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IIM CALCUTTA
CONSULT CLUB

PRESENTS

CASE BOOK

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CALCUTTA

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FOREWORD

Greetings!

The Consult Club of IIM Calcutta is delighted to present the second edition of the IIM C Casebook. The purpose of this book is to better equip students, with a keen interest in pursuing a career in the field of management consulting, with the different types of cases asked during the recruitment process in both summer and final placements.

This casebook is a concise guide to developing the essential analytical approach to solving cases that is sought by most recruiting firms. It has been curated with utmost care with inputs from the 57th and earlier batches and includes a collection of cases in the final interviews and in the buddy programs of various firms.

We are sharing this casebook on public domains to assist students with their preparation. Please note that this is meant to supplement the excellent work done by our and other schools in earlier casebooks and interview experience compendia, so we strongly encourage you to not make this your sole reference.

We hope you enjoy reading this book and practicing cases with your peers. The process is just as fun as the destination!

Godspeed.

Regards,
Consult Club
IIM Calcutta

HOW TO USE THIS BOOK

Dear reader,

In lieu of the upcoming summer placements for the 58th Batch, we have put together this concise guide to different types of cases that are asked during the course of the selection process of various consulting firms. Apart from the different types of frameworks used, we have selected a bunch of cases that were asked to the previous batches during their buddy calls and final interviews with various firms.

Before you dive into the vast pool of literature available to you in the form of casebooks, we urge you to make a note of the following:

- **Do not memorize frameworks:** Frameworks used in specific types of cases are mere guidelines and tools to enable you to think. Keep in mind that they are not necessarily applicable in every situation as the interviewer might also test your ability to think on your feet.
- **Work in non-homogenous groups:** In order to maximize your learning when practicing cases, we urge you to work with groups of different people to consider different aspects and points of view of the problem statement. We suggest the reader should use the interview transcripts in this casebook to set up a case in groups of at least 2. An observer may keep note of hygiene factors.
- **Structure is key:** Always be **MECE** (Mutually Exclusive Collectively Exhaustive) when it comes to structuring your thoughts. Be exhaustive and list down all possible alternatives under any scenario before the interviewer leads you in a particular direction.

We wish you all the best for your placements and hope you land a job of your choice. Feel free to reach out to us in case you require any assistance.

- Consult Club, IIM Calcutta

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THE CASE INTERVIEW PROCESS

WHAT IS A CASE INTERVIEW?

A case interview is a simplified, condensed version of a complete consulting project. The candidate (interviewee) is in the driver's seat and is expected to explore the data and provide solutions to a problem statement that a client gave to the interviewing firm.

IDEAL CANDIDATES DEMONSTRATE

PROBLEM SOLVING ABILITY + INTERPERSONAL SKILLS + CULTURAL FIT

The case interview is an example of a real business problem based on your interviewers' past work experiences. The problems you will encounter are not designed to be brain teasers, or theoretical problems designed to stump you, but rather to reflect the challenges that our clients face. These real-life examples allow you to learn more about the type of work we do and the impact we have with our clients.

We believe the following is representative of all firms and are qualities expected in a potential candidate:

- The approach you take to solving a problem
- How analytical and creative your thinking is
- Your usage of data to quantify and make your recommendations
- Your communication skills in conveying your ideas
- How you would suggest implementing these proposals

Source: Bain & Co. (www.bain.com)

CASE INTERVIEW FORMAT

A typical case interview lasts for 20-25 minutes and includes the following components*:

INTRO	FIT QUESTIONS	CASE INTERVIEW	Q&A
3-5 mins	5 mins	10-15 mins	3-5 mins

Clarifying Questions

- **Prompt:** This is the premise of the case. It will include some background on who the client is and lay out the problem
- **Clarifying Questions:** Some basic contextual questions to guide your frameworks; avoid getting into the nitty-gritties of the case in this stage

Framework

- **Framework:** Once you are confident that you understand the prompt and the context of the case, take roughly 90 seconds to layout a structure on how to approach the case. Refer to the Frameworks section to get a better understanding

Analysis

- Most types of cases involve some basic calculations and guesstimates to come to a conclusion. Ask relevant questions, confirm the analysis with the interviewer before identifying any pattern or insights

Brainstorming

- After the analysis, the interviewer can ask you to brainstorm around additional aspects of the problem; refer to the section on brainstorming for some key takeaways

Conclusion

- **Summary:** Restating the facts discussed through the course of the case
- **Synthesis:** Providing additional insights and takeaways from the case in addition to a quick summary
- One can go a step further and suggest ways to implement the solutions provided in the case, if time permits

**Note: While this is usually followed, this format may differ by firm or by interviewer*

FIT/ PERSONAL QUESTIONS

While case preparation is key to cracking the interview, consulting firms are also assessing your ability to successfully work with teams and judge how well you understand their firm and yourself. This is done through customary HR questions such as:

Tell me about yourself

- **Your pitch should include**: Your past, key positions held, achievements in your career; highlight work experience and/or internships focusing on results
- **All answers must include**: Relative skills & experiences, key transition points in your career, and a career objective
- **Strong answers have**: A powerful "hook" –your value proposition that highlights how you have the competencies they desire in a candidate

Why Firm X or Consulting

- **Firm & industry fit**: Interviewee should have a deep understanding of a firm's culture, functional expertise, and working style
- **Industry interest**: Interviewee should highlight experiences they want to gain and skills they bring
- **Strong answers have**: Structured reasons, and answers tailored to your prior experiences and future aspirations

Give me an instance when…

- **Experience/ Personal**: Interviewee should demonstrate leadership ability, "drive" –taking initiative, and professionalism
- **CAR**: **Context / challenge** you faced, the **action** that you demonstrated, and the **result** of your actions
- **Strong answers have**: Concise response, a learning element if the situation helped you grow, utilizes structure, and engages the interviewer with energy, emotion, and authenticity

CLARIFYING QUESTIONS

Clarifying Questions → Framework → Brainstorming → Analysis → Conclusion

Guide to asking preliminary questions*:
The following may be helpful in asking clarifying questions in a structured manner:

- **7Ps:** Start with the 4Ps (Product, Place, Price, Promotions) move to the remaining 3Ps (Physical evidence, People, Process) if need be
- **3Cs/4CP** (Customer, Company, Competitor, Product)
- **4As** (Awareness, Accessibility, Availability, Affordability)

Refer to the **Frameworks** section for detailed explanation.

THE PROMPT	CLARIFYING QUESTIONS
All case prompts will introduce the company premise, industry, and a brief description of the company's issue	Clarifying questions should always be to the point (E.g.: context on products, core goal of the client, revenue generations)
It is up to the candidate to find out the business objective of the client by asking necessary clarifying questions	Do not make any assumptions unless necessary. Confirm with the interviewer before making any assumption
Most prompts leave out the business context of the clients' core products or operations	Feel free to ask relevant clarifying questions during the course of the case

**Note: This is not a exhaustive list of frameworks. The candidate may ask more questions relevant to the context of the case*

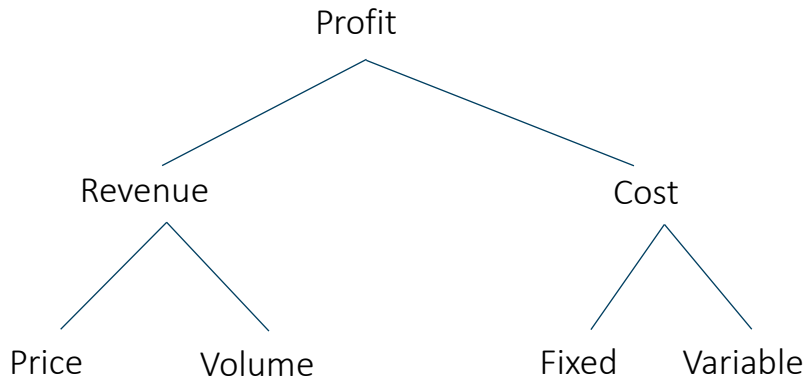
FRAMEWORK

Clarifying Questions | **Framework** | Brainstorming | Analysis | Conclusion

EXAMPLE*

Notes and Clarifying Answers

Key question in prompt



Market/External
- Competitors
- Government Regulations
- Industry Trends
- Natural Calamity

Customer/Company
- Internal
  - Acquisitions
  - Capacity
  - Value Chain
- Consumer Preferences

Recommendations

Frameworks provide clarity of thought and helps you structure your arguments better*.

MANTRA:
MECE: Mutually Exclusive, Collectively Exhaustive
- Ensure your framework is as MECE as possible
- Detailed but not lost in the weeds
- Thorough but not wasteful
- Insightful but not presumptive

MYTH:
- There is one perfect framework for every case
- Frameworks are not important
- There is a finite number of frameworks that will provide answers to every case

**Note: Different types of case frameworks have been explained in subsequent sections of this book.*
***Structuring in this manner will help the interviewer understand and assess your thought process. Candidates can chose a format they are comfortable with.*

BRAINSTORMING

Clarifying Questions | Framework | **Brainstorming** | Analysis | Conclusion

The key to brainstorming is structure. The candidate should first devise two or more "buckets" or categories to organize his/her thoughts.
Note: Be **MECE** in organizing your thoughts*

INTERNAL v/s EXTERNAL

- Internal factors represent any aspect internal to the client's business (e.g.: products, process, brand, leadership, etc.)
- External factors represent those which are beyond the client's control (e.g.: competition, government regulations, market trends, etc.)

CUSTOMER JOURNEY

When conventional frameworks do not help you get to the crux of the problem, understanding the customer journey can bring useful insights.

- **AIDA**- Attention, Interest, Desire, Action
- Useful in cases pertaining to improving sales of a company/product

VALUE CHAIN ANALYSIS

- Analyze each step of the value chain to identify the root cause of the client's issue
- Useful for exploring causes to cost related problems

SUPPLY v/s DEMAND

- Useful in profitability cases to identify whether the root cause of the problem is due to supply push or demand pull
- Typically used in exploring revenue related problems

**Note: This is not an exhaustive list of frameworks. The candidate is encouraged to apply his/her creativity*

GUIDE TO DOING ANALYSIS

Clarifying Questions | Framework | Brainstorming | **Analysis** | Conclusion

Most cases involve simple arithmetic or guesstimates. Follow these tips to avoid making mistakes:

TIPS FOR SUCCESS

SANITY CHECK

Make sure your numbers make sense in the context of the case.

MISTAKES

Mistakes are okay. You can recover from them as long as you don't repeat them.

SHORTCUTS

Round-off when required and manage your zeroes correctly to avoid mistakes.

TALK

Talk it through and explain each step you are doing to your interviewer.

SO WHAT?

Draw necessary inferences from your numbers and tie it back to the case.

PRACTICE

Practice until you are comfortable doing math in front of the interviewer.

ESSENTIAL CONCEPTS

Clarifying Questions | Framework | Brainstorming | **Analysis** | Conclusion

The following concepts maybe helpful in coming to necessary conclusions in some cases:

NET PRESENT VALUE

Calculates the discounted return on investment over a period of time

- Requires cash flows (revenue-cost), discount rate, timeframe and initial investment
- Some cases require calculation of NPV to perpetuity (time period=forever)
- **Perpetuity = (Cash flow per period/ discount rate) - initial investment**

PAYBACK PERIOD

Calculates amount of time required to recover an initial investment made on a project

- Requires cash flows per period and initial investment
- Can be the business objective of the client in some cases, especially market entry
- **Payback Period = Initial Investment/ Cash Flow per period**

BREAKEVEN SALES

Calculates the number of units that need to be sold to recover initial investment

- Requires per unit selling price, per unit cost price and initial investment
- **Breakeven Sales = Initial investment/ (Profit per unit)**

**Note: This is not an exhaustive list of concepts. Candidate may use concepts as deemed fit for the context of the case.*

CONCLUSION

Clarifying Questions | Framework | Brainstorming | Analysis | **Conclusion**

Conclusion may include the following key elements:

Summary

Restate the key facts mentioned in the case and the inferences drawn during the course of the case

Recommendation

State the actions that the client should take and cite the key insights in your analysis that have helped arrive at the conclusion

Implementation

Highlight the actions the client must take in order to implement the recommendation given in the case

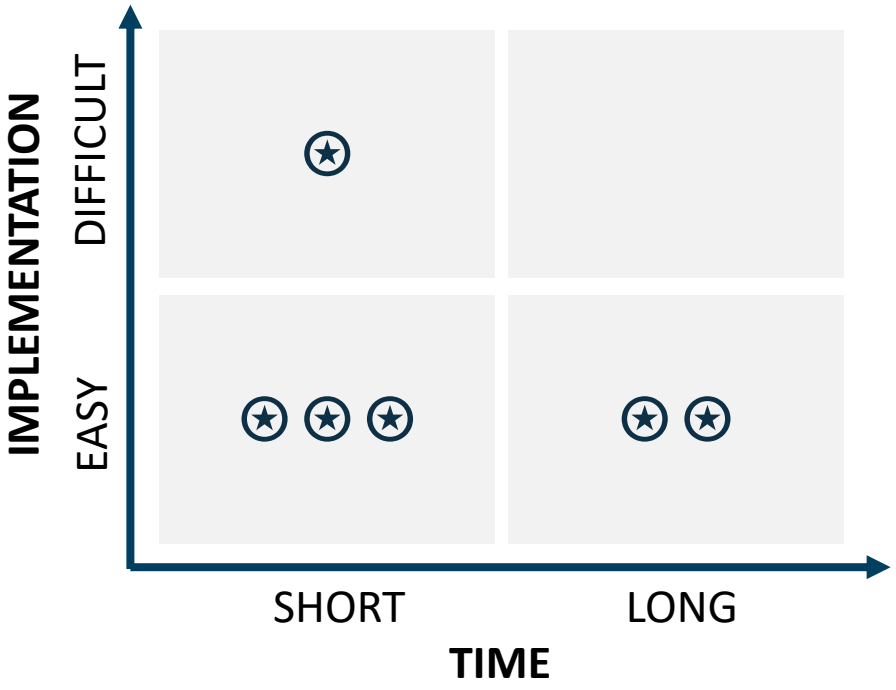
E.g.: Establish a value chain in a market entry case that includes Production, Distribution and Marketing

Risks & Concerns

Mention the factors in the case that the client should be aware of that may impact their business or implementation of a recommendation

Note: It should not contradict your overall recommendation

STRUCTURING RECOMMENDATIONS



Feasibility vs Impact is another way of structuring recommendations derived from the case.

