer. The company's growth is not at par with the industry. Figure out why.

- Can I proceed to the demand side now?

Yes, you can do that.

- As we haven't been in the market selling antibiotics, we need to recapture the market share, I think this can be done by reducing our margins on this drug for a limited time and increasing the marketing for this product.

Sure, so what are your recommendations?

- My suggestions are to initially renew the patent as soon as possible and allocate greater production power to this. The marketing for the antibiotics should be focused upon to regain the market share. The production capacity can also be increased as it is at a saturated level.

That sounds great. We can end here.

GR2 - Apparel Business

The client is in the apparel business in the US and wants to expand by adding designer masks to their stores. They need your suggestions on how to achieve growth.

- So, from what I understand, our client is in the apparel business and wants to add “designer masks” as a new product in their stores. I would like to ask a few clarifying questions regarding the case before we proceed.

Sure.

- What is the client’s objective for launching this new product?

The client wants to start manufacturing masks as it has become a necessity now and capturing the market share would be the main objective.

- Ok, what are the product segments that the client operates in, and what is the current position in the industry?

We are a premium clothing manufacturer known for our quality, brand value and are currently operating in the US and few parts of Europe. The market that we are a part of is a consolidated space. (could we be clear on demographics ,cos logistically us is vast and varied)

- Alright. As we are entering this market with the onset of the Covid 19 virus, do you want to include the masks as a part of the dress that you sell or sell masks individually?

You can only consider the masks that we sell with the outfit.

- Great, can I know about the manufacturing location of the company? Also, is it safe to assume that only the high-income individuals are our customers?

We manufacture and sell the clothing in the US itself, and yes the target market is the rich households.

- This helps a lot, as we are new in manufacturing masks, we can acquire a mask manufacturer or establish a unit for the same. As mask manufacturing is highly regulated, acquiring a manufacturer who already has a license, etc. would make it easy for the client.

- As mentioned, since we produce the masks that go with the dresses, we cannot increase our revenue by a significant amount due to the mask. To do so, we need to either sell masks individually or try to capture a greater share of the market in the clothing industry by advertising.

Yes, that seems reasonable, can you suggest any other way instead of advertising by which we can generate more revenues.

GR2 - Apparel Business

The client is in the apparel business in the US and wants to expand by adding designer masks to their stores. They need your suggestions on how to achieve growth.

- Sure, as we have our manufacturing unit in the United States, it can be shifted to a country like China, where you can cut down the production costs, keeping the margin constant thereby increasing your revenues.
- We can also approach this by increasing the price of the clothes sold, based on the price elasticity of demand for the product as we are accommodating masks into the outfit.

Can you list some bottlenecks of exploring new geography either for marketing or setting up for manufacture?

- Okay, setting up a new production unit would pose the following challenges:
  - Cost of setting up the machinery
  - Procuring the raw material in the new geography
  - Warehousing
  - Greater logistics cost for importing
  - Getting license
- For venturing into new geography like China for expanding its market:
  - Getting licenses
  - Presence of established competitors
  - Getting our product into the stores/market

Great, that makes sense, we can end here.

Thanks.

Your client is a cigarette manufacturer who has been unable to generate profits in the last quarter. Find out the reason and help them grow w.r.t. profitability.

- I would like to confirm the objective before we go ahead. So we have to find out why our client's profit margin is decreasing. Are there any other goals that we need to consider?

No, that is the only objective as of now.

- I would like to know more about our client's business and the geographical region it operates in?

The client produces and sells a wide range of cigarettes. They are completely based out of India.

- Okay. So could you tell if the problem is faced by all the major players in the industry or is it specific to our client's business?

It turns out that almost all the major players are facing the same problem. I think you can now go on to find out the possible reasons.

- I would now like to discuss the diversity of competitors and change in the figures of market share for the last quarter.

Sure. Your client had a market share of 30% and three of the other major players were having market shares of 15%, 15% and 10%. But recently, small fragmented firms have captured 10% out of this 70%.

- So the increase in market share of fragmented players can be mostly attributed to increase in their sales which can be due to introduction of new products, entering new geographies, enhancing sales channels, marketing activities or change in prices.

Yes it can be attributed to a decrease in prices for small players. To give you some statistics, taxes on cigarettes in India are almost 12 times higher than in the US and 9 times higher than japan.

- Okay. So apparently there has been a new tax imposed by the Indian government which might have tempted the small firms to adopt unfair means like buying materials at a cheaper rate from foreign countries and smuggling them to India.

Yeah it makes sense. People constantly are shipping cigarettes to India, by not declaring them as such so that they could escape being taxed. Why should they fight against smuggled goods? And how would you recommend the Govt prevent it?

Your client is a cigarette manufacturer who has been unable to generate profits in the last quarter. Find out the reason and help them grow w.r.t. profitability.

- As we have seen over the years, smuggling is one of the biggest threats to any economy as it reduces the revenue of the Government and also affects the local producers by decreasing their sales. As these goods are not verified for their quality and composition, it can have adverse effects on people's health.
- So the government should take necessary steps to stop smuggling by educating people, thorough checking, reducing taxes and taking strict action on smugglers.

What would you suggest your client do to improve their profit margins?

- Okay. So my first recommendation to the client would be exporting its products to emerging markets where imports are also less taxed.
- Also, as the client is an established player in the market, it can leverage its pre-existing large distribution channels to diversify into the FMCG sector and generate more revenues which would in turn result in increased profit margins. Moreover, the client should lobby the government to reduce the taxes.

Excellent suggestion. It was nice interacting with you.

Your client is a recruitment solution company. You are needed to help them grow.

- Okay. So may I know a bit more about their business and what exactly they want to grow? Is it revenue or profits or something else?

So the company has a platform which connects job seekers and recruiters and they operate completely in India itself and they want to maximize their profit.

- May I know more about the industry concentration?

Yes sure. So the client is already holding a market share of 95% and has complete monopoly in the market.

- So i assume that they have reached a point of saturation and are unable to grow further in this industry. Is it right?

Yes, absolutely. So you are needed to analyse its growth prospects both inside and outside the industry.

- I have a few recommendations for the client which can help them grow further inside the industry.

- First, to improve the core platform efficiency and experience using Data Science, AI and Machine Language tools and techniques.
- To enhance the Job Seeker Experience and Career Information
- To strengthen product offering primarily by encouraging client to use Recruitment Management System (RMS) which helps client use technology to help manage candidate shortlisting, screening, interview management and onboarding processes better.
- To make strategic investments in related and adjacent businesses that provide improved experience on the sites.

Seems good enough. But what do you think are the threats they might face?

- Okay. So these are the threats they may face.

- Data Security: Technical failure and breakdowns in servers could lead to interruptions of our websites and result in corruption of all data and/or security breaches.
- Competition Risk: All portals face competition directly on the online space as well as offline.
- Dependency Risk: The Company relies heavily on the recruitment business in India for its profits and cash flows.

GR4 - Recruitment Solution

Your client is a recruitment solution company. You are needed to help them grow.

How can they reduce dependency risk? How would you suggest them to diversify?

- They can leverage their algorithm to start similar ventures like a matrimonial website, property portal etc. where they can potentially do well because of the similar buyer-seller perspective of these portals with the pre-existing recruiting portal.
- They will also have an edge over the other competitors due to the large amount of data and customer base they have collected across their operations as a recruitment solutions company.

Makes sense. Is there any other strategy for growth that you can think of and would recommend to the client?

- They can utilize the fund accumulated over these years and the experience of promoters running a tech company, to invest in startups as venture capital or can also provide seed funding to emerging tech companies.

You have done pretty well here. Good luck!

GR5 - Event Management Firm

The client is an event management company, they want to grow their business in the next 3-5 years. Analyze the current situation and possible options and give recommendations.

- I would like to confirm the objective before we go ahead. So may I know a bit more about their business and what exactly they want to grow?