INDUSTRY OVERVIEW

Note: The following is a non-exhaustive list of commonly tested industries. The interviewer may test the candidate on industries based on his/her prior experience

CONSUMER GOODS/RETAIL

The growth of CPG (Consumer Packaged Goods) industry (10% CAGR) has taken place on the back of steadily rising incomes and population particularly in emerging markets.

KEY INDUSTRY TRENDS

- **Amazon effect:** Growing importance of E-category management enables companies to sell select SKUs and pack sizes via e-commerce platforms
- **Digital Marketing:** Tapping Social Media for rich consumer insights and shaping consumer opinions. CPG companies are increasingly using social media to understand needs, gaps, brand equity and consumer preferences
- **Big Data:** CPG companies and retailers are ramping up the use of consumer shopping behavior data now more than ever to create curated/personalized shopping experiences and targeted advertisements
- **Retail Omnichannel:** Large brick & mortar retailers are pivoting to an "order online, pick-up in store" mix while also building out their online fulfillment capabilities to cater to the consumer. Store foot-prints are also getting smaller to reduce inventory
- **Predictive demand forecasting and agile supply chain:** With the advent of e-commerce, CPG companies are actioning insights that are predictive and forward-looking in nature. This brings supply chains close to real time

JARGON

- **SKU**: Stock keeping unit – refers to a unique item sold in a store
- **CRM**: Customer Relationship Management – Strategy & tools designed to boost profitability and strengthen customer loyalty by using data
- **Loss Leader**: Products sold at a loss to attract new customers or stimulate other profitable sales

Further Reading (click to read):

1. McKinsey: The decade ahead: Trends that will shape the consumer goods industry
2. Kearney: Continuous Disruption: Amazon.com's Transformation of 21st Century Retailing
3. Seven Top Trends Shaping the CPG Industry

KEY CALCULATIONS

1. **Inventory Turnover** = $\frac{\text{Sales}}{\text{Inventory}}$

2. **Gross Margin** = $\frac{(\text{Revenue} - \text{COGS})}{\text{Revenue}}$

3. **Contribution Margin (CM)**

$$= \frac{(\text{Sales} - \text{Variable Cost})}{\text{Sales}}$$

ENERGY, OIL, AND GAS

Global energy generation is still dominated by conventional sources such as coal, oil and gas. Growth in energy consumption is driven by Asian and other emerging economies – which are also leading the world in gradual adoption of renewable energy.

KEY INDUSTRY TRENDS

- **Renewable Energy:** India, a founding member of International Solar Alliance, plans to develop 175 GW of renewable energy capacity (solar, wind, small hydro, etc.) by 2022. For the past 5 years, India and China have led global growth in installed capacity of renewable energy.
  Imp. stats – India installed capacity: **Wind - 36GW** and **Solar 34GW** (30GW added in last 5 years)
- **Natural Gas:** Guided by a globally coordinated effort, most countries are expanding use of natural gas (primarily methane), which is not only a less polluting but also a cheaper source of energy
- **Shale Oil Boom:** Led by the USA, countries all over the world are exploring an unconventional method of extracting crude oil and gas from shale rock formations by a process known as fracturing. This has helped the USA emerge as one of the largest producers of these hydrocarbons. However, it is pertinent to note that shale oil production is feasible only beyond a certain price, which is driven by global markets
- **Diversification Strategy:** Major oil producing nations (even companies) are venturing into newer sources of revenue to reduce their over-reliance on conventional sources of energy

JARGON

- **Upstream**: Part of value chain which is concerned with exploration and production of crude oil and gas
- **Downstream**: Part of value chain which covers refining of crude oil and gas to multiple products such as motor diesel, petrol, aviation turbine fuel, CNG, etc., and retail marketing of such products
- **PPA**: Power purchase agreement – long term agreements by electricity distribution companies to purchase electricity from power producers

Further Reading (click to read):

1. McKinsey: Global Energy Perspective 2019
2. Seven Top Trends Shaping the Energy Industry

KEY CALCULATIONS

1. **Plant Load Factor** = $\frac{\text{Energy produced}}{\text{Max. energy that can be produced}}$

2. **Gross Refining Margin** = Price of refined products – Cost of crude oil

3. **Receivables Turnover** = $\frac{\text{Revenue}}{\text{Average receivables}}$

4. **Return on Investment** = $\frac{\text{Profit}}{\text{Investment}}$

AIRLINES

India is currently considered the third largest domestic civil aviation market in the world. India has become the third largest domestic aviation market in the world and is expected to overtake UK to become the third largest air passenger market by 2024

KEY INDUSTRY TRENDS

- **New Airport Development:** As per IATA estimates, air traffic in India is expected to reach ~478 million passengers by 2036. To support such high traffic volumes, country needs to develop adequate supporting infrastructure. Additionally, to support this growth we will need to develop adequate capacity and capability in the country
- **Capacity expansion of current airports:** The airports at four metro cities in the country – New Delhi, Mumbai, Hyderabad and Bengaluru – cater to nearly 55% of the country's total air traffic and are operating at near-full capacity. Rising private consumption and healthy economic growth would continue to provide tailwind to traffic growth.
- **Regional Connectivity Scheme:** The Government recognizes the need to generate demand at regional airports and a lack of proper airport infrastructure. The Regional Connectivity Scheme launched in 2016, has the objective to promote tourism, provide employment and promote balanced regional growth by making flying affordable for the masses. The policy intends to improve regional connectivity via measures such as incentives for airlines, airfare caps, and revival of existing airstrips and airports

JARGON

- **Load Factor:** Measures the capacity utilization of transportation services and is equal to the average actual utilization divided by maximum capacity
- **PRASM:** Passenger Revenue per Average Seat Mile – is the revenue generated per available seat miles in which ASM = number of seats available x number of miles flown
- **Hangar Costs:** Costs associated with parking aircrafts; Companies need to conduct a cost benefit analysis in order to assess whether to rent, lease or buy hangars

Further Reading (click to read):

1. Auctus Advisors: Civil Aviation and Cargo - A Knowledge Paper
2. How Airlines can gain a competitive edge through pricing

KEY CONSIDERATIONS

1. Fuel Prices
2. Carrying Capacity
3. Capacity Utilisation
4. Range/Distance
5. Destination Routes
6. Maintenance Costs
7. Depreciation of fleet

MANUFACTURING

Industry 4.0 is revolutionizing manufacturing by providing manufacturers with the opportunity to use IT and advanced technology throughout the product life cycle. This has resulted in substantial cost savings, increased efficiencies, and operational excellence.

KEY INDUSTRY TRENDS

- **IoT:** Manufacturers are increasingly leveraging the Internet of Things (IoT), which entails the interconnection of unique devices within an existing Internet infrastructure, to achieve a variety of goals including cost reduction, increased efficiency, improved safety, meeting compliance requirements, and product innovation. IoT's existence is primarily due to three factors: widely available Internet access, smaller sensors, and cloud computing
- **From B2B to B2C:** Many manufacturers who traditionally had a B2B business model are shifting to a B2B2C omnichannel. The benefits include increased profit, faster Time-to-market, brand control, price control, collecting consumer data. Companies are leveraging various e-commerce platforms for this purpose
- **ERP Systems:** Manufacturers can streamline their process by automating all business operations to get accurate real time information thereby reducing costs
- **Increased Re-shoring:** Growing economies in off-shoring countries requires manufacturer to increase wages. This coupled with lack of infrastructure in various countries and increased transportation costs has led to many firms 're-shoring' operations to their country, especially US

JARGON

- **Just-in-time (JIT)**: 'Pull-Demand' system in which raw materials are delivered as needed to minimize inventory
- **Bottleneck**: The resource in a manufacturing process that is working at max capacity and thus limits the output of the entire production process
- **Pareto:** 80% consequences come from 20% causes. In general, 20% of the causes lead to 80% of the downtime

Further Reading (click to read):

1. McKinsey: IoT and Predictive Maintenance
2. Bain Insights: Lean Six Sigma and Performance Improvement
3. Manufacturing the future: The next era of global growth and innovation

KEY CONSIDERATIONS

1. Raw Material Costs
2. Labor and wages
3. Supply capacity constraints/bottlenecks
4. Overhead costs
5. In-bound and out-bound logistics costs
6. Depreciation of equipment

Ask: In what part of the *value chain* does the client operate?

FINANCIAL SERVICES – BANKING AND NBFCs

Banking and lending has been one of the high growth and prominent sectors in the Indian economy. Though it is still dominated by public sector banks, we do see industry growth being driven by private banks and lenders.

KEY INDUSTRY TRENDS

- **PSB Consolidation**: Public sector banks have been undergoing a consolidation spree. The Govt. has been merging weak banks with the stronger ones based on IT compatibility, synergy in terms of geographies, asset classes served, etc.
- **Focus on Retail Assets**: Due to higher incidence of NPAs in corporate loan assets, banks (and lenders in general) are trying to increase their exposure to retail assets such as personal loans, home loans, car loans, etc. which have lower risk but higher return
- **NBFCs**: Non-banking finance companies, which have boosted lending growth in India over the last decade, are likely to see subdued growth due to reluctance of banks to fund NBFCs. Banks have surplus liquidity, but it is the riskiness of NBFC assets and loan defaults by NBFCs which have contributed to this industry wide issue
- **Venture Debt**: Start-ups, which find it difficult to borrow from banks, are increasingly raising funds from venture debt funds such as InnoVen, Alteria, Trifecta, etc.
- **Digital Banks and Payments:** The prevalence of more digital transactions have eroded the need for cash for daily use, leading to the proliferation of online banks that offer higher savings account interest rates and comparable services

JARGON

- **NPA**: Non-performing assets are loans which have remained unpaid for more than 90 or 180 days
- **CRAR**: Credit to risk weighted assets ratio is basically what proportion of a lender's assets (loans, investments, cash, etc.) are financed by equity and preference capital
- **CASA**: Current account and savings account – ratio of total deposits of a bank held in the form of current account and savings account; since these deposits are cheaper, higher the better

Further Reading (click to read):

1. BCG: Digital Payments 2020
2. Retail Banking 2020

KEY CALCULATIONS

1. **Net Interest Margin** =

$$\frac{\text{Interest earned} - \text{Interest expended}}{\text{Average loan assets}}$$

2. **Net NPA** = Gross NPA –Provision for loan assets

3. **Return on Assets** =

$$\frac{\text{Profit after tax}}{\text{Average total assets}}$$

FINANCIAL SERVICES - INSURANCE

Insurance Industry primarily covers Life Insurance and General Insurance. The industry has witnessed growth rate of ~ 15% in the past decade on the back of steadily rising incomes, population & increasing financial inclusion in India. IRDAI is the governing body for all insurance companies in India.

KEY INDUSTRY TRENDS

- **Increasing Insurance Penetration**: Insurance Penetration (premiums as a % of GDP) in India has increased from 2.71% in 2001 to 3.68% in 2017 v/s. global average of 6%
- **Increasing share of Pvt. Sector**: Share of pvt. sector in general insurance has increased from 13% (in FY03) to 56% (in FY20); in life insurance it has increased from 2% (in FY03) to 34% (in FY19)
- **Emergence of New Distribution Channels**: Increasing use of new distribution channels like banssurance, online distribution and NBFCS especially by the new-age players
- **Automation**: High investment in Information Technology, Infrastructure and chatbots to automate various processes to reduce costs and increase efficiency as well as customer satisfaction
- **Discontinuation of Tax Incentives**: In Budget 2020, the government discontinued tax incentives on life as well as health insurance, among other things. This may result in strong headwinds for the sector

JARGON

- **Insurance Density**: It is the ratio of premium underwritten in a year to the total population i.e. per-capita premium paid by the people of the country. In India, it is ~ 74 USD (as of 2018)
- **Reinsurance**: It is a form of insurance purchased by an insurance company in order to mitigate risk
- **Solvency Ratio**: It is the ratio of Available Solvency Margin (ASM) to Required Solvency Margin (RSM). ASM is the excess of assets over liabilities. RSM is based on net premiums and defined as per IRDAI guidelines. As per IRDAI guidelines, Cos. need to maintain solvency ratio of at least 150%

Further Reading (click to read):

1. Bain: India's life insurers need smarter policies for growth
2. McKinsey: Digital Disruption in Insurance

KEY CONSIDERATIONS

1. **Revenue Sources**: Insurance premium, interest from re-investing premiums
2. **Costs**: Customer service, claims, salaries, admin, licenses
3. New policies and renewals
4. Demographics and client risk profile
5. Marketing channels: Agents, online and corporate tie-ups

INFORMATION TECHNOLOGY

The IT-BPM sector in India stood at US$177 billion in 2019 witnessing a growth of 6.1 per cent year-on-year and is estimated that the size of the industry will grow to US$ 350 billion by 2025.

KEY INDUSTRY TRENDS

- **Artificial Intelligence (AI)/Machine Learning:** AI is the ability of a computer program to think and learn. Emergence of AI and ML has enabled digitalization of various practices in organizations and is expected to contribute $1 Trillion to the Indian Economy by 2035
- **Cloud Computing:** Is the practice of using a network of remote servers hosted on the Internet to store, manage, and process data, rather than a local server or a personal computer. More companies are moving to this platform for security, convenience, and cost savings
- **Internet of Things (IoT):** Smart devices that are all connected and communicate with each other via the internet are rising in demand due to value of strategic data that they provide
- **Blockchain:** A digital ledger in which transactions made and recorded chronologically and publicly. –Important for security and transfer verification purposes. Ex. include Bitcoin, and other cryptocurrencies

JARGON

- **Intellectual Property (IP):** A category of property that includes intangible creations protected by trademarks and copyrights (e.g. software,code, algorithms, etc.)
- **Freemium:** A pricing model used by many digital services, a "freemium" model is one where the majority of users are able to engage with a product or service entirely for free (perhaps in exchange for data collection or being served advertisements)
- **SaaS:** "Software as a service" -a software distribution model in which a third-party provider hosts applications and makes them available to customers over the Internet –Like Salesforce or Workday

Further Reading (click to read):

1. Digital India: Technology to transform a connected nation
2. Evolving Business Models for Sustained Growth: Indian IT/ITeS Industry (PwC Report)

KEY CALCULATIONS

1. **Addressable Market Size:**

Top Down Approach:
Total Population → No. of users → Market Share → #Units per user * Price Per Unit

Bottom Up Approach:
Current Customer Base → Potential Customer Base (Secondary Research) → Future User Base * #Units Per User * Price per unit

2. **Customer Acquisition Cost:**

$$\frac{\text{Marketing Expenses}}{\text{Newly acquired customers}}$$

TELECOMMUNICATIONS

Telecom industry has undergone a roller coaster ride, posting total losses of about INR 40,000 Cr over last 2 years. The industry has consolidated into 3 major players with Vodafone Idea, Airtel, Reliance-Jio retaining 90% of the industry.

KEY INDUSTRY TRENDS

- **Subscriber Base:** 2019 subscriber base in India was ~1162 Million, this however is projected to decline over the next 2-3 years at around 2-3% due to a INR 35/month minimum recharge regulation brought by the government
- **Penetration:** It is gauged by the tele density in an area. Urban tele-density is ~156% while rural tele density is ~57%
- **SIM Card Consolidation:** Urban penetration is expected to decline due to users dropping off secondary SIM cards and switching to primary SIM cards due to the minimum recharge regulation. Rural penetration is expected to grow over the coming years. This is the primary driver of "Churn Rate" or % subscribers leaving the network per quarter
- **Service Bundling:** Industry is witnessing a structural shift from simple call services to bundled offerings including social networking, OTT services, online shopping, news services packaged with the subscription to attract new customers
- **Cell Tower Networks:** Owned by Telecom firms under a separate entity, this is their primary asset driving growth. They require high upfront cost to set up, generate a rent income based on traffic. Companies often let out traffic bandwidth to other companies for higher rents.

JARGON

- **ARPU**: Average Return per User – Most Crucial revenue driver
- **Tele Density**: No of subscriptions per 100 population in an area
- **AGR Dispute:** The government in 1999 announced the National Telecom Policy, which gave these companies an option to migrate from fixed license fee to revenue sharing fee. As per the new policy, 15 per cent AGR was fixed as a license fee under the revenue-sharing model, which was later reduced to 13 per cent and then 8 per cent in 2013. The DoT claimed revenue share from all earnings under the AGR from the telecom companies, Telco's owe Rs 1.47 lakh crore to the DoT, including Rs 92,600 crore as license fee and Rs 55,100 crore as spectrum usage charges.

Further Reading (click to read):

1. The Business Case for 5G

KEY CALCULATIONS

1. **ARPU** = $\frac{\text{Revenue}}{\text{No. of subscriptions}}$

2. **Customer Acquisition Cost** = $\frac{\text{Marketing Expenses}}{\text{Newly Acquired Customers}}$

KEY CONSIDERATIONS

1. Regional Competition
2. Competition
   1. New Entrants
   2. Barriers to Entry
   3. Substitutability/Switching Costs
3. Contract lengths as stipulations
4. Infrastructure

HEALTHCARE & PHARMACEUTICALS

India is uniquely positioned in the global pharmaceutical industry, being the world's largest producer of pharma products coupled with the conscious governmental push to expand healthcare coverage for a continuously upwardly mobile demographic

KEY INDUSTRY TRENDS

- **Ayushman Bharat Yojna:** Launched in Sep 2018 by India, it is the world's largest fully state-sponsored healthcare coverage scheme. It aims to provide free secondary and tertiary healthcare coverage up to 5 lakhs per year per family to the bottom 40% of population
- **Telemedicine:** Higher smartphone and broadband penetration is creating a market that was largely untapped pre-Covid. The pandemic also forced the government to finally issue telemedicine guidelines for virtual consultations on March 26, providing regulatory clarity for further market expansion, expected to grow to $5B+ by 2025, at a CAGR of 34%
- **Price capping:** The National Pharmaceutical Pricing Authority (NPPA) has capped the prices of 50+ essential medicines, and devices such as knee caps and stents. First happened in 1962, this became more frequent in the last decade.
- **Industry Joint Ventures:** To reduce their dependency on production of generics (of which India is the largest producer), Indian pharma firms are increasingly tying up with international firms for production of their patented drugs.

JARGON

- **HCP (Healthcare Professional):** Umbrella term for medical professionals involved in supervision and treatment of patients across industries (oncology, gynaecology, orthopaedics, etc.) Does not include nurses.
- **Sales Rep and Detailing:** POC for the HCP from the pharma company who lets them know of new products, provides access to training resources on how to use products and answers HCP queries
- **Generics:** Much cheaper, exact copies of drugs that have lost their patent (after 20 years of coming to the market)
- **Co-pay:** Fixed amount that patients covered by insurance needs to pay before accessing a medical service. It is used by health insurance companies to prevent moral hazard, i.e. to deter patients from seeking medical care that may not be necessary. The amount is usually nominal - 5-10% of the total cost

Further Reading (click to read):

1. India Pharma 2020: Propelling access and acceptance, realizing true potential

KEY CONSIDERATIONS

1. Regulatory guidelines from health ministry and CDSCO – Central Drug Standards Control Organisation
2. Price capping orders from NPPA
3. Emergence of ASEAN countries as manufacturing hubs
4. Data integrity and test results manipulation warnings from FDA
5. QC issues around substandard and fake medicines

AUTOMOBILES

India is expected to emerge as the world's 3rd largest passenger vehicle market by 2021. Currently, the automotive sector contributes to 7% of India's GDP and is expected to increase to 12% as per the Automotive Mission Plan.

KEY INDUSTRY TRENDS

- **Government Initiatives:** Through the National Electric Mobility Mission Plan (NEMMP) and other initiatives, the government seeks to achieve two objectives – facilitate long term growth and minimize emissions and oil dependence
- **BS-IV to BS-VI:** Targeted at making improvements in emission control, fuel efficiency and engine design; BS-VI fuel has lower Sulphur content; FAME1 and FAME2 introduced to incentivize EV buyers and electrification of public transport
- **Electrification:** India's EV market is miniscule compared to China, Europe and the US. Declining prices of batteries and supportive govt. policies are stimulating the segment's growth. Reduction in emissions and less dependency on oil imports are clear advantages of electrification. There's heavy dependence on China for raw material, competitive disadvantage in battery manufacturing and lack of charging infrastructure are some challenges
- **Make in India:** Although there is still a long way to go before India becomes a leader in the manufacturing arena, companies in the automotive sector are embracing this opportunity to leverage India as a hub for low-cost, high-quality products. After creating a strong value proposition in mini cars, India is gaining global recognition in the compact sedan and SUV category

JARGON

- **OEMs**: Automobile manufacturers do not produce every part of the vehicle and rely on OEMs for components
- **SAAR**: Most auto makers experience seasonality in sales – High: April to June, Low: November to January and hence report seasonally adjusted annual rate of sales
- **Net Promoter Score**: Metric used in customer experience programs. NPS measures the loyalty of customers. Measured with a single question survey and reported with a number from -100 to +100, a higher score is desirable.

Further Reading (click to read):

1. McKinsey: The future of mobility in India's passenger-vehicle market
2. Bain: Innovation in automotive industry

KEY CONSIDERATIONS

1. **Revenue Sources**: New vehicle sales, after sales service, used vehicles sales, etc.
2. **Costs**: Explore the value chain (Suppliers, Manufacturing, Dealers, Retailers, Customers)
3. Regulatory barriers
4. Import-Export split

FRAMEWORKS

GENERAL FRAMEWORKS

BUSINESS SITUATION FRAMEWORK (3C'S OR 3C-P)

Used for understanding the firm's current position in the market and evaluating launch of new products, entry into a new market, growth etc.

Customers	Understanding market segments; consumer behavior; demographics; Used for identifying target customers
Competitors	Size of the market; Market share; Clients' performance vis-à-vis competition; Competitors' future aspirations
Company	Understanding the firms' goals and objectives; Strategy it in the short term and long term
Product	Nature of the firms' product/service vis-à-vis competitors; Customer requirements; Complements and substitutes

MARKETING MIX (4P'S AND 7P'S)

Used for identifying the differentiating factor between the firm and the industry and root cause analysis for any problem

Product	Various attributes of the product; Differentiating factors; Value Proposition
Place	Different distribution channels used by the firm (retail, wholesale, online etc.); Supply chain; Network optimization
Promotion	Marketing message of the client; Promotion channels; Recent Marketing Campaigns Run
Price	Price of client's product; Price Elasticity of the product; Willingness to Pay; Competitor Pricing
Physical Evidence	Sales of the product/Contacting Customers; Product Packaging; Online experience
People	Who are the people from the client's side delivering services? How trained are they?
Process	The systems and processes that deliver a product or a service to the customer; Quality Assurance; Value-Chain analysis

THE FOUR A's

Used for identifying the supply and demand constraints of a product/service

Awareness	Branding; Analyze whether sufficient people know about the product/service
Availability	Sufficient supply; Appropriate stock; Analyze availability across various distribution channels
Accessibility	Equitable distribution of product/service and accessible by all target consumers
Affordability	Appropriate pricing of products/services to ensure it is affordable by all target consumers

PORTER'S FIVE FORCES

Michael Porter's Five Forces is probably the most famous framework used in preparing for case interviews. It has endured as one of the frameworks most talked about by many in and out of the consulting field. Although the Five Forces is an excellent framework in helping you organize you thoughts, its analysis is not complete. It should be used in conjunction with other frameworks to enable you to fully understand the issues at hand.

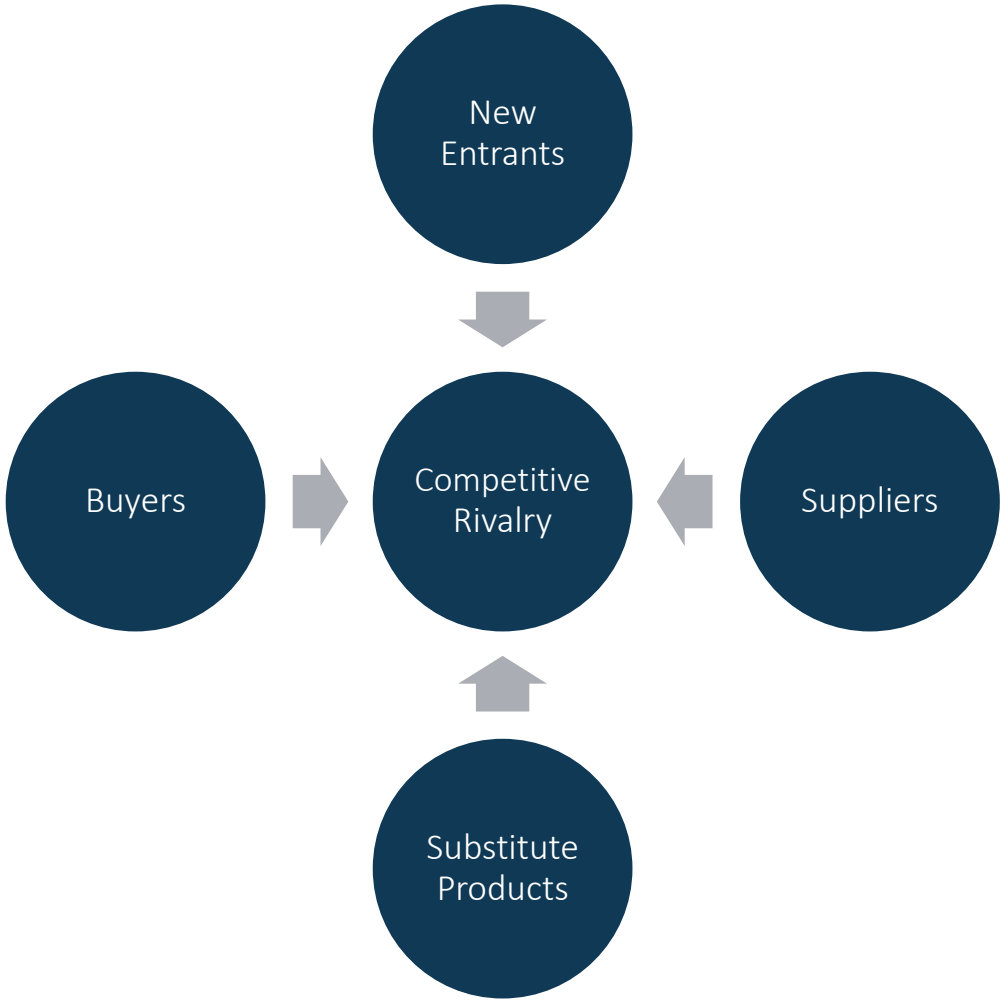
Competitive advantage in an industry is dependent on five primary forces:

- The threat of new entrants
- The bargaining power of buyers
- The bargaining power of suppliers
- The threat of substitute products
- Rivalry with competitors

The degree of these threats determines the attractiveness of the market

- Intense competition allows minimal profit margins
- Mild competition allows wider profit margins

The goal is to assess whether a company should enter/exit the industry or find a position in the industry where it can best defend itself against these forces or can influence them in its favour.