This company has grown fairly well in the past but for this year they haven't been able to achieve the same results as earlier and are unable to cross the current threshold.

- Okay, Now I would like to know at present where does the revenue come from and who are it's main customers

The firm's primary source of revenue comes from their contracts with large corporations and private parties, workshops, conferences. They charge a fee for their services to organize these events, and they make a tremendous amount of money from each contract.

- I'm curious, have sales – for the company overall – have sales for the competitors changed? So I'm trying to figure out if this an industry problem or if this is a company specific problem. Do we have any information on that?

Well, it turns out other companies have seen a steady market.

- So this is not a industry issue but an issue more specific to the domain of our company or with customers. What is the breakdown of fees that we charge per event?

Sure. The prices have remained constant for both the customer segments. The client charges 10% on total expenses for the event + about 500-1000 rupees on hourly basis depending on the . The client also collects commission for services by securing event space through venues that offer a commissionable rate.

- Interesting. I think I've gathered a fair understanding of the context and the client. I would like to start the analysis now. I would like to divide the case into two parts – Growth in the current market and exploring new markets. Under new markets, I would cover Product diversification, Business Integration and Geographical expansion

What exactly do you mean by Diversification, Integration and Geographical expansion ?

The client is an event management company, they want to grow their business in the next 3-5 years. Analyze the current situation and possible options and give recommendations.

- By diversification, I mean expanding into new product lines – like we can explore weddings, anniversaries and graduation parties. Next, Integration can only be backward. Backward integration would be to acquire banquet halls and venues ourselves, which is not feasible due to present capital status. For geographical expansion, I would start by exploring international clients who have been working with us in India. Since relationships are an important component in the event business, the existing relationships and word of mouth will help us enter the new markets.

Great. Let’s talk about the existing markets.

- The quantity of contracts and the amount per contract determine revenue in existing markets. Because raising revenue per contract may not be realistic given the competitive nature of the market, we should concentrate on expanding the number of contracts we receive. Our number of contracts are a result of the overall number of contracts in the market, the percentage of contracts we apply for, and our success rate. We can improve our chances of getting the ones we're applying for by focusing on marketing and knowing market trends. For the ones that we apply to – we need to understand the internal processes of decision making and provide rates less than our competitors ensuring the same level of quality. It might reduce profit on each contract but volume should make for it. Our success rate can be improved by better relations with the larger corporations.

Great. That’ll be all. Thank you.

The client is in the automotive industry and is facing stagnation in growth. Investigate the reason and give recommendations to improve.

- I would like to start with some clarifications

Sure, go ahead.

- I would want to know more about our client, what kind of cars they manufacture, EV or traditional mechanical cars.

Our company is well known for producing mechanical cars with digital systems, and we have recently started making some EV vehicles as well.

- What is the average revenue of the manufacturer and in which countries are the cars supplied

The client earned 10 Billion dollars pre covid and have a good reach in south-east Asia and some of its showrooms in the USA and Europe. But during covid, we have seen a decline in our revenues which has now reached 10%.

- As revenues have decreased post covid, I would like to understand whether this is a client-specific or industry-wide issue.

We have seen a decrease of 7% revenue in competitors average too, and hence can be considered an industry-wide problem.

- As it is clear now that it is an industry-wide problem, we can analyze profits by branching it into two parts, i.e., revenue problem or cost problem.
Have our clients seen a drop in the demand post covid?

No, on the other hand, our client had an increase in orders and total sales due to a surge in market demand. Also, the average selling price of vehicles was not much different from the pre covid area, and all categories of cars were sold.

- Okay, so I would like to proceed with considering the drop in revenue due to cost unless you would recommend developing my issue tree better. I will begin by bifurcating the costs into fixed and variable; fixed costs consist of land cost, factory cost, water and electricity bills, while the variable cost considers labor, materials, etc.

GR6 - Automotive Industry

The client is in the automotive industry and is facing stagnation in growth. Investigate the reason and give recommendations to improve.

Our client has seen an increase in cost by 20%. It mainly constitutes an increase in labor cost by 5% due to covid protocols imposed by the Govt. and a 30% increase in material cost due to semiconductor chip shortage; you can proceed with costs.

- It can be concluded that due to increase in demand post covid along with semiconductor shortage due to fewer supply orders from the automobile industry and more requirements from telecom and laptops due to increase in work from home and Covid-19 restrictions which affected many back-end chip packaging, and testing operations have led to decreasing in revenues of the client.

Yes, you are correct. Please summarize the case and suggest some solutions to the identified problem.

- I am unable to think of any sustainable short-term solution for the problem. As it is predicted that the semiconductor industry will take time to recover, I would suggest getting in contact with as many semiconductor chip manufacturers as possible to get assured and cheapest supplies in the near future for any more growth in the demand.

- Also, some measures to tackle with semiconductor crisis like lowering the production of diesel vehicles and making more petrol variants as diesel variants require more chips and manufacturing more basic models than top-end models for the time being because high-end models have more digital components can be done by your company.

- As a long-term solution, the client should try to develop a technology or R&D team that may help in forecasting and predicting the demand and as well handle the purchase and stocking of materials and other variable cost contributors.

Thank you for your recommendation; it was a pleasure to interview you.

Cases

Pricing

P1 - Upcoming Building Project

Your client is an upcoming builder in Mumbai. He has recently built a housing complex. He wants to figure out how to price the apartments. Help him decide a price.

- I would like to ask a few clarifying questions before I begin. I want to understand a few things about the complex. What kind of a locality is it located in and how crowded is the market in that region?

The complex is located on the outskirts of town. The client has gotten a head start to this area before any other builder. It's a new area where a few offices are being built nearby, as well as a metro project announced by the state government that will link the area to the main city.

- This will draw people who work in these offices as well as others who are willing to move in search of lower-cost housing. How many flats and buildings does the complex have and are these segmented into different categories?

There are 15 buildings with 75 apartments each and these are divided into different categories to 1bhk,2bhk and 3bhk apartments.

- Okay, lastly what is the average size of a single apartment and are they commercial plus residential or fully residential?

Sure. Your client had a market share of 30% and three of the other major players were having market shares of 15%, 15% and 10%. But recently, small fragmented firms have captured 10% out of this 70%.

- So the increase in market share of fragmented players can be mostly attributed to increase in their sales which can be due to introduction of new products, entering new geographies, enhancing sales channels, marketing activities or change in prices.

Yes it can be attributed to a decrease in prices for small players. To give you some statistics, taxes on cigarettes in India are almost 12 times higher than in the US and 9 times higher than japan.

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P1 - Upcoming Building Project

Your client is an upcoming builder in Mumbai. He has recently built a housing complex. He wants to figure out how to price the apartments. Help him decide a price.

- Since some flats will be more expensive than others, the price per square foot for floors 1-10 will be 1500 INR, while the price per square foot for floors 10-15 will be 1275 INR.
- Since all of the apartments will not be occupied in the first year, we can raise the price of the apartment in subsequent years to account for inflation, improvements in the surrounding area, and other factors.

Alright, this was a good approach, I think we can end here.

-

P2 - Eyewear Manufacturer

The increase in usage of mobiles and digital screens post covid-19 has led to a huge rise in demand for anti-fatigue and anti-glare glasses. Help your client, a leading eyewear manufacturer decide their prices.

- Can you elaborate about our product?

The client has developed new anti fatigue and anti glare glasses that have been found to reduce 80% of eye strain among users. These glasses promise 80% reduction in stress on eyes as compared to 25% promised by the current variants in the market.

- Can you elaborate about our client's position in the market and any major competitors?

The client currently runs an e marketplace with nationwide shipping and has 20 stores across 5 metro cities in India. Currently, our client owns a 25% market share in the eyewear industry. There are main competitors like Lenskart and Titan Eyeplus.
Now you can go ahead with your approach.