Note: Identification of buyers and suppliers is key. Here's an easy heuristic:

- The company pays money to a supplier
- The company gets money from a buyer

Buyer can be intermediaries; They needn't always be end consumers

Source: Michael E. Porter, *Competitive Strategy: Techniques for Analysing Industries and Competitors*

PORTER'S FIVE FORCES

Barriers to Entry:

There are a number of factors that determine the degree of difficulty to enter an industry:

- Economies of Scale
- Product differentiation
- Capital requirements
- Access to distribution channels
- Cost advantages independent of scale
- Propriety technologies
- Relationship with suppliers of raw materials
- Geographical presence
- Time compression diseconomies
- Government regulations

Relationship with Buyers:

A buyer group is powerful if:

- It is concentrated or purchase large volumes as a % of seller's sales
- Undifferentiated products
- Low switching costs
- Buyers pose a credible threat of backward integration
- The industry's product is unimportant to the quality of the
- buyer's products or services

Relationship with Suppliers:

A supplier group is powerful if:

- There are fewer substitutable products
- The industry is not an important customer of the supplier group
- The supplier group is an import input to the buyer's business
- The supplier's products are differentiated and have high associated switching costs
- The supplier group poses a credible threat of forward integration

Substitute Products:

Substitute products that deserve the most attention are those that:

- Compete in price with the industry's products
- Are produced by industries earning higher products

Rivalry:

Rivalry among existing competitors increases if:

- Numerous or equally balanced competitors exist
- Industry growth is slow
- Fixed costs are high
- Undifferentiated products and low switching costs

Source: Michael E. Porter, *Competitive Strategy: Techniques for Analysing Industries and Competitors*

IMPORTANT MATRICES

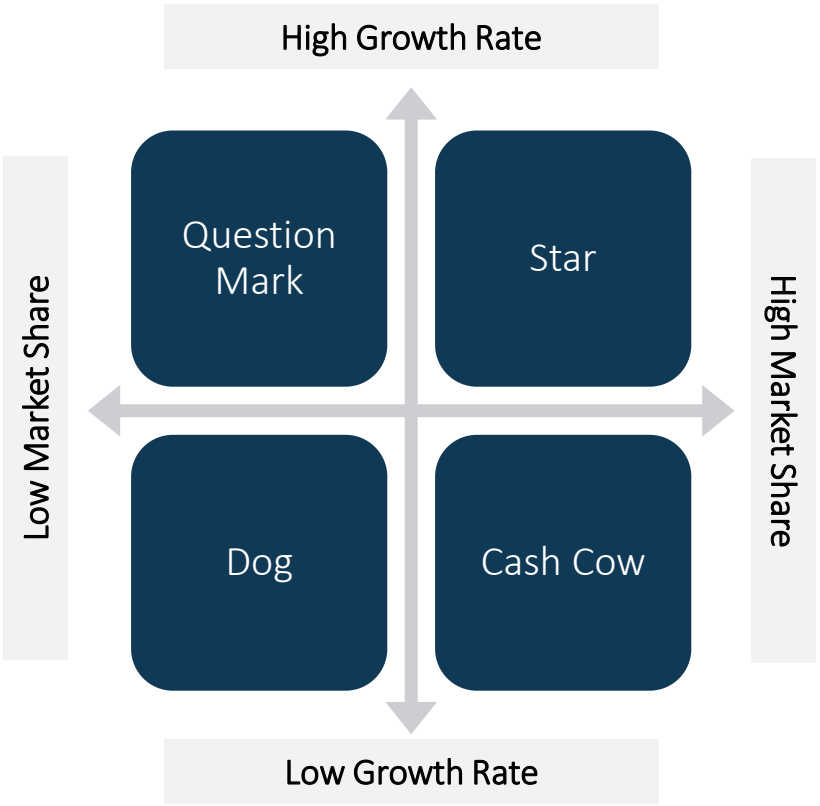
Matrices are an excellent way to illustrate a small number of potential scenarios or concepts. Some examples include:

- High Impact versus Low Impact
- High Market Share versus Low Market Share
- Broad Market Reach vs Limited Market Reach

BCG – GROWTH SHARE MATRIX

The BCG Growth-Share Matrix is a portfolio planning model based on the observation that a company's business units can be classified into four categories based on combinations of market growth and market share relative to the largest competitor. Market growth serves as a proxy for industry attractiveness (cash usage) and relative market share as a proxy for competitive advantage (cash generation).

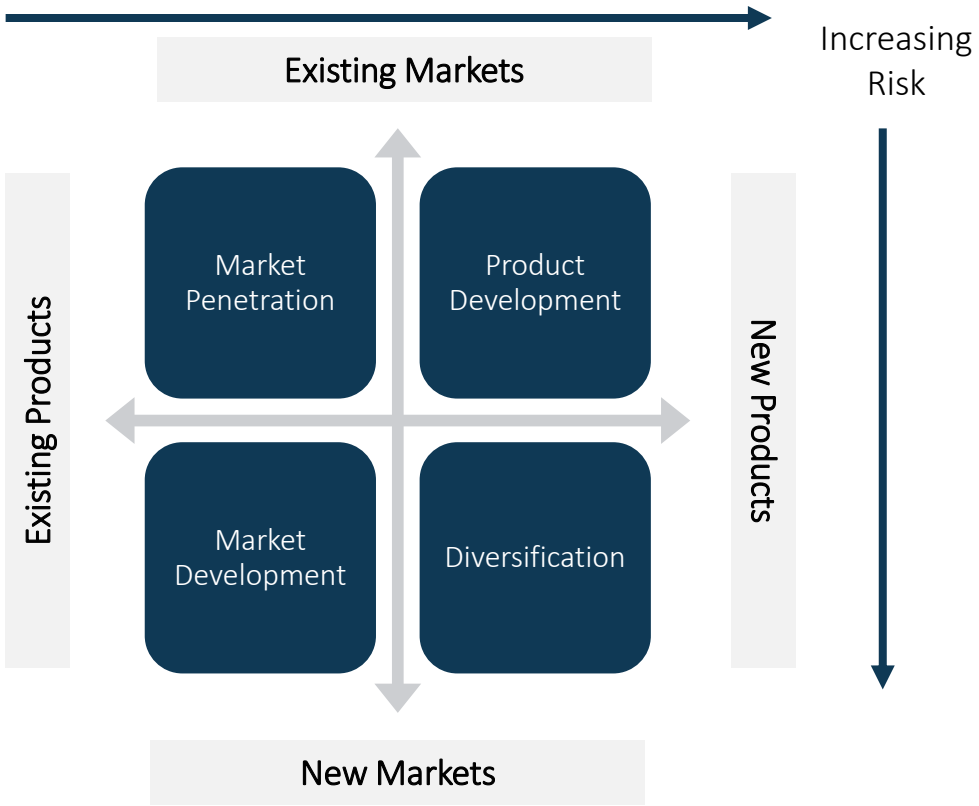
Dogs	**Low Share, Low Growth.** Companies should liquidate, divest, or reposition these "pets"
Question Marks	**High Growth, Low Share.** Companies should invest in or discard these "question marks," depending on their chances of becoming stars
Stars	**High Growth, High Share.** Companies should significantly invest in these "stars" as they have high future potential
Cash Cows	**Low Growth, High Share.** Companies should *milk* these "cash cows" for cash to reinvest



Source: BCG Growth Share Matrix

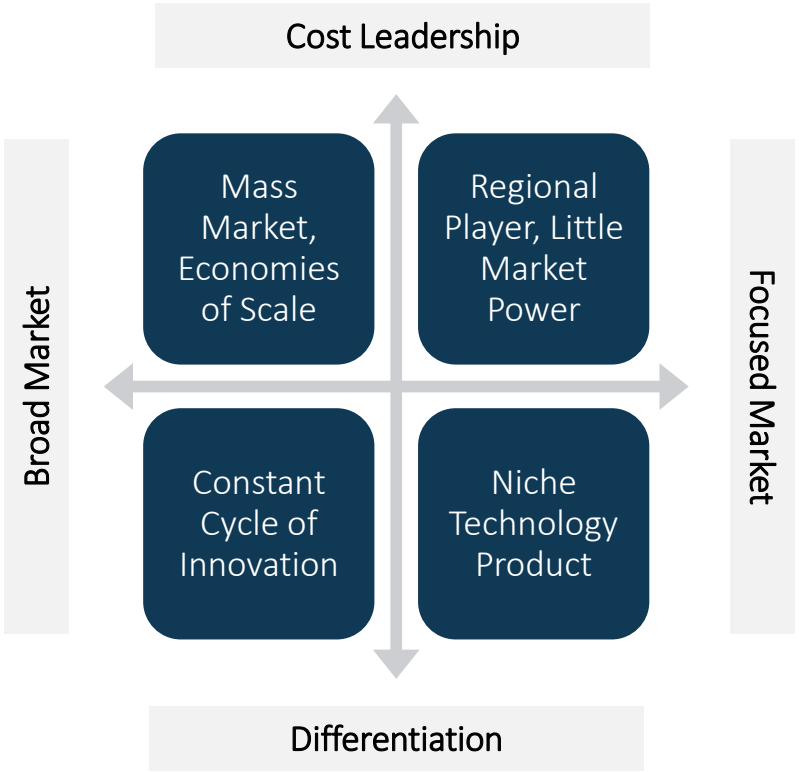
IMPORTANT MATRICES

ANSOFF MATRIX



The Ansoff Matrix, also called the Product/Market Expansion Grid, is a tool used by firms to analyze and plan their strategies for growth. The matrix shows four strategies that can be used to help a firm grow and also analyzes the risk associated with each strategy. .

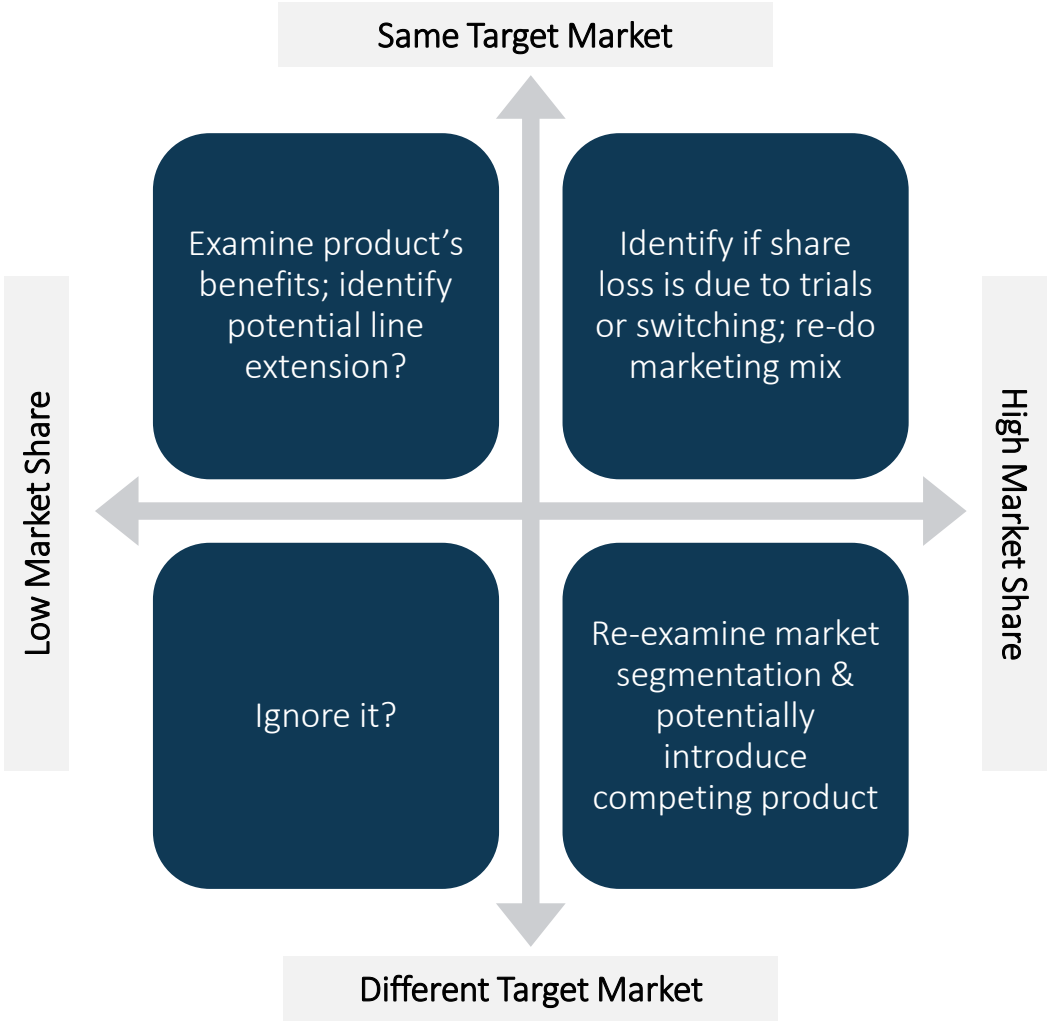
PORTER'S GENERIC STRATEGIES



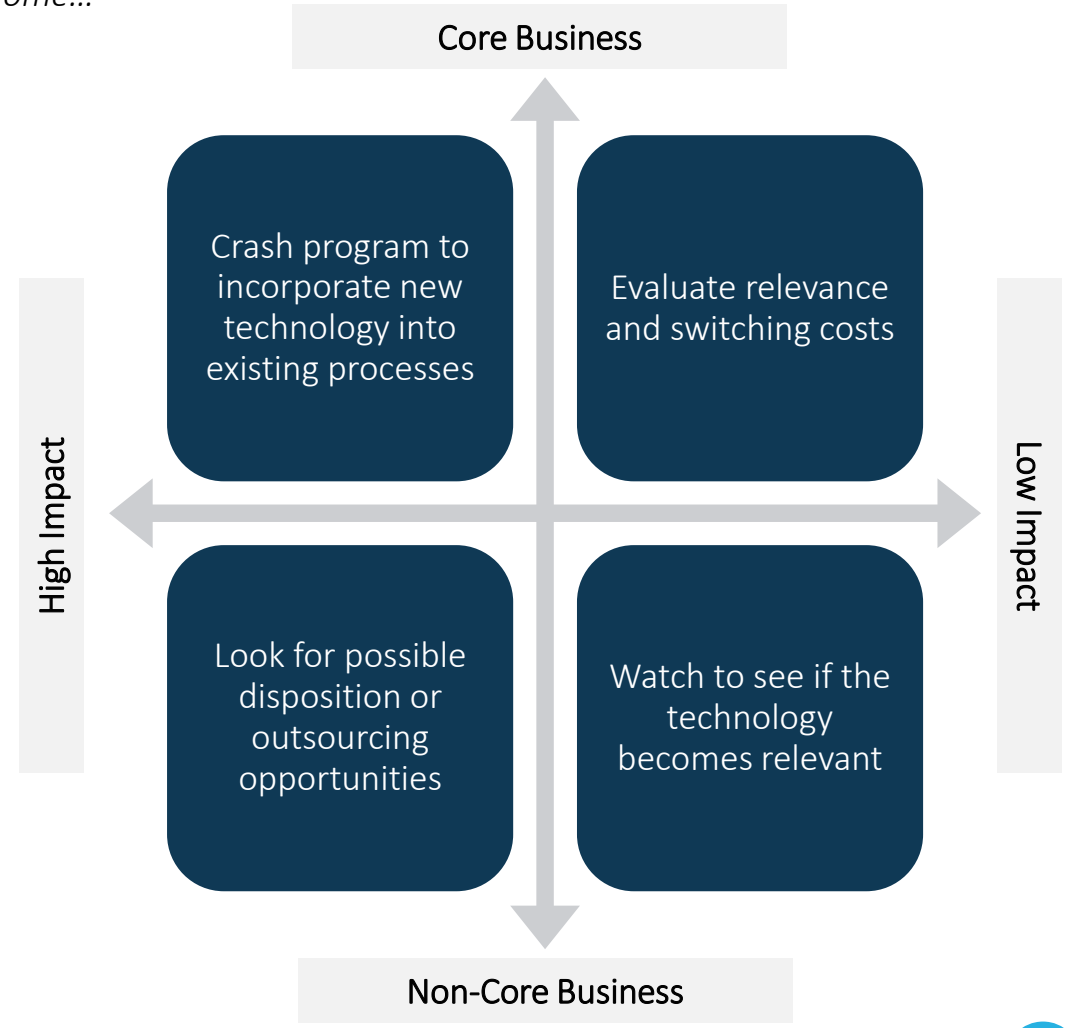
Porter's generic strategies describe how a company pursues competitive advantage across its chosen market scope. The generic strategy reflects the choices made regarding both the type of competitive advantage and the scope.

MATRICES - EXAMPLES

"You are a brand manager for P&G in the Health & Beauty Aids category, and a competitor just introduced a new toothpaste that is gaining market share…"



"You are the head of R&D for a large pharma company, and a new process has been created as a result of the work done to sequence the human genome…"



CASE THEMES

The following case themes are popularly tested in case interviews. Please note that this is not an exhaustive list of themes and a case interview can include a combination of multiple themes.

PROFITABILITY: Analyze potential reasons for decline in profits by studying sources of revenue and costs and identifying sustainable solutions to improve profitability

MARKET ENTRY: Analyze the client's opportunity to expand and quantify the viable market for launching new products and services or entry into a new geography

PRICING: Evaluate the product offering of the client and suggest appropriate pricing strategy through competitor, cost and value based pricing. Often combined with market entry cases

GROWTH: Identify opportunities for the client to optimally grow revenues or increase market share

UNCONVENTIONAL: These cases usually test the candidates' presence of mind and analytical skills. Structure is key to tackling such open ended cases

PROFITABILITY

BASIC FRAMEWORK

The basic framework for profitability involves breaking down the profit as "Profit = Revenue – Cost" and further delving into the branches. The case can have issues with either revenue, cost or both.

Starting with the basic, deep dive into each of these areas to identify the key problem.

Before starting with the framework, ask key preliminary questions like –

- Since when has the client been facing this issue?
- What was the trend before?
- Is this issue client specific issue or industry specific?
- Is there any timeline to solve this issue?

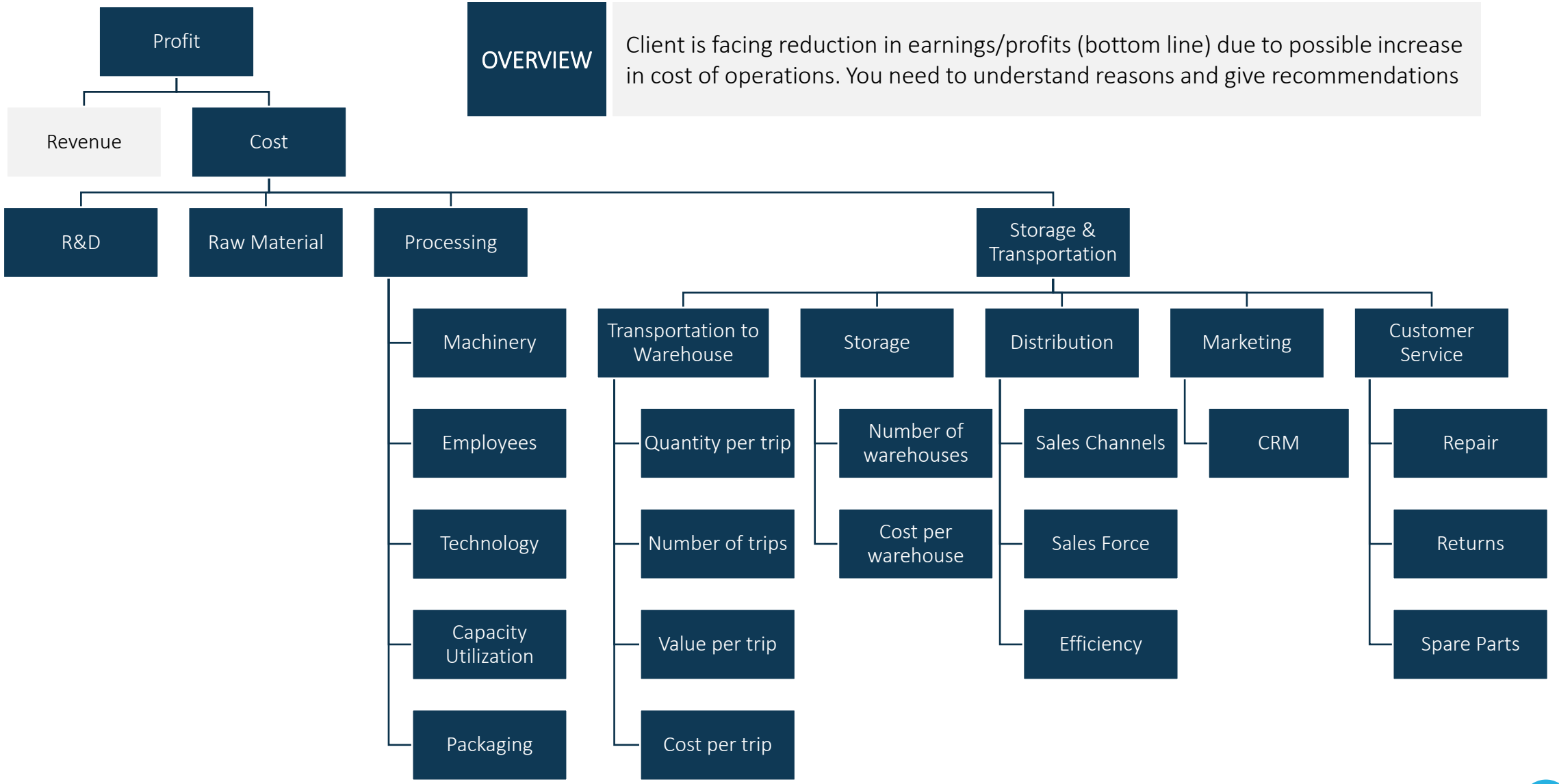
During the case analysis, make sure to ask questions like –

- Has the revenue been declining or has the cost been increasing?
- Which of the revenue/cost streams have an issue?

COST REDUCTION – VALUE CHAIN ANALYSIS

OVERVIEW

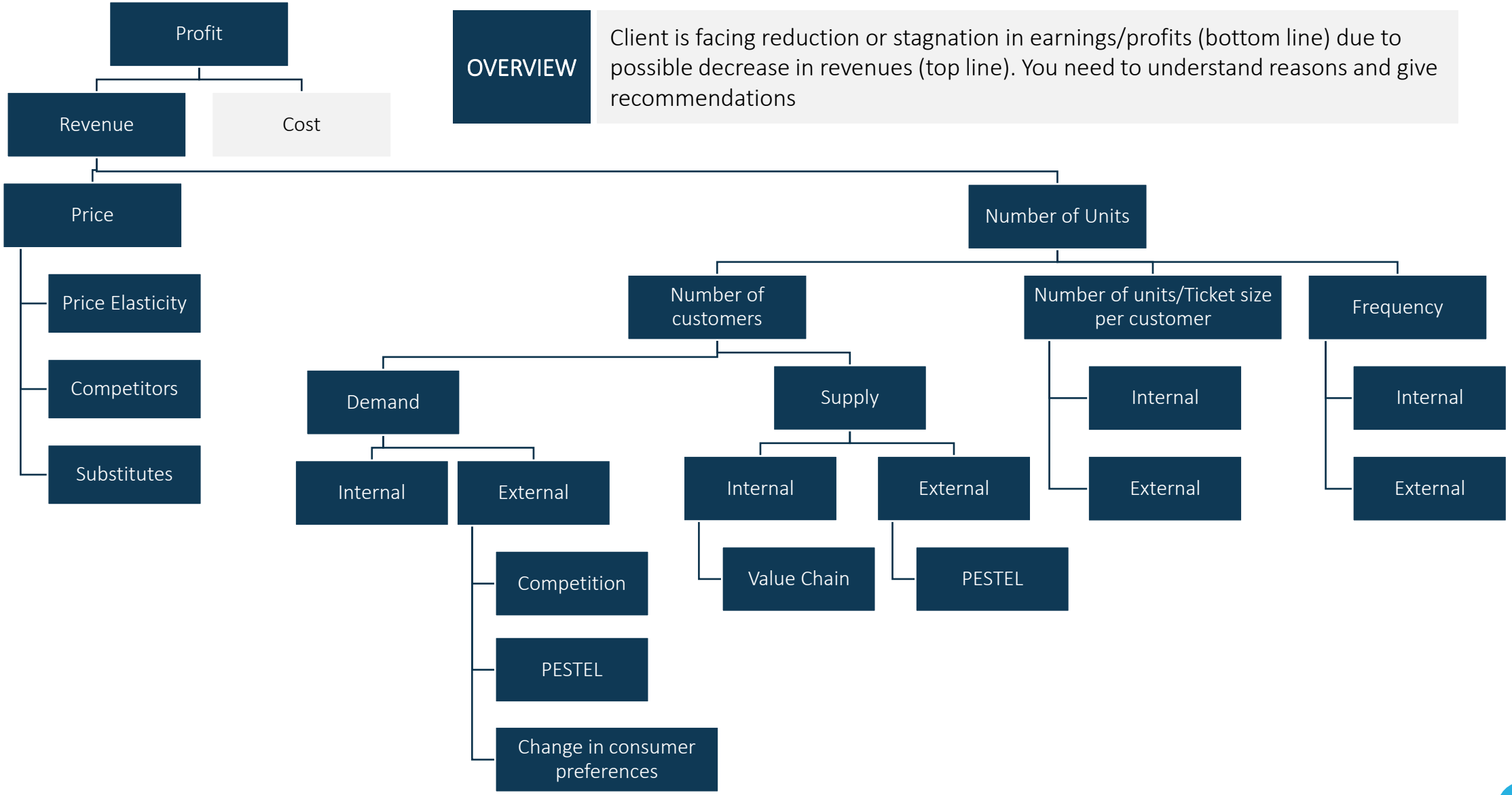
Client is facing reduction in earnings/profits (bottom line) due to possible increase in cost of operations. You need to understand reasons and give recommendations



DECLINING REVENUES

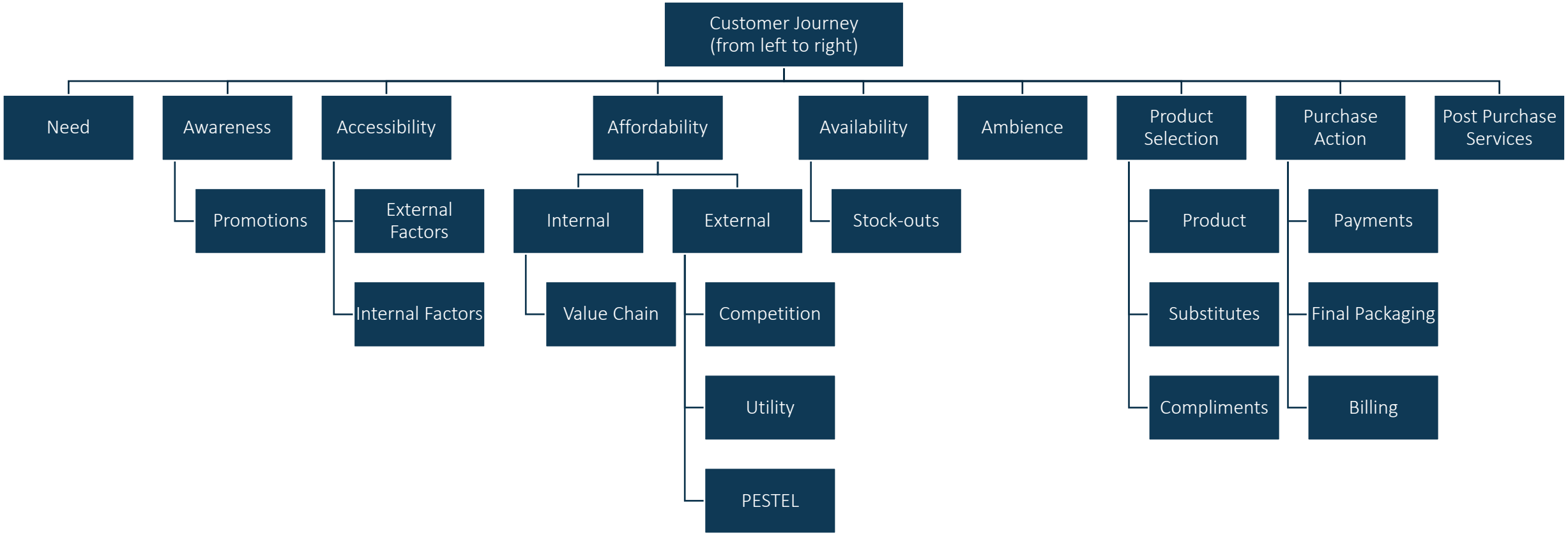
OVERVIEW

Client is facing reduction or stagnation in earnings/profits (bottom line) due to possible decrease in revenues (top line). You need to understand reasons and give recommendations



CUSTOMER JOURNEY

Customer Journey is a framework which can be used in any kind of situation. At any point in analysis if you are stuck, this can be used to ensure that all possible options are covered. This is the most common framework used in unconventional cases, and can be used as a part of other conventional cases as well. It refers to the journey of customers right from the start – when they develop a need for something, and how various factors can influence their journey. For example, if customers require something, they should know about it (awareness), they should be able to reach a point where they can buy it (accessibility), the product should be in stock (availability), and they should be able to afford it (affordability).