- I can think of two approaches to price the product, a cost based approach that would allow us to cover the basic costs and a competitor based approach which would give us a benchmark.

Please go ahead starting with the cost based approach

- Surely! Since this project would have involved significant RnD, do we have any costs that we need to recover, if so do we have a timeframe within which we would like to cover this cost?

The client invested around 500 crore rupees in RnD and incur a variable (manufacturing + logistics) cost of Rs 1200 per unit. You can consider a time frame of 2 years to recover the R&D cost.

- Got it! I'll need to guesstimate the current number of units sold by the client to identify the price to be charged. Can I go ahead?

Sure.

- I will assume that these glasses would be bought by only the middle class and upper class working people and students with 6+ hours of screen time daily.
- Current Indian population is 130 Cr. Out of this 10% marks up the upper class and 50% is middle class. Further, people in the age gap of 15-60 is our main target. (Teenagers-20% Young adults- 20% Adults- 30%).

P2 - Eyewear Manufacturer

The increase in usage of mobiles and digital screens post covid-19 has led to a huge rise in demand for anti-fatigue and anti-glare glasses. Help your client, a leading eyewear manufacturer decide their prices.

-Therefore we can assume that the target audience around 130*0.6**0.7 ~ 55 crore. Out of this we can consider that 10% understand our product and are willing to it to buy it in the next 2 years.

- total units to be sold= 5.5 crore ~ 5 crore & price per unit = 500/5 = 100 rupees per unit
- Total price of each unit=1200+100=1300

Great, that gives us a lower limit on the price, do we have any expectations on margins?

This sounds reasonable. Now can you go ahead with a competitor based approach of pricing.

- Our product is almost 3 times as effective as compared to other market variants. The products in the market range from 500-1000, so I'll take the average selling value to be Rs 750. Now, since our product is 3 times as effective to these variants, our product can be priced at 750*3=2250 rupees.

Sounds good. Thank you.

P3- Momo shop

An individual is looking to open a momos shop on college campus. What should he charge for each momo?

- Thank you for the problem statement. Before proceeding further, I would like to ask certain clarifying questions.

Well, go ahead!

- First of all, is there any other outlet selling similar products, or will you be the only one?

There is one outlet. However, its sales record didn't go well for momos.

- So when there is no sale of this product on the campus, why do you want to open an outlet for the same?

We conducted a survey for this and found out that the students hugely demand momos however, are not satisfied with the one provided at the existing outlet.

- This sounds reasonable. We will then not look into competitor based pricing and will focus only on cost based and value based pricing. I would like to go with cost based pricing first.

Sure, proceed.

- I would like to consider the campus population to be 6k including the students as well as staff. Let us assume, on an average, one person eats 5 momos in 15 days. Therefore, the demand per day would be around 2000 momos. May I get to know what it would cost to produce this quantity of momos?

Producing such a large quantity would cost around Rs.6000.

- Thank you, that means we will be spending Rs.3 in making one momo. Above this 3 rupees, I would like to add the cost of rent payable to the college administration along with the opportunity cost of you working somewhere else on a salary. Adding this will make a momo cost around Rs.6. What margin do you wish upon this?

That is a great point. I would like to keep the margin a little high, around 60%.

- Cool, this would make your momo cost around 10 rupees per piece.

P3- Momo shop

**An individual is looking to open a momos shop on college campus.
What should he charge for each momo?**

Sounds fair. Now please look over value based pricing once.

- Yes sir, I would like to assert the fact that most of the student population is fond of eating momos and are not able to do so on the campus. However, a small outlet outside campus demands Rs.10 per momo. Considering the fact that food items are priced below the market price inside the campus, I would like to suggest the price to be around 8 rupees.

This looks like a valid analysis. Any final comments?

- I would like to conclude my findings by saying that you can price a momo between 8 and 10 rupees for the students and staff in the college.

Thank You very much.

P4 - Craft Beer

A company that wants to introduce a new brand of craft beer in the Indian market. Suggest a pricing strategy for the same?

- To summarise, Our client is a beer manufacturer, who wishes to enter the Indian market in the craft beer division. I have a few questions before we proceed, what is the client's position in the market? Is the client operating somewhere else?

The client is a reputed manufacturer operating in the mass production of alcoholic beverages and wants to capitalize on the premium market. The client has operations in Europe and has been pretty successful there.

- Is there any particular location that you want to enter first, like Goa has low taxes, has more tourists and is the client setting up a new manufacturing unit?

You can choose Goa as the location for the pilot program, and no, the client will manufacture at the existing plant, and you can consider the cost for setting up the machinery and warehousing negligible.

- What is the market segment that we are trying to capture and what is the USP of the client?

As the client is a leading player in the industry in Europe, the ingredients used are of premium quality and add an exotic taste to it. The main objective is to capture the medium income groups.

- Are there any existing players in the market?

No, there are no major players in the market, we would be the first major brand to venture.(p,s for the consumer the alternatives are imported premium mass production brands like Stella Artois, Hoegaarden, and Asahi and startups as Simba, white rhino, etc)

- I can think of three approaches to price the craft beer, a cost-based approach that would allow us to cover the basic costs, a competitor-based approach that would give us a benchmark, and finally a value-based approach that would be based on any USP that our product can provide.
- But given the rather new set of the target market, I would consider a cost-based approach

Sure, you can go forward with that

P4 - Craft Beer

A company that wants to introduce a new brand of craft beer in the Indian market. Suggest a pricing strategy for the same?

- Since the product is already established in foreign markets and infrastructure is pre-existing, only the variable costs will have a significant effect. I would like to ask what is the major size of the product we are selling and manufacturing, packaging and delivery costs, also the government taxation.

The client's major offering will be the 300mL glass bottles. You can assume the manufacturing-packaging costs at 150/bottle and taxation of 25%, with overheads at approx 10% of the initial manufacturing cost.

Assume 30% margin.

- What will be the distribution channel employed for this product?

The proposed delivery model is from the production facility to retailer/pubs, with retailer margins at 10%.

- So this adds up to a price of 295 per bottle. Now I would like to benchmark it with existing alternatives, do we have any data on their prices. Or a market research suggesting the customer disposition. If the price is above the industry average, can we assume that the consumers are ready to pay a premium for obtaining our product?

The above-mentioned brands are priced in the 200-250 but as we have an edge over their products, we can consider that and go forward with it.

- So, considering the VP and price of the available alternatives and to carve a premium niche in the market I would suggest a price bracket of 300 for 330mL offerings.

This is a fair estimate, we can conclude the case.

Suggest a pricing model for an EV Sedan in the Indian market by a local player.

- So, I understand that our client is a local player in the Indian automotive industry and wants to launch an EV Sedan. What is the main objective of introducing this product?

The taxation on IC engine vehicles is increasing and the client wants to increase its market share in the growing EV sector and make the most out of the government incentives.

- I would like to ask what is the current position of the company and which segment it wants to target.

The client is one of the leading manufacturers of conventional passenger cars in India with a market share of 30% and a showroom presence across 20+ major cities. It is aiming to target the upper-middle-class segment for EVs

- To start with could you tell me more about this EV sedan and how does it fare better than IC engine vehicles

The client proposes a 4 door sedan with a Li-ion battery and dc motor powered. There are many advantages. To list a few;

- The EVs produce almost 90% fewer emissions than their IC counterparts
- Long driving range of 300-350 km
- More boot space and less noisy

- So, the product can be placed as a good eco-friendly alternative and with long life. I want to know about the existing competition in this space and target geography.

The sector is fairly new and any significant competition is absent. The client wants to enter Bangalore on a pilot basis

- Since there is no direct competitor, we could approach the pricing by Cost-based approach

Sure, go on with it

- Since it is a new product in the new market, what are the R&D costs and when are we expecting a break-even point, also is the charging infrastructure laid.