DELHI METRO NETWORK

The Delhi Metro network is facing profitability issues in CP – the profit is not as high as other stations. Figure out why and suggest recommendations.

Sure. Since when has the station facing this issue?

Since the beginning.

Okay. Now, profits are a function of the revenues and costs. So are the costs higher as compared to other stations or is the station not generating revenue as high as other metro stations?

The revenue is not as high as other stations. You can ignore costs in this case.

Okay. I would break down the revenue streams into 3 broad categories – tickets, advertisements and outlets. Is there any other source of revenue for the station as well?

No, you can proceed with these three.

Is there an issue with one of these revenue streams as compared to other metro stations, or shall I look at all of them to find where the problem is?

The revenue from outlets is less as compared to other metro stations.

Okay. The revenue from the outlets depends on the total number of outlets, and the rent per outlet. Is the number of outlets same as other metro stations?

Yes, assume it to be roughly the same.

What about the rent? How is it charged?

The rent is fixed for each outlet.

Since rent is the same clearly price is not an issue for the shopkeepers. They would be looking into other aspects when they rent an outlet. They would also be considering the expected revenue when they operate in a metro station, the other costs that they might incur, the margins that they have – if they differ across stations, and also conditions of the rent agreement. Am I missing something?

Yes, that is correct. Expected revenue, incurred costs and margins are the same. You can explore the reasons of why rent agreement be an issue.

Sure. The various terms of a rent agreement include the rent, the duration, and the lock-in period. Since the rent is the same, is the duration or lock-in period different? Probably longer than others which would be a higher risk for the shopkeeper?

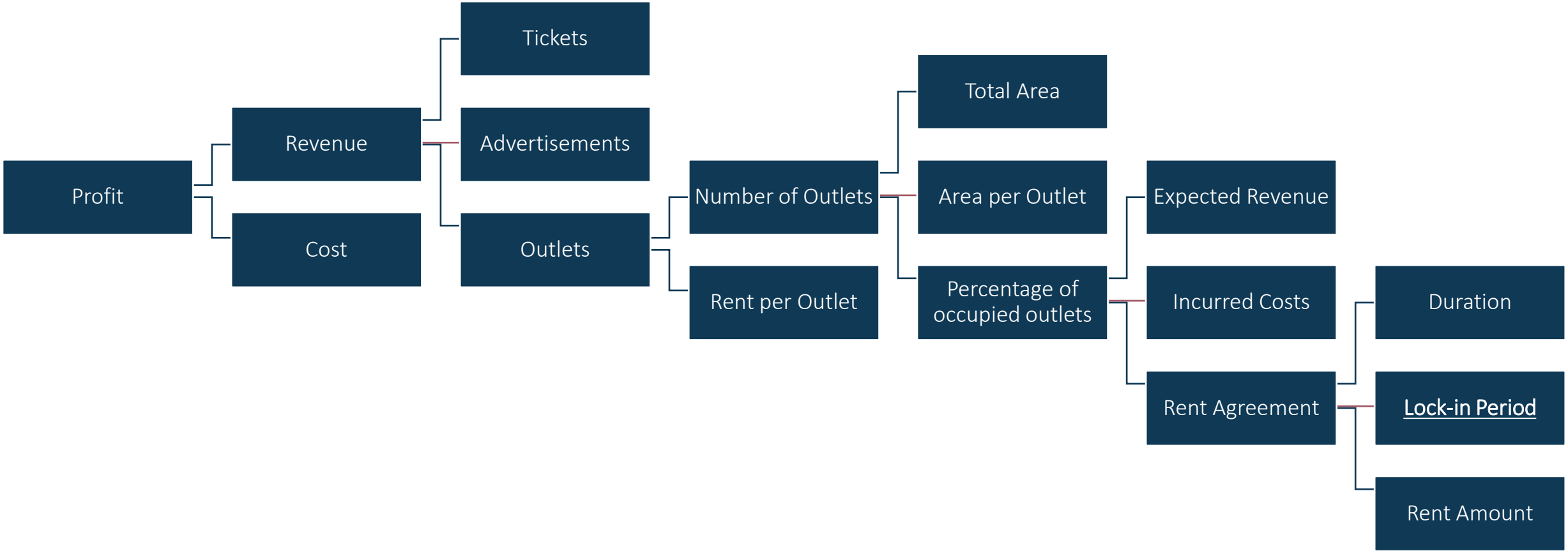
Yes, that is correct. The lock-in period for outlets in other metro stations is 2 months while in CP it is 6 months, due to which they do not prefer to rent them. Can you suggest recommendations?

Yes. First, we should look into why the lock-in period is 6 months in CP while 2 months in other stations, and if it is possible it should be reduced. If not, then the rent can be reduced. We can also opt for differential pricing, where the rent is a function of the area and location of the outlet inside the station – for example areas which attract high footfall can have a higher rent.

That's all. Thanks.

DELHI METRO NETWORK

Summary: I had to figure out why the Delhi Metro network is facing profitability issues in CP. The issue is that the lock-in period for outlets in this metro station is 6 months, which was higher than other metro stations where the lock-in period for the same outlets is 2 months. Due to this, people are less willing to take them on rent. To rectify this, I would recommend that they can look into reducing the lock-in period if possible. If not, they can consider reducing the rent. They can also opt for a differential pricing, where rent can be a function of area of the outlet and footfall.



FOUR STAR HOTEL

Client is a Four Star Hotel in Delhi who's experiencing a dip in revenue. Come up with three key recommendations.

Alright, I will start with a few preliminary questions to understand the situation better. Where is the client based out of and since when are they facing this dip?

The client is based out of Delhi and it has been a year since they've started facing this issue.

Okay. I would like to know a little more. Where in Delhi are they located, is it a tourist spot or a business district and what is the mix of their customers? In addition, I would like to know if there are any competitors in the same area, what their mix and if they've been experiencing the same problems.

Our client is situated in a business district but sees about 30% of tourist bookings too. There are four major competitors in the area, who have a similar mix and have seen a rise in revenues over the same period.

That's interesting, our competitors are not facing the problem that we are. So it is not a general industrywide trend. I would like to breakdown revenue into the number of guests per year times the number of days they stay times the average spend per day. I would then compare with our competitors in each part. Do we have any information on how we're doing on each of these fronts?

That's a good enough split. The number of guests per year have reduced for our client and increased for the competition. Average stay duration has remained the same. How would you split the spend per day further?

I see first off that number of guests have reduced. I will look into this after I detail out spend/day. I would split it into Room Rents, Food and Miscellaneous, the last including concierge, laundry, On-Demand Movies etc. How have revenues changed in these segments?

The spends on Food and Misc. have remained the same. On Average, Room Rents/Day have reduced. How would you proceed further?

I would like to segment the rooms into premium and regular and look at the revenues in each segment, unless there are more categories.

That's correct, there are only two segments. However, elaborate on how you would segment revenue further in each segment.

I would write Rent/Day as Number of Rooms*Avg. Occupancy*Tariff/Day. So a decline could be due to non-availability, lower occupancy or reduced tariffs. Do you have the data for the same for both room categories?

You're right, The premium suites have seen a reduced occupancy this year compared to last years whereas the regular ones have seen a small increase. Rest all are same.

I would like to split up occupancy across customer segments and seasons. Are we seeing a drop in the tourist occupancy or for the business customers? Is there any particular time of the year where the fall in occupancy is most pronounced? Similarly, what is the data for increase in regular rooms?

We have noticed a fall in the tourist segment mostly. And as for the seasonal variation, there is none. Occupancy of regular rooms also increased y-o-y for the winter holiday season.

FOUR STAR HOTEL

Okay, so I hypothesize that tourists are not staying as much as they used to in the premium rooms and are instead staying in the regular ones during the holiday season. This could be due to unaffordability or some hotel policy reserving the premium rooms. I would like to analyse the tourist characteristics to understand their preferences and see if my hypothesis is true.

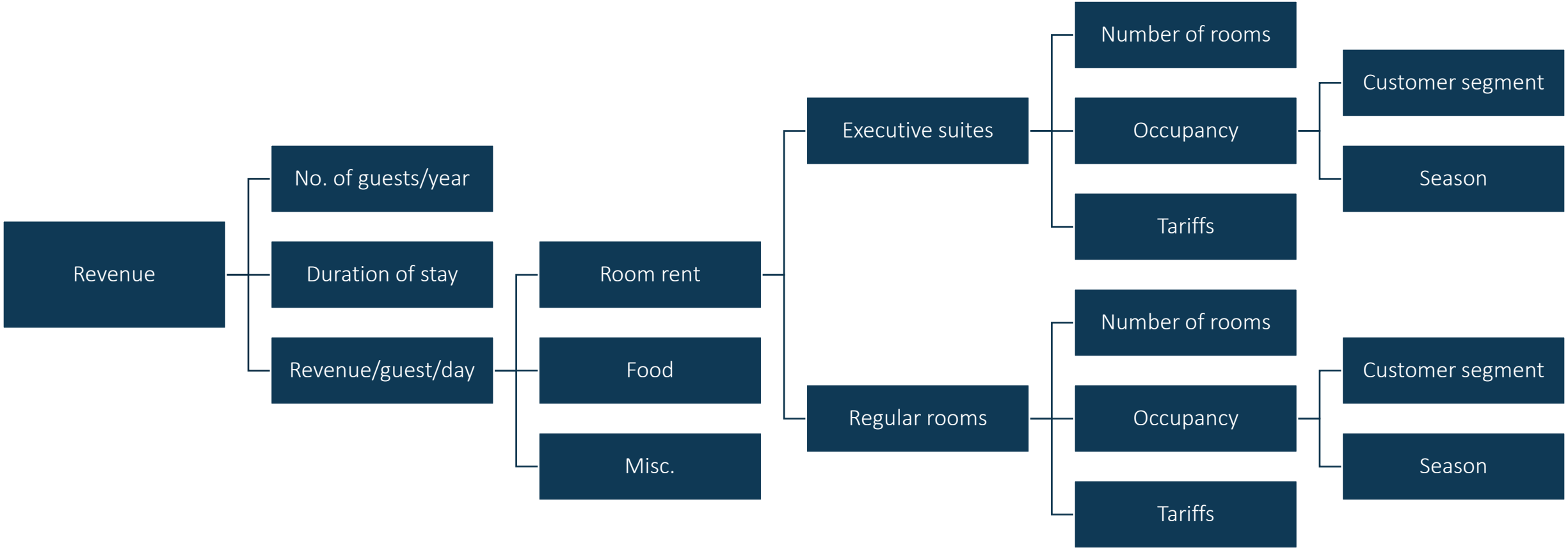
That won't be necessary. The hotel has changed its policy on free upgrades if regular rooms are full and stopped it. You can give your recommendations now.

The hotel can look at bringing back it's old policy of free upgrades. However, in case it doesn't want to provide perverse incentives to book at the last minute, the hotel can look at offering premium suites at a discount or on a long term basis, reduce the excess number of rooms in the Premium segment.

That will be all, thank you.

FOUR STAR HOTEL

Summary: Client is a four star hotel in Delhi facing a decline in profits. This was due to a decline in occupancy in the premium segment while the regular segment had seen an increase/ This was because the hotel has changed its policy on free upgrades if regular rooms are full and stopped it. The client can look at offering premium suites at a discount or on a long term basis, reduce the excess number of rooms in the Premium segment.



INSURANCE COMPANY

Your client is an insurance company who has been facing a decline in its profits since the last 1 year. Analyze the problem and suggest recommendations.

Understood. Before I commence with the analysis, I wanted to ask some clarifying questions. What kind of insurance does it provide? What are the geographies in which it operates? How does it sell insurance? Also, is this an industry wide phenomenon or company specific issue?

It provides many types of insurance but the decline has primarily been in Automobile insurance. It operates in India in 3 states - Delhi, Maharashtra and Gujarat. It has partnered with car dealers to sell insurance at the time of purchase. Apart from this, renewals continue by directly approaching the customers. This is happening only with our client, the market is fairly unchanged.

Right. I'll breakdown the profits into revenues and costs. Do we have any information about changes in them?

Revenues have been unchanged and costs have increased.

Okay, so this is a cost side issue. I'll break down the costs into fixed and variable costs. The major cost head in fixed is operating costs while that in variable is claims payout. Has anyone of these increased?

Yes, the claims payout has increased.

Alright, so the total claims payout cost can be broken down further as no. of payouts and average amount per payout. Which of these has changed?

Number of payouts have increased. What can be the possible reasons for the same?

There can be 2 types of causes - Internal like algorithm/formula determining claims payout could have changed or External like more no. of accidents could be happening.

We know that the internal algorithm and formula has remained unchanged.