The client has invested 600Cr in R&D and another 150cr in laying out charging stations in Bangalore with a break-even expectation of 5 years.

- we could specify variable costs including manufacturing, safety testing, software updates, and warranty considerations
- The basic manufacturing cost per car is 15 Lakh with an additional 5 lakh for other obligations.

Suggest a pricing model for an EV Sedan in the Indian market by a local player

- I assume the distribution channel to be the usual manufacturer-showroom-consumer, or the company is willing to introduce different channels

The client wishes to maintain an omnichannel with both online and company outlets serving directly to consumers.

- To attain the R&D costs in 5 years with expected market growth of 30% YoY of the industry we need to sell around 2200 cars at 24 Lakh a car. Can I know the pricing of the similarly specced ic car and do we know the customers' willingness to pay such a price for the EV.

The EV is priced at 1.5x than the similarly specced ic. We are not having such amount of sales, could you recommend some strategies to improve it?

- As you pointed out that the price is a bit more than the general expectations, but given the long-range on a single charge the other alternative I could think we could serve the commercial cab providers on a sales+service model, could I ask what other benefits are we able to give the large scale clients.

We can bundle in the charging network access and there are taxation concessions from the government.

- So, in order to estimate the savings of a wholesale consumer, I considered an average distance covered by the consumer to be 8000 km each month, and this would cost him/her around Rs. 27,000 per month for the fuel. For our model, it takes around Rs. 7000 each month.
- Considering a premium of 40% we can offer the charging at 10000 per month and this saves around 2 lakh for the customer on an annual basis.

That's a fair number, so can you conclude your recommendations?

- We can price the car for the general market at 25 Lakhs and provide the cab industry with a price of 21 Lakhs and 1-year free charging access priced at 1.2 lakh a year thereafter for 5 years.

This seems good, we can end it here.

P6- Cell Manufacturer

Company C has created a AA cell that claims to last 10 years in a clock. How should C price that cell?

- Thank you for the case statement. Before we figure out the price of the cell, I would like to ask some clarifying questions regarding our company, the market, and the product.

Yeah, sure! Go ahead.

- Is this the first product of our company or is it in some business from before?

The company currently produces regular cells and shares the market equally with its competitors and plans to continue in the Indian market.

- Okay. Since we claim that the cell would last 10 years, I would be interested in knowing how long on average a cell like that lasts, and is this product unique with respect to others?

On an average, a cell lasts for around 6-12 months in a clock. And all companies are selling cells of that quality. This is a completely new product with that respect.

- With this known, may I also ask what is the price of that regular cell sold in the market?

The regular cell is sold at the price of Rs.15 in the market.

- With all the required information gathered, we could either use cost based or value based pricing techniques to determine the price. Competitor based pricing could be rejected since there is no other firm with similar product.

Sounds good, proceed with value based first.

- Since the average cell lasts for say 10 months and we are claiming our’s to do so for 120 months, I would like to incorporate the cost of 12 regular cells along with the opportunity cost of going to buy cell every 10 months which would include fuel and other prices, which I would like to keep Rs.100.
That would add up to 10*15 that is Rs. 150 along with opportunity cost to Rs.250.

P6- Cell Manufacturer

Company C has created a AA cell that claims to last 10 years in a clock. How should C price that cell?

Sounds fine but are you sure people will spend that amount on a cell?

- If you give a warranty with our product for a period of say 8 years. That would sound convincing enough for the customer to buy and try our product at least once.

Well, this seems to be convincing. Now proceed with the cost based approach.

- Thank-you. I would like to know how much do we spend on manufacturing this cell compared to a regular cell and how much did R&D cost?

The R&D was sponsored by our promoters and doesn't add up to our costs. We incur a cost of Rs.5 to manufacture a regular cell while the special cell costs Rs.50 to produce.

- So upon comparison of both cells, the special cell should sell accordingly for Rs.150. However, we should also add further margin to it considering selling this cell would harm our sales of 12 regular cells.

- I would suggest, we should add the selling price minus the cost price of those 12 cells, that is 12*15 - 12*5 = Rs.120. This would make our product cost Rs.270.

Good job, would you like to conclude your findings?

- Thank you sir, I would like to end my analysis with the findings that we can sell our special cell at a price between Rs.250 and Rs.270 which would provide us with sufficient profits.

This sounds like a good plan. That would be all. Thank you.

Cases

Market Entry

M1 - Healthcare Manufacturer

Your client is a well pharmaceutical company in India and wants to enter into sanitizer and protection gear (PPE kits) manufacturing. They want your advice about the proposal.

- What is our client's objective behind the expansion of its portfolio? Should COVID 19 outbreak be considered?

The sanitizer and protection gear market is expected to grow due to the outbreak , hence the manufacturer wants to enter the market to gain maximum profits from this new segment.

- Understood, I want to know a bit more about the client. Can you please elaborate on the current position of the company in the drug manufacturing sector?

The client is one of the top firms in the country and holds 10 % of total pharma market share but the sanitizer and PPE market is currently dominated by FMCG companies or local players respectively and no pharmaceutical company has yet ventured into this space.

- That implies the market is currently dominated by players outside the client's industry and the client's dominant position in the pharmaceutical sector could be leveraged to enter this space.
- We can suppose it to capture at least 5% of both PPE and sanitizer market. Could you tell me if we have the current market size of sanitizer and PPE kit space?

Correct, we are well suited to give a reputable alternative and already have finances to support our product launch.
The total market size is estimated to be $10 bn for sanitizers and $5 bn for PPE kits annually and both are expected to grow with a CAGR of 10% this year.

- Great, that means our client is looking to capture at least $0.75 bn market. Before proceeding to the economic viability, I would like to discuss more on the value chain of the products. I want to know are there any restrictions and regulations imposed by the government to enter this sensitive market? Will the client need additional equipment for manufacturing the new products?

There are not many major restrictions. Client has expertise in drug manufacturing and may require investment in new equipment and research.

Okay, No since the client is already a dominant player, the distribution, marketing and customer acquisition will not be a major problem and we can focus on the R&D and equipment cost and proceed towards economic viability.

Yes, please proceed with it. How will you evaluate profitability? Consider the R&D and equipment cost comes out to be 500 million and the equipment is able to meet the market demand.

Your client is a well pharmaceutical company in India and wants to enter into sanitizer and protection gear (PPE kits) manufacturing. They want your advice about the proposal.

- I would also like to know what would be the distribution, marketing, licensing and any other cost involved?

Yes , the client expects to incur 80% of total sales in all the mentioned costs combined. Now can you suggest if it's worth to venture into this space?

- Okay ,so client is expected to have profits of 150mn for this year and about 165 million next year, so with my expectations it will take the client at least 3 years to achieve a break even point.
- The Compound Annual Growth Rate (CAGR) is expected to reduce drastically post vaccinations, after the COVID 19 situation comes under control , with reduced no. of patients the need of PPE Kits will be reduced and will affect the market a lot.
- Sanitizer market will have minor fluctuations as people will still tend to use them as a precaution.

What do you think about client choice?

- Clients primary objective is to earn maximum profit by utilizing the surge in market share due to the outbreak. But, client's current position and expertise, it will require a large capital investment, and having a large number of competitor's has an impact on the choice.
- With a requirement of minimum 3 years to have a breakeven, it would be difficult to generate a good amount of profits, considering vaccinations and general decline in severity of COVID 19, it won't be a right decision to enter this market with a primary aim of gaining profits.

Alright , this was a good approach , I think we can end it here.

M2 - Smartphone Manufacturer

Your client is a smartphone manufacturer in India and wants to relaunch its services, Suggest a plan to enter the market.

- So our client is experienced and had entered the market earlier and wants to relaunch themselves. Can I get to know why they want to do so and what is the reason for relaunch?

- The company was started in 2000 and began its first sale in 2008. In 2014 client gained most of the market share beating all the possible competitors. The company focused on making cheap phones for the mass public and the business plan was a great success.
- But later in 2015, it suffered from negative publicity and was accused of selling phones which were primarily built in foreign nations and sold here by mere renaming. This led to loss in customer base and almost ended the company.

- Thank you for the information, I would like to know if there are any government regulations for the relaunch and is the client ready to invest capital?

There are not many major regulations imposed by the government and client is ready to invest.

I feel that we need to express our client as a completely new brand, so as to overcome the negative image of the previous company, I will proceed this problem considering this as a market entry case.is my approach right?

I will broadly look at the market condition now like competitions, customers and customer viewpoint.

Yes, looks good. You can continue with it?

- After the dismissal of client in 2015, Chinese companies have captured a large market share. With many of these competitors selling phones in our price range it is important to gain back our customers.
- With recent digitalization with help of various govt projects, public has gained knowledge in basics of smartphone working and are now realizing the use and need of various features and components of a phone.

Okay, what do you think about customer viewpoint at this time?

M2 - Smartphone Manufacturer

Your client is a smartphone manufacturer in India and wants to relaunch its services, Suggest a plan to enter the market.

- Customers will get to know that the brand is a relaunch and can pre assume some of their earlier experiences with the previous company for the new one. Most of the public is now looking for having maximum features with minimum price. And our competitors are already providing a lot of features.

What would you suggest to a client?

- Our client needs to provide at par features with the competition. But main agenda should be to manage all the rumours and questions raised by the mass during the first few months of relaunch.
- We will need to convince our customers that this is a new brand with a new business model and we have learned our lesson from our previous mistakes.

This is good, we can close the case now.

M3 - EdTech Startup

The client is an ed-tech startup and wants to expand its business and hit specific targets

- So, what exactly are they doing right now, and where do they plan to expand.

They are currently teaching primary stuff and want to evaluate the JEE market.

- Okay, so they teach basic school stuff at primary standards and want to go to JEE stuff directly. This sounds interesting, but my first opinion of it will be that it's too far-fetched.

May I ask why you are saying so?

- The primary school stuff and the JEE material are entirely different things. On one side, the primary stuff is based on concept strengthening via theory, whereas JEE focuses on the application element via objective questions.
- The content developer and educator working currently with you will have to turn their domain a 180 degree to fit into this.

That sounds correct; your point is valid. Maybe if you could give another point regarding this to support your move, that will be great.

- Well, there's very high competition in the JEE market; with numerous already established ed-tech firms and many new startups, it will again be challenging to develop a brand name and large customer base. We might not receive the expected profits even after investing huge capital

You sound very satisfactory; you may conclude your point

Looking at the prevailing competition and difficulties for expansion, I would suggest that it would better to drop off the plan of entering the JEE market and instead invest more into expanding the current business in its existing domain

That was quite well put. Thank-you!

M4 - Electric Car

The client is a leading fuel car manufacturer in India and wants to start manufacturing and selling electric vehicles too in the country. You have been hired to suggest whether the client should step into this or refrain from doing so.

- Okay, so as you said that the client is a well-established car brand in India, the work of starting from scratch to build a brand name is gone, and we can look towards the company budget and then analyze the market sentiment.

Yes, talking about the budget, being a good profiter, is not a point of concern.

- Cool, so it seems that you'll continue with the fuel car business and expand into electric cars separately.

That's correct.

- So to start with, I will like to make a road map. Analyze the potential of our idea in the market and look at what the customer sentiment is and then decide whether it's advisable to venture into this new endeavor or not.

This sounds fine to me.

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- The country seems to be shifting toward sustainable development, which also includes cutting down fuel use. With most of the new car buyers being of the younger generation who are more inclined towards environmental concerns will surely prefer an electric vehicle over a fuel one.
- Can I ask what price are you planning to sell it?

The client is planning to range the price from a 15 lakh SUV to an 80 lakh luxurious Sportback.

- The pricing seems fair enough, keeping in mind the costs of other vehicles, and should not be a point of concern. Are you looking for some government grants and facilities too?

We are hoping that the government might give certain relaxations and issue policies supporting us.

- Great, talking about government policies, I believe the 'Aatmanirbhar Bharat' policy can be highly in our favor; being the only local electric car manufacturer in India will attract both the government and buyers.

This looks like a good analysis. Will you like to conclude it

The client has an ecommerce presence in India and wants to enter into microfinance/financial services segment. Analyze the decision.

- I would like to ask a few preliminary questions. Can you tell me more about the client?

Our client is operating in the E-commerce segment in India and is one of the major players in this industry.

- What is the client's objective behind this?

The client aims to maximize its revenue and achieve good returns on the capital invested.

- Understood. What products does the client aim to offer in the new segment?

The client plans to offer various fintech products like lending and deposit, EMIs,
Insurance, wallets, credit cards, and P2P lending.
Which among these do you think the client should focus on the most?

- I will examine all of the products with respect to market capitalization and alignment of customers geography with existing operations

Okay. That sounds fair/correct

- Now moving ahead, Do you have any figures on the market size, and are there any existing players?

As this is a nascent market there are no significant competitors you would need to estimate the market size.

- Before proceeding, I would like to know if there are any financial constraints or regulatory restrictions to entry into this market?

The client is backed by major VC funds and regarding government regulations, KYC identification is mandatory.

M5 - Financial Services

The client has an ecommerce presence in India and wants to enter into microfinance/financial services segment. Analyze the decision.

- Okay, now I would like to focus on estimating the market size. I will approach this by
segmenting the market into 1) individual customers & 2) MSMEs

We can ascertain the addressable market of individuals by first finding the number of smartphone users in India, segregating on the basis of rural/urban/ semi-urban population, then dividing them into different segments according to their incomes, and finally subtracting the population which already has access to major financial institutions.

To find the rupee value we can further categorize the addressable market in terms of frequency of transactions and average transaction value and multiply them to get the figure.
Similarly, the MSME market could be estimated by identifying an enterprises' need for capital/investment using data like sector/inventory, sales value, frequency of sales among others in the already present merchant pool in the e-commerce sector, and extrapolate that in a wider market to identify target consumers.

This approach sounds fair, there is no need to dive into numerical calculations. Let's say this gives a big market. Can you think of any barriers that the client might face while launching the aforementioned products?

- I think in a market like India people will be skeptical regarding online lending and deposits. I would suggest raising awareness regarding transparency and making the product/app easy to use for wider adoption. Like any other new tech venture, this too will involve a high burn rate in the initial phases.

This seems like a valid analysis, could you elaborate on some customer acquisition strategies?

- Sure, new customers can be acquired by introducing cashback, referrals, or freebies and existing customers from e-commerce could be offered EMIs and discounts while using new products. On the other hand, merchants could be given transactional fee waivers and other benefits while using these financial products.

Great. We can close the case here. Thank you.

The client is an insurance company and plans to enter the pet insurance segment in India. How should they go about it?

- Thank you for the case statement. Before proceeding further, I would like to ask a few clarifying questions.

Sure, go ahead.

- Why has the client decided to enter the pet insurance segment in particular, and with what objective?

The client is looking to enter the market to gain a customer base as there is a rise in pet ownership and the projected rise in pet grooming and care, hence the scope for pet insurance.

- I want to know more about the client, its current standing in the industry, and what segments it already deals in? Also, are there any existing players in pet insurance?

The client is one of the top firms in the country offering life and health insurance services. The penetration of pet insurance is low, and no significant players exist in this segment.

- Are there limitations regarding the capital requirements or any regulatory restrictions that may encounter?

As mentioned, the client is a major player, and they do not have any financing constraints and has legal team to deal with regulations.

- Should I consider cattle insurance provided in the agriculture sector under this new pet insurance or as a separate entity?

Consider it as separate.

- Could you tell me if we have the current market size of pet insurance space and the number of pet owners in India if you know by any chance?