Understood. In that case, there seems to be an external reason for this phenomenon. Again, there can be 2 possibilities - Technical flaws like faulty cars leading to more accidents or Interpersonal flaws like irresponsible driving.

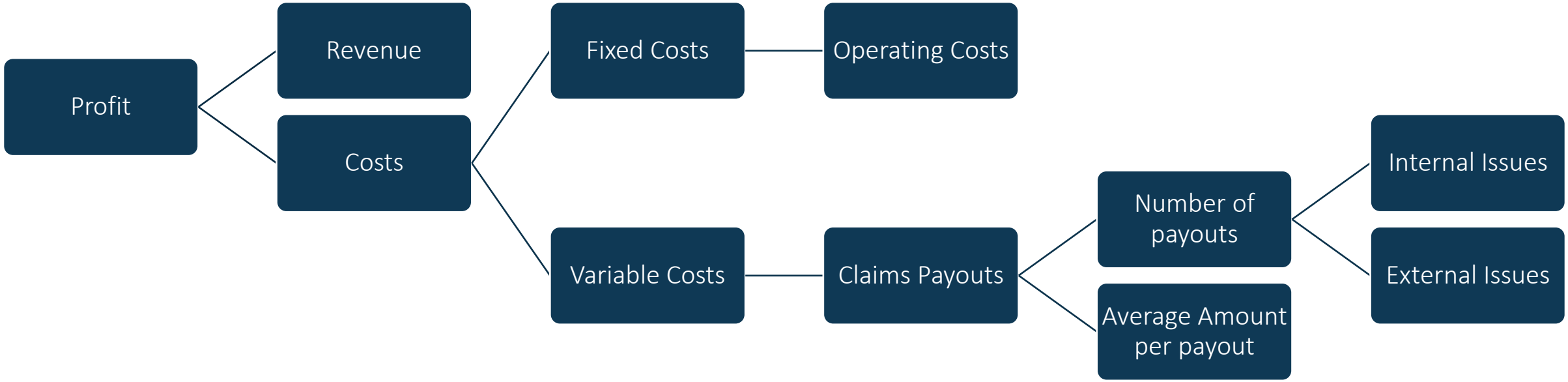
You are spot on. We have observed that the young population in our customer base has been driving recklessly which has led to greater occasions for paying higher amount of claims. Could you suggest some recommendations in this regard?

Sure. I recommend the client to: 1. In the short term, change their algorithm/formula to either set a cap on the damages that can be reimbursed or take a higher amount of premiums from risky youth drivers. 2. In the long term, the client should diversify its customers both age wise and state wise so that this doesn't affect their bottom-line too much again in the future.

Good recommendations. Thank You. We can close the case here.

INSURANCE COMPANY

Summary: I had to determine the cause of profit decline for an insurance company. Upon analysis, I found out that this was due to an increase in costs, which was due to an increase in the number of claim pay-outs because of irresponsible driving by the youth.



BEER MANUFACTURER

Client is a beer manufacturer. Its facing decline in profits. You have been brought in to figure out the reason and suggest some recommendations

Just to reiterate, our client is a beer manufacturer and they have been facing a decline in profits. I need to figure out the reasons and provide some recommendations for the same, To start with, may I know how long has the client been facing this problem?

The company has been facing this issue since 2-3 years.

In which geography does the client operate? Is there any particular region in which we are seeing this issue?

The client has different brands across the world. The problem is particularly evident in the US.

Is this an industry wide issue or is it a client specific problem?

It an industry wide issue.

Can you tell me more about the competitors of the client?

There are 4 major players. Our client has almost 50% of the market share.

Okay. Now I would like to break down the profits as revenue minus costs. Could you please tell me if there are any changes in the revenues and costs over the past few years .

The revenues have been declining. The costs have remained the same.

That's interesting. Here, I would like to understand a bit about the revenue stream of our client. I understand that beer is typically sold on liquor shops and pubs. Am I missing any other revenue stream? Has the revenue gone down in both these channels?

No these are the two major channels. Revenue has gone down in both.

I would like to split the revenue in number of units sold and average price of a beet bottle. Could you please let me know if there are any changes in these two parameters?

As a matter of fact, industry price of beer has remained the same but units sold have gone down.

Ok, has there been any supply issue in distributing the beer through the channels? Or the demand from the consumer side has reduced?

There has been no change in the supply. Even the margins for the distributors have remained the same. People are just not buying the product.

Ok. Since, this has been an industry wide problem, it looks like an external issue. I would like to analyse some macro economic factors that could have led to this. *(Applies PESTEL)*

Yes. Actually, there has been a social lifestyle change in the beer consumers of US. They have become more health conscious as beer may lead to long term obesity and other heart and liver problems.

OK. That's why there is a fall in the demand. I think we have identified the issue. Can I take up a minute to come up with some recommendations?

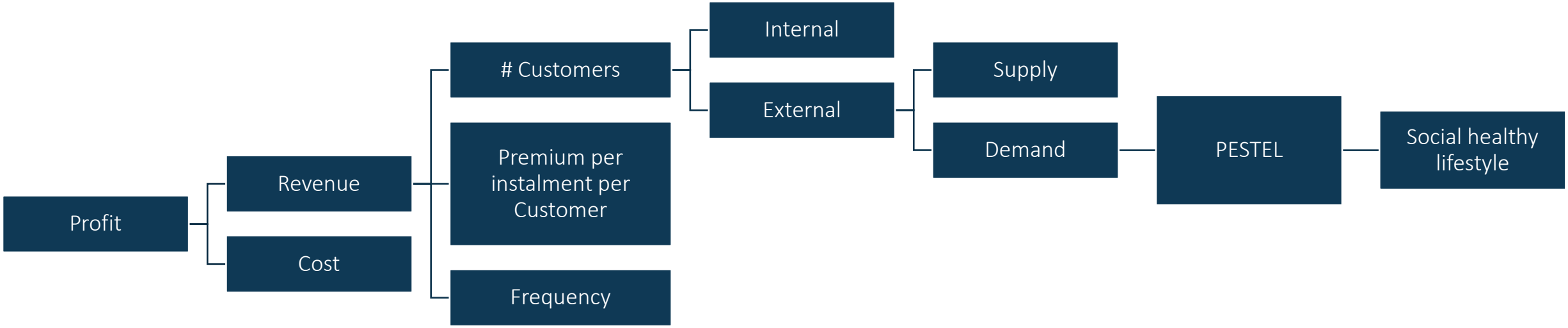
Sure

I'll split my recommendations into two parts : Existing products & New Products. On the existing products, to stimulate demand, we can look at promoting the beer brands that already have low alcohol content. On the new products side, we should plan to launch a new brand with zero alcohol content that tastes like beer, which can be healthier alternative for our consumers

Looks good. Thanks

BEER MANUFACTURER

Summary: Client was a beer manufacturer facing a decline in profits. This was an industry wide issue – there had been a social lifestyle change in the beer consumers of US. They had become more health conscious as they thought beer may lead to long term obesity and other heart and liver problems. To stimulate demand, the client can look at promoting the beer brands that already have low alcohol content. They can also plan to launch a new brand with zero alcohol content that tastes like beer, which can be healthier alternative for our consumers.



KIRANA STORE OWNER

Your Client is a Kirana shop owner who is facing a decline in profit for the past 5-6 months. Identify the root cause for the same

I have a few preliminary questions – Where is the store located? Who are the customers? Does the shop provide home deliveries? Are there any competitors? Have they been facing similar issues?

The store is located in a Tier-2 city. Customers are mostly people from the city and a few villagers from a nearby village. The shop also takes order over call and provides home deliveries. Yes. There are competitors, but they haven't been facing this issue.

Alright. A decrease in profits can either be due to a drop in revenue or an increase in costs or a combination of both. Do we have any info?

It is a drop in the revenues. Let's analyze them.

Revenue is a function of the number of customers and average transaction amount. Do we have any info on what has gone down?

The number of customers have declined

Alright. This can be due to Internal and External factors. I'll analyze Internal factors first, via a customer journey map. The journey involves: Travel -> Parking -> Product Ask -> Waiting > Transaction/Finance -> Post Purchase – Service. The issues under each bucket can be - For the travel, if there is any hindrance in reaching the Shop or any blockage to the Shop's visibility. Next for the parking, if there is any change in the current parking system or there some other new shops occupied the current place and blocked parking.

For products, any change in offerings can be an issue. The waiting time going up or rude behavior of shopkeeper during that time can be an issue. Under transaction, unavailability of certain modes can be an issue. Coming to the Post-Service bucket, the Kirana store primarily replaces products to retain the customers. Any change in this practice can be an issue.

Good analysis. However, none of this is an issue. Let's analyze External factors

External factors can come from the customers, competitors or regulators

Okay. Please explain the three buckets.

In the customer's bucket, any change in customer's preferences will impact our revenues. The preferences can be store-specific or brand-specific. Under competitors, it can either be due to new competitors or existing competitors. Any new competitor will impact our sales, while discounts/loyalty programs by existing customers will also impact our sales as the customers will start going to them. Under regulatory sides, any regulatory challenges like change in shop timing, change in market rules etc can impact our sales.

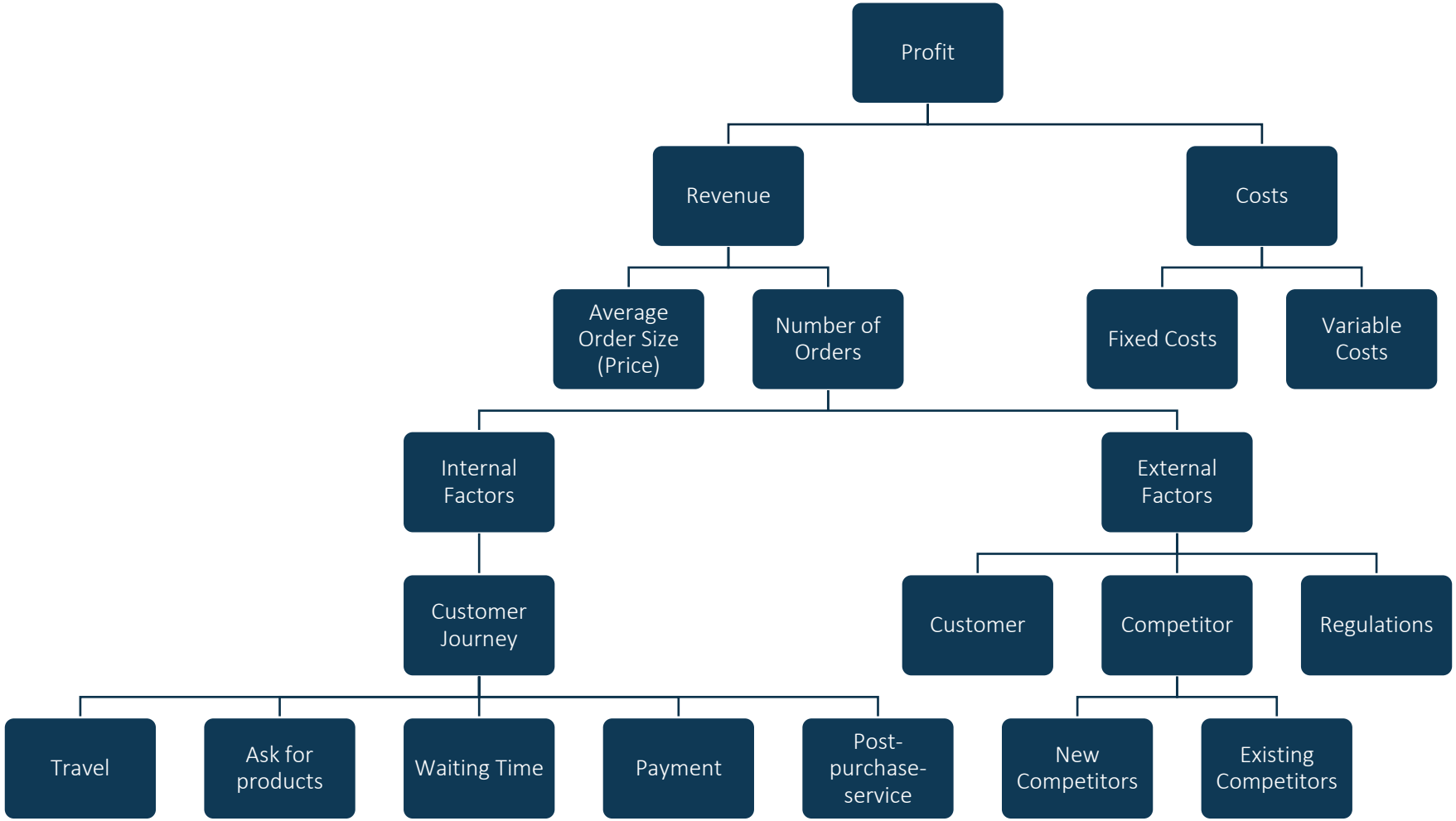
Great. You have got the answer. One of the competitors has started ordering discounts on orders above INR 500. Since people from the nearby village visit to buy their monthly ration, their bill is above this amount, and they have shifted to the competitor. Can you give some recommendations?

Sure. In the short-term, we can start offering more lucrative discounts for orders above a certain amount. In the long term, we can start offering home deliveries in the nearby village at a minimal additional cost.

Good recommendations. Thank You. We can close the case here.

KIRANA STORE OWNER

Summary: I had to figure out why the Kirana Store Owner is facing a decline in profits. We found out that the revenues had declined, due to a drop in the number of orders, resulting from discounts offered by a competitor. To solve the issue, I recommended offering discounts in the short term, and offering a home-delivery service to the nearby villages in the long term.



LIGHTBULB MANUFACTURER

Your client is a lightbulb manufacturer facing a decline in profits for the last 6 months. Figure out why and suggest recommendations.

Sure. I'd like to ask a few preliminary questions to understand the situation better. What kind of lightbulbs does the company manufacture?

The client manufactures a single standard lightbulb.

Okay. Where in the value chain does the client operate? What is their business model?