The Indian pet insurance market is valued at Rs 400 cr and is projected to grow with a CAGR of 14% for the next decade. No. of pet owners in India are estimated to be at 2.5cr.

- I assume the client would want to capture at least 5% of the market in the near future and make at least 20 cr in revenues before achieving economic viability.

The assumptions seem fair, go on.

M6 - Pet Insurance

Market Entry | Hard

The client is an insurance company and plans to enter the pet insurance segment in India. How should they go about it?

- I would like to check if the market is suitable for entering, and if it has the potential, how to enter it.

Okay, that sounds alright.

- I would first find target customers from a pool of pet owners(approx 3cr) . Based on population distribution, I believe we can assume that around 30%(70lakh) would be urban. Dividing on the basis of income, in the urban group we can get about 30%(20lakh) of them (10-30-60) who belong to the upper-middle to high-income groups. Out of these around 40%(8Lakh) would be in the mid or young age group which may act cautious and buy insurance. If we aim to target 5%(40k) of this available market and charge a premium of around 4k, it will amount to approx 16cr. This figure does not include insurance for pet shops or pet shows/pageants. Taking into account these factors, I feel the market has potential.

The evaluation seems fine.

As the client is already present in Home and Life insurance, what are the delivery channels for these products?

The client has trained on-ground agents and dedicated online marketing channels for selling.

Since we have an existing network of agents, we can train a set of them to sell this product along with online identification and targeting for a better conversion rate. Strategic partnerships could be made with veterinary clinics and pet shops to increase penetration. As the market is nascent, adopting a marketing strategy that raises awareness seems appropriate.

- Okay. Could you please describe at what point will a pet owner require insurance?

Let us look at the life cycle of a pet owner, which includes purchasing/adopting a new pet, daily play with, travel with them, eventual diseases, and caretaking of pets. I would categorize them as theft/loss, illness, wellness, death, and accident.

M6 - Pet Insurance

The client is an insurance company and plans to enter the pet insurance segment in India. How should they go about it?

Could you suggest what the client can offer based on this?

Creating products like fixed sum insurance or fixed period insurance along with a rolling disease/accident cover and then judging their performance on the basis of
persistency ratio-the proportion of policyholders who continue to pay their renewal premium, to judge loyalty,
combined ratio- ratio of sum of losses and expenses over earned premium, for profitability, and
commission expense ratio- percentage of premiums spent on commissions separately over a couple of years to direct focus on well-performing products.

This feels like a fair approach. I think we can end it here.

Cases

Profitability

PR1 - Taxi Driver

A taxi driver in Mumbai wants to increase his revenue and profits.

I would like to start with some clarifications.

Sure, go ahead.

- What is the current state of the operations of the taxi driver? Does he own the taxi, and what are his working hours?

The driver is the owner of the taxi and operates during the day time. The driver starts his day at the railway station and works for 10-12 hours daily.

- Has the fare policy recently changed? I am assuming that fuel, parking fee and maintenance to be the major costs. Are there any hidden costs? Also, is the driver in losses currently?

The taxi driver earns enough to make ends meet but is keen to increase his income. The fare policy is determined by the local administration and is unlikely to change for the foreseeable future. Apart from the cost mentioned by you, there isn't any other hidden cost.

- Okay. I think this issue involves increasing income, I would try to look at increasing revenues and decreasing costs.

-On the revenue side, is the taxi driver operating on a fixed route or is he moving from point to point? If he is operating at a single fixed stand, he might be returning empty to that stand; on the other hand, moving point to point would increase his waiting time.

The driver has a spot at the railway station which is considered a profitable spot but often returns to the station empty as he doesn't often find people traveling towards the station.

- Is the driver able to find a customer easily at the station?

Yes, he gets regular customers, because the trains bring passengers all day long.

- So, he needs to reduce coming back empty towards the station. He should focus on routes with more potential passengers. He should try to focus on customers going to places like bus stands from the station and vice versa.

Do you think that it would make a significant difference to the revenues of the driver?

- On the revenues side, I would also like to explore the options of revenue-sharing of taxi-fare by letting some other driver drive the taxi in the night.

PR1 - Taxi Driver

Profitability | Easy

A taxi driver in Mumbai wants to increase his revenue and profits.

Can you think about any issues that would pop-up in such an arrangement?

- First issue would be obviously finding such a trustworthy person, whom he can lend the taxi.
- He would also need to discuss a revenue sharing model.
- Accountability and proper maintenance would be another issue which needs to be looked into.

Is there anything else to increase the revenues?

- He could look for putting up advertisements on his taxi.

What are the other options available to the driver?

- on LPG/CNG or petrol/diesel? If petrol, what are the switching cost and variable cost? I would now focus on the cost side of the operations. Is the taxi currently operated

The taxi is currently diesel based. Switching to CNG would require large one time investment but the funds can be arranged by any public sector banks which are encouraging such practices. Also, it is cheaper to use CNG over diesel.

The driver should switch to CNG. Also, he should focus on proper maintenance of the vehicle as this would increase fuel efficiency and reduce loss of revenue due to downtime.

Sounds Good!

PR2 - Women's IPL

Profitability | Medium

Our client is a major TV network who wants to know how much to bid on the TV rights for the Women's IPL. Find the bid price.

- What is the objective of this bidding ?

For our client the objective is profit.

- Okay, so we will have to look at costs of bidding and revenues we can generate from the telecast. Can I assume that advertisements on the channel is a major source of revenue ?

Yes you are correct, advertisements are our client's main source of revenue.

- Can I assume that the IPL matches will replace regularly scheduled shows ?

Yes, go ahead.

- What is the duration of this contract for TV rights ? And how many seasons of this tournament are played each year?

The duration of the contract for TV rights is 2 years . And there is only one season of the tournament per year.

- Okay so for exact calculation of the advertisement revenue I will need specific data related to the Women's IPL, so we will come back to it again . I would like to know about the costs first. Do we have any data for coverage costs ?

Consider all costs associated with coverage to be Rs. 800 Cr.

- Should I consider other costs too? Like opportunity cost of missing out on other content and revenue from them ?

Yes, you can consider that too. We'll be missing out on Rs. 2 Cr. / hour.

- If that's all on the cost I would like to move to the revenue side . How many matches are there in this tournament ?

There are a total of 60 matches with an opening and closing ceremony.

- And can I assume that opening and closing ceremonies will have higher viewership . Even weekends will have higher viewership than other days and we consider that in our pricing model ? Can you give some ballpark numbers for the duration of the season and the included events?

Our client is a major TV network who wants to know how much to bid on the TV rights for the Women's IPL. Find the bid price.

Yes, you are right. Out of the total 60 matches, 24 will be played on weekends(On weekends there will be 2 matches each day, one in the afternoon and one in evening) and 36 will be played on weekdays. Each match lasts for 3 hours on an average and the opening and closing ceremonies are also of 3 hours each.

- Okay. So how much are we charging per ad to the customer . Also since it is IPL I am assuming all slots will be filled.

- Ad costs are Rs. 80 Lakh/30 seconds during primetime and half of this that is 40 Lakh/30 seconds during non prime time.
- All the weekend evenings are considered prime time.
- Ad duration - 10 min/hour
- Opening and closing ceremony ads cost 50% above primetime costs.

- Okay based on the above data, the revenue comes out to be Rs. 1872 Cr.

  - The total costs are Rs. 800 Cr. + (186 hours * Rs. 2 Cr./hour) = Rs 1172 Cr.
  - So the profits come out to be around Rs. 700 Cr./year.
  - So by assuming inflation rate to be around 5% per year total profit during the contract comes out to be 700+735 = Rs. 1435 Cr.
  - So based on this calculation bid price shouldn't be greater than Rs. 1435 Cr.

Good job! Looks good to me. You can go now.

Assumptions:

1. Advertisements are the main source of revenue for the TV network.
2. IPL matches will replace the regular shows broadcasted during the off-season.
3. Opening and closing ceremonies along with the weekends will have increased viewership.
4. All the weekend evenings are considered primetime.

Data for Calculation:

1. Duration of Contract : 2 years
2. Fixed Coverage Costs : 80 Cr. INR
3. No. of Matches per season : 60
4. Duration of 1 match : 3 hours
5. Advertisement revenue rate : 80 Lakhs INR/30 seconds(primetime) & 40 Lakhs INR/30 seconds(non-primetime)
6. Advertisement breaks duration : 10 min/hour
7. Opening and Closing Ceremony ads cost 50% above primetime costs
8. Opportunity Cost of regular shows : 2 Cr. INR/hour
9. Inflation rate over the length of contract : 5%

PR3 - Automobile Manufacturer

Your client is a leading automobile manufacturer who is suffering from a loss of revenue. You are appointed to find out the problem and suggest possible solutions

- I would like to start with some clarifications

Sure, go ahead.

- I would want to know more about our client, what kind of cars do they manufacture, EV or traditional mechanical cars

Our company is well known for producing mechanical cars with digital systems and we have recently started producing some EV vehicles as well

- What is the average revenue of the manufacturer and in which countries are the cars supplied

The client earned 10 Billion dollars pre covid and has a good reach in south-east Asia and some of its showrooms in the USA and Europe. But during covid, we have seen a decline in our revenues which has now reached up to 10%.

- As revenues have decreased post covid, I would like to understand if this is a client-specific problem or industry-wide issue.

We have seen a decrease of 7% revenue in competitors average too, and hence can be considered as an industry-wide problem.

- As it is clear now that it is an industry-wide problem, we can analyze profits by branching it into 2 parts, i.e. revenue problem or cost problem.
Have our clients seen a drop in the demand post covid?

No, on the other hand, our client had an increase in orders and total sales due to a surge in market demand. Also, the average selling price of vehicles was not much different from the pre covid area and all categories of vehicles were sold.

- Okay, so I would like to proceed with considering the drop in revenue due to cost unless you would recommend developing my issue tree better. I will begin by bifurcating the costs into fixed and variable, fixed costs consist of land cost, factory cost, water and electricity bills, while the variable cost takes into account labor, materials, etc

PR3 - Automobile Manufacturer

Profitability | Medium

Your client is a leading automobile manufacturer who is suffering from a loss of revenue. You are appointed to find out the problem and suggest possible solutions

Our client has seen an increase in cost by 20%, and it mainly constitutes an increase in labor cost by 5% due to covid protocols imposed by the Govt. and a 30% increase in material cost due to semiconductor chip shortage, you can proceed with costs.

- It can be concluded that due to increasing in demand post covid along with semiconductor shortage due to fewer supply orders from the automobile industry and more requirements from telecom and laptops due to increase in work from home and Covid-19 restrictions which affected many back-end chip packaging and testing operations has led to decrease in revenues of client

Yes, you are correct. Please summarize the case and suggest some solutions to the identified problem.

- I am unable to think of any sustainable short term solution for the problem, and as it is predicted that the semiconductor industry will take time to recover, i would suggest getting in contact with as many semiconductor chip manufacturers as possible, so as to get assured and cheapest supplies in near future for any more growth in the demand.

- Also, some measures to tackle with semiconductor crisis like lowering the production of diesel vehicles and making more petrol variants as diesel variants require more chips and manufacturing more basic models than top-end models for the time being because high-end models have more digital components can be done by your company.

As a long-term solution, the client should try to develop a technology or team that may help in forecasting and predicting the demand and as well handle the purchase and stocking of materials and other variable cost contributors.

Thank you for your recommendation, it was a pleasure to interview you.

PR4 - Travel Agency (1/2)

Profitability | Medium

Your client is a travel agency which has seen a decrease in profits over the last year. You have been approached to find the problem and suggest changes.

- Does our client operate only in India or it also operates internationally?

It also operates internationally but it is mainly focused on India.

- Is our client a startup or one of the major players of the industries?

Our client is a start-up.

- What is the percentage decline in profits and its main reason ?

There is a 30% decline in profits due to decline in retail customers due to the Covid-19 pandemic.

- Okay, since the problem is regarding declining profits it will involve factors related to both revenue and cost. I would first like to look at factors related to cost.

Sure, Go ahead!

- What is the cost structure of our client between fixed costs and variable costs?

Both fixed and variable costs contribute equally to total cost for our client that means fixed cost is 50% and variable cost is 50% of the total cost.

Okay, what are the components of variable cost and their percentage wise distribution?

- Variable cost consists of Advertisements which is 30% of the total variable cost.
- Optional contracts with hotels and transportation agencies which is 50% of total variable cost and the last 20% of the cost is due to contract based employees.

- What percentage of these optional contracts with hotels and transportation agencies generate no or very less revenue?

You can assume that over the last year nearly 60% of the contracts have generated no or very less revenue.

- And what is the proportion of our client's current workforce between permanent employees and contract based employees?

Since our client is a startup, 60% of its employees are contracts based and the rest are permanent.

PR4 - Travel Agency (1/2)

Your client is a travel agency which has seen a decrease in profits over the last year. You have been approached to find the problem and suggest changes.

- Okay , are we advertising all our services (specific destinations, specific travel packages) equally? And all our services offered which we advertise generating equal revenue or is there a disparity?

Yes, we are advertising all our services equally but there is a difference in revenue generated by them. Certain locations are turning out to be more popular as tourist spots because of lesser number of infections and better safety standards.

- Great, so to tackle this problem we can try to decrease our costs and increase our revenue. To decrease the cost we will have to focus mainly on the variable cost.

Okay, so what are your recommendations?

1. To decrease the variable cost we can break 60% of the optional contracts with hotels and transportation agencies which have generated no revenue. Also we can lay off 50% of the contract based employees to reduce this cost. This will help us reduce the total cost by about 20%

2. We will also have to direct our money spent on advertisements such that we are spending more on the services(destinations, travel packages) which are more popular among the tourists and are generating more revenue than other services.

3. Funds freed from cost reduction can be used to develop more customer friendly and cheaper products which will attract more customers.

4. We can also renegotiate the contracts with some of the hotels and travel agencies by increasing the contract duration and decreasing the price as compared to earlier thus increasing our net revenue.

PR5 - Travel Agency (2/2)

Profitability | Hard

A travel agency makes a 12% commission on all of its travel bookings. Their current profit before taxes is $4m, while the industry average ranges from $5-7m. Why are they making less than the industry average?

- I would like to start with some clarifications

Sure, go ahead.

-What is the total gross revenue for the agency every year?

$10 million

- So, how does this compare to other agencies of similar size?

They are about the same.

- What about the product line? Does the agency handle any bookings other than travel tickets?

No. They just book tickets for their customers.

- What are the different number of customer segments that the agency services in a year?

The agency has two business segments business travelers & leisure travelers. Business travelers account for 40% of total revenue & leisure travelers account for 60%. The agency processes around a million bookings a year with 350,000 bookings going to business travelers and 650,000 go-to leisure travelers

- Is there a cost associated with each transaction?

Yes, each transaction, regardless of segment, costs about $9.5

- Now calculating profit per transaction for both segments

Business segment:

- 40% of total revenues of $10 m with a transaction cost of $9.5
  - 40%*$10 M=$4 m.
  - Revenue per transaction: $4 m/350,000 bookings=$11.42
  - Profit per transaction: $11.42-$9.5=1.92
  - Total profits: $1.92*350,000 bookings=$0.672 m.

PR5 - Travel Agency (2/2)

Profitability | Hard

A travel agency makes a 12% commission on all of its travel bookings. Their current profit before taxes is $4m, while the industry average ranges from $5-7m. Why are they making less than the industry average?

60% of total revenues of $10 m with a transaction cost of $9.5

- 60%*$10 M=$6 m.
- Revenue per transaction: $6 m/750,000 bookings=$9.2
- Profit per transaction: $9.2-$9.5=$-0.3
- Total profits: $-0.8*700,000 bookings=$-0.21 M.

Interesting. It appears that leisure travelers are depleting the business margins. Either the cost per transaction in the leisure category is too high or the revenue per transaction is too low.

That sounds about right. What now?

- We need to benchmark the cost structure to other agencies.

The agency should concentrate on business travelers because they generate more revenue. We should also investigate the possibilities of lowering the transaction costs for leisure travelers.

The agency can also check if they can renegotiate transaction prices for business travelers, who travel frequently and hence potentially earn the agency a discount. To improve income and profit per transaction, the agency can choose to provide more products to leisure travelers.

Thank you for your recommendation, it was a pleasure to interview you.

Cases

Unconventional

U1 - IPL Franchise Bidding

BHCG Ltd wants to bid for an IPL team, do you think it is a good investment?

- Before delving into the details, I have some clarifying questions about the firm itself. What does our company do and why specifically IPL?

BHCG Ltd is a private equity and investment advisory firm with approximately 500 billion in secured commitments since inception across European and Asian private equity, credit and growth funds. They have invested in a number of sports such as Formula One, football, and cricket. They are bullish about the Indian economy and they have already invested in a few of the local clubs and have seen a good return on their investments.

- What is the main purpose of investing in an IPL team, is it to generate greater profits, brand themselves in the geography, or any other specific objective?

Since our client is a private equity firm, they want to maximize the profits of their investors, given that IPL matches have a high viewership of around 300 million.

- I think the best way to value a firm is by looking at the cash flow and discounting the profits to the present value. For that, we need to know the revenues and costs of operating a franchise.

Sure, you can start analyzing the different revenue streams first and then move into the cost part.

- The major sources of revenue are Brand - Sponsors, Gate Money, Merchandise, Share from Central Sponsorships, Share from Central Media Rights.

Can you expand on the sponsor part?

- We first have the title sponsors, like DLF or Pepsi who pay a specific amount to get their name attached to IPL that year, next we have the Principal sponsor who is the main sponsor for a particular team, Daikin for Delhi Capitals is an example, then we have Associate Partners and Official partners.

U1 - IPL Franchise Bidding

BHCG Ltd wants to bid for an IPL team, do you think it is a good investment?

This year Dream 11 sponsored the title for 200 crores. And last year we found that one of the franchises clocked in 100 crores from sponsorships, and consider BCCI sold the media rights to Star Sports for 20,000 crores for the next 5 years.

- As far as I know, BCCI shares approximately 50% of its revenues with the teams. So, from the title, each team gets 10 crores (200*.5/10) but this will certainly increase a lot as this deal took place when the economy was in a dire situation where Vivo also had to withdraw due to political reasons. And from media rights, they get 200 crores(20,000 for 5 years so each year corresponds to 4000 crores and each team gets an equal share of 10% from its 50% i.e, 2000 cr). As you already mentioned that a team is getting 100 crores from other sponsorships we can consider the same figure in our calculations. So the total comes out to be 310 crores.

Now estimate the revenue from remaining fronts and assume the revenue from central sponsorships is 1000 crore which goes to the BCCI.

- First considering the gate money, the average seating capacity is 50K in our Indian stadiums, and the average ticket price from my observation is 2000. So the total revenue considering full occupancy is 10 cr per match, as there are 10 teams and 14 matches are played excluding play-offs in which 7 of them are played in the home stadium so revenue is 70 cr. Now considering the merchandise, we can sell T-shirts, Mugs, Cases, Watches, etc with an average price of 1000, and assuming 100,000 items to be sold we get a revenue of around 10 Cr.

The revenue generated from physical ads on the ground can be negligible.

Revenue from central sponsorships attributing to each team is 50 crore (1000*.5/10) assuming the teams get 50% of the revenue generated by the BCCI.

That seems to be a valid number, can you now sum up the profits generated from the streams considering a profit margin of 40%, growth rate to be 20%, and tell me how you will use this to calculate the ROI? You can use your mobile calculator for this.

BHCG Ltd wants to bid for an IPL team, do you think it is a good investment?

That seems to be a valid number, can you now sum up the profits generated from the streams considering a profit margin of 40%, growth rate to be 20%, and tell me how you will use this to calculate the ROI? You can use your mobile calculator for this.

- So, calculating the revenue from all the sources we get a sum of 440 Cr per year with a profit margin of 40%, the profits come out to be approximately 180 crores. So by using the formula, where CFn is Profits*(1+g)^n.

We get the total value of the firm to be around 4710 crores.

Considering a margin of safety of 10%, we can bid for the team for 4239 crores.

Formula

$$\mathrm{DCF} = \frac{CF_1}{(1+r)^1} + \frac{CF_2}{(1+r)^2} + \cdots + \frac{CF_n}{(1+r)^n}$$

DCF = discounted cash flow

CF_i = cash flow period i

r = interest rate

n = time in years before the future cash flow occurs

Resources

Books:

1. Case Interview Secrets*, by Victor Cheng*
2. Book: Case Interviews Cracked*, by Sankalp Kelshikar and Saransh Garg*
3. Case in Point*, by Marc P Cosentino*
4. Interview Math*, by Lewis C. Lin*

Websites:

1. *Case Interview Workshop Introduction (Victor Cheng) – YouTube*
2. *Crafting Cases*
3. *Case Interview Secrets*
4. *MConsulting Prep - YouTube*

PM:

1. Cracking the PM Interview, by Gayle Laakmann McDowell and Jackie Bavaro
2. Hooked*, by Nir Eyal*
3. *PM School*

Practice Questions

Guesstimates:

1. Calculate the number of masks that were sold in a month during the Covid-19 period in India.
2. Estimate the monetary value of resources provided by a tree in a year.
3. Estimate the market size for fridges in Mumbai.
4. Estimate the revenue of tourism in New York City in peak months.
5. Estimate the number of books read by an Indian in his lifetime.

Unconventional Case:

India despite of having such large population is unable to prepare a fleet of athletes who perform well at international level such as Olympics. Give a reason for the same and suggest ways to improve the performance and medal tally.

Merger and Acquisition Case:

Tesla is looking to launch its EV in India by partnering with Tata. As a consultant to Tata, analyze whether the client should consider this deal or not.

Practice Questions

Cases:

1. Suppose the SpaceX starships have advanced enough and are able to provide transport anywhere on earth within an hour. Suggest a pricing strategy for the same. (Pricing)
2. Suppose drone technology has significantly advanced and is now able to transport human passengers. Suggest pricing strategy for drone cabs. Consider Existing competition, Fuel cost, Safety features, Interior design, R&D and manufacturing cost, and the time comparison with competitors. (Pricing)
3. Your client is a low cost airline operator in South Asia. Over the past 2 to 3 years, it has been burning cash Diagnose and recommend solutions. (Profitability)
4. Peter England, an Indian clothing brand by Aditya Birla Group is planning to venture into luxury clothing in the lines of brands like Armani, YSL. How should they go about this? (Market Entry)
5. To cater the rising need of fast and reliable transport, Indian Railways has commissioned development of high-speed bullet train between Bangalore and Mumbai. The new train will reduce the current travel time of 21 hrs to 4 hrs between the 2 cities. Devise a pricing strategy for the train tickets. (Pricing)
6. Clubhouse - a social audio platform, has been witnessing a reduction in active users on its app for the past two quarters. They have approached you to find its reason and suggest a strategy to grow its user base and market share. (Growth Strategy)
7. An online fantasy gaming platform has been experiencing declining profits despite steady revenue growth. They have come to you to help identify the reasons and explore possible solutions. (Profitability)

Thank you!

For any queries and feedback:

THE BITS HYDERABAD CONSULTING GROUP

BHCG