The client is responsible for R&D and processing. They have their own distribution network. They place orders for raw materials from suppliers. The client is a B2B company. They deal with big ticket orders.

Alright. Which regions do they operate in?

They manufacture in Uttar Pradesh and sell all over India. Their operations are uniform across the country.

Alright. I'd also like to know whether the drop in profits is an industry wide phenomenon or is it just limited to our company.

The decline in profits is unique to our client.

Okay. Now, profits are a function of the revenues and costs. So in the past 6 months, have the costs increase or the revenues declined?

The revenues have declined.

Okay. The revenues could have declined due to decrease in (i) number of orders (ii) size of order (iii) price per lightbulb or an increase in discounts. Have we observed a change in any or these factors?

Alright. The client has had to offer more discounts in the last 6 months. The client has a policy that it will offer discounts if their order is not delivered within a particular time frame.

Interesting. So the client has had to offer more discounts due to delayed delivery of the orders. I would like to explore the value chain to determine the reason for delay.
The value chain would consist of (i) Research and Development (ii) Raw Material Procurement (iii) Processing (iv) Testing (v) Storage and Transportation (vi) Distribution and (vii) Marketing. I would like to start with R&D. Have there been any delays in this process?

No delays.

Okay. Have there been any delays in raw material procurement?
When the client places an order for raw materials, the receive it in time.

Alright. Is there an issue with forecasting the requirement of raw materials?

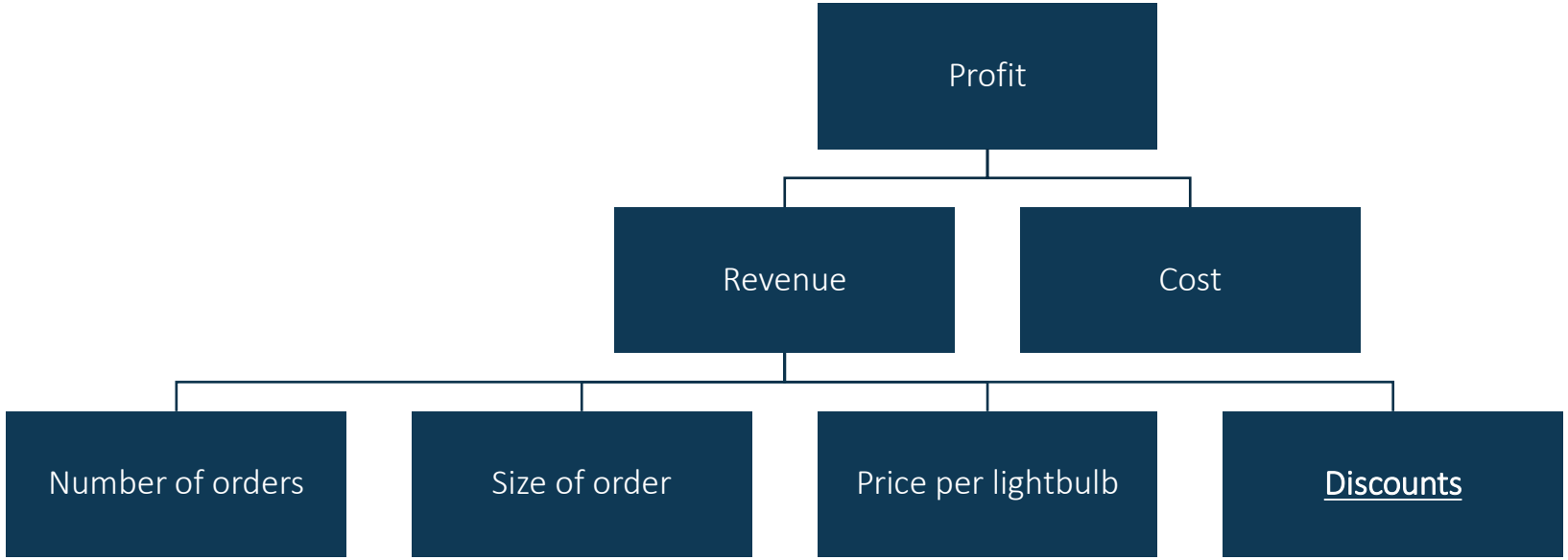
Yes. A new MBA graduate has been put in charge of forecasting 6 months ago. On his advice, the client has changed it's forecasting methodology. This has caused a delay in raw material procurement. Do you have any recommendations for the client?

Yes. I have 3 recommendations. (i) To understand why the forecasting method was changed and consider reverting to the previous method. (ii) To explore the possibility of altering the contract with buyers to reduce discounts. (iii) To explore the possibility of storing raw material for longer time.

That's all. Thanks.

LIGHTBULB MANUFACTURER

Summary: The client was a light bulb manufacturer facing decline in profits. They had to offer higher discounts due to delayed delivery of orders. The client had recently changed their forecasting methodology, which caused a delay in raw material procurement. To fix the same, it is important to understand why the forecasting method was changed and consider reverting to the previous method. The client can also explore the possibility of altering the contract with buyers to reduce discounts, and explore the possibility of storing raw material for longer time.



BAKERY SHOP

A bakery shop is experiencing a decline in profits since past 6 months. Figure out why.

Where is bakery located? Does it has one branch or multiple branches? Does it sells online also?

Bakery is located in Delhi. They have only one branch where they sell through dine-in, takeaways and online.

Are there any other bakeries or similar food shops nearby? Do they also face the same problem?

Yes, there are other bakeries nearby. However, they are not facing a decline in profits.

So, it's a company specific problem. I want to divide Profits into Revenue & Cost. Profits can decline due to 1. Decline in revenue or 2. Increase in cost or 3. A mixture of both.

The bakery is facing both decline in revenue and increase in cost.

I'll start with Revenue. Does decline in revenue in both business - Online as well as Dine-in/Takeaways?

The revenue decline problem is only in Dine-in/Takeaways segment.

Okay. Revenue can be divided into revenue per customer visit & number of customer visits. Revenue per customer can be analysed as (Average Price) x (Number of items purchase per customer visit)
To analyse decline in number of customer visit, the problem can de analysed from Demand and Supply side i.e. whether there is a decrease in demand or supply issues.

The number of customer visits has declined and it's a demand side issue.

Sure. I want to analyse the customer journey. Since bakery sells all season products, seasonality won't be an issue.
Customer Interest -> Travel to bakery -> Parking of vehicle and entry into bakery -> Select items to buy -> Placing order -> Payment -> Waiting for order -> Dining-in/Takeaway

We have problems with parking. There is a construction work going on in parking lot, hence customers can't park their vehicles for visiting bakery shop.

Got it. So decline in customer visits and hence revenue issue is due to parking lot problems.
I'll move to cost now. Does increase in cost in both business - Online as well as Dine-in/Takeaways?

The "cost increase" problem is only in online segment.

Okay. I want to analyse cost factors and then drill down on the issue. The major costs specifically for online sales will be maintenance cost of website/app, transaction cost (for online payments), margin paid to food delivery services, delivery cost.

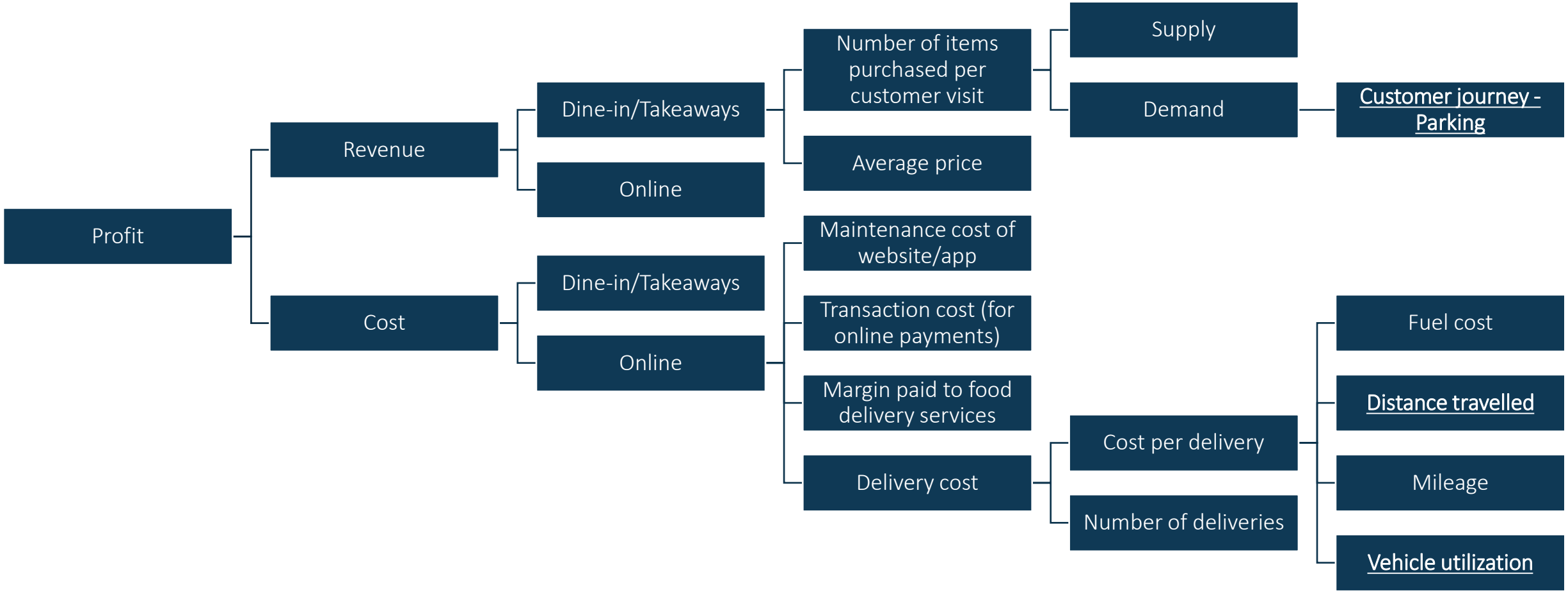
The delivery cost has increased.

Delivery cost can be broken down into (Number of deliveries) x (Cost per delivery); Cost per delivery is dependent on vehicle used, vehicle utilisation, fuel cost, distance travelled, mileage.

Right. So we have started to deliver at longer distances. Although the number of deliveries and revenues have increased, it also lead to higher distance travelled and ineffective utilisation of vehicle leading to higher delivery costs.

BAKERY SHOP

Summary: Client was a bakery shop facing a decline in profits. There was a reduction in revenues due to construction work going on in parking lot, hence customers couldn't park their vehicles for visiting the bakery shop. There was also a rise in costs of online orders, since they had started to deliver at longer distances. It lead to higher distance travelled and ineffective utilisation of vehicle leading to higher delivery costs.



INSURANCE PROVIDER

Client is an insurance provider facing a decline in profits. Figure out why and suggest recommendations.

Just to reiterate, that the client is an insurance provider facing a decline in profits. I need to find out why. What kind of insurance does the client provide and since when have they been facing this issue?

Client deals with tractor insurance, and has been facing this issue for the past 1 year.

In which geography does the client operate?

The client operates Pan India.

Okay. Since they only deal with tractor insurance, can I assume that their customers are only people living in rural areas and involved in farming?

Yes, you can assume that.

Is this an industry wide issue or is it a client specific problem?

It an industry wide issue.

Can you tell me more about the competitors of the client?

There are 5 more players in the industry and all have equal market share.

How does the client operate? How do they reach out to the customers? Do they have their own offices with agents, or is there any other tie up?

The client does not follow an agent driven process. We have tie ups with local banks, the customers can approach any bank to avail the insurance and other facilities are available are there.

Okay. Now I would like to break down the profits as revenue minus costs. Have the costs increased or revenues reduced or a combination of both?

The revenues have declined.

Can I assume that major revenue comes from the insurance premium that we collect from customers?

Yes, you can assume that.

The premium would be a function of the total number of customers, the premium per customer per instalment, and the frequency of paying instalments. Has there been a change recently in any of these?

Yes, the number of customers has gone down.

Okay. This means that less people are buying insurance for their tractors. This could be due to internal or external reasons. Internal reasons could be anything that is related to the client, for example any changes that have been introduced recently, or external reasons which could be related to any external factor, which I'll further examine in detail.

The decline is due to external factors.

Is it a supply issue or a demand issue? Do we lack capacity to sell the policies or has the demand reduced?

There is a reduction in demand.

Okay. To see why the demand has reduced, I would go through the journey of a customer, starting from the need till the post purchase behaviour. Does that sound suitable to you?

Yes, you can go ahead with this.

The process that I will consider will include need, awareness, availability, accessibility, affordability, purchase behaviour, and post purchase behaviour. Do we know if there is an issue with any of these factors?

Yes, the customer need has declined.

INSURANCE PROVIDER

Okay, this means that the customer does not need insurance as they used to before, even though other factors have remained the same, is that right?

Yes.

The number of insurance policies that we have in the market would depend on the total number of tractors and the percentage of them buying an insurance policy. So are less people preferring an insurance policy, or has the number of people purchasing tractors gone down?

The number of tractors has reduced.

Is it a supply side issue or a demand side issue?

It is a demand side issue.

Since the demand for tractors is declining, I will again consider the journey of a customer when he buys a tractor, starting from need till the post purchase behaviour. Do we know if there is an issue with any of the factors?

The affordability of the customers has declined.

The affordability could again depend on both internal and external factors. Has the income declined, or the price of the tractors has increased?

Neither. Both are the same.

Okay, I will look closely into the factors that affect the affordability of the customers. When a farmer buys a tractor, he would either use his own finances or borrow money from someone, which can either be a local bank or local moneylenders. In this case, I think they would be borrowing money. Do we know the source of their funds?

They generally borrow from a local bank.

The affordability of a farmer would depend on the price of the tractor, and also the interest that he has to pay on the money he borrows. Has there recently been any change in the interest rates?

Yes. Last year a lot of farmers defaulted on their loans, due to which the local banks have increased the interest rates.

Do we know why the farmers defaulted on their loans?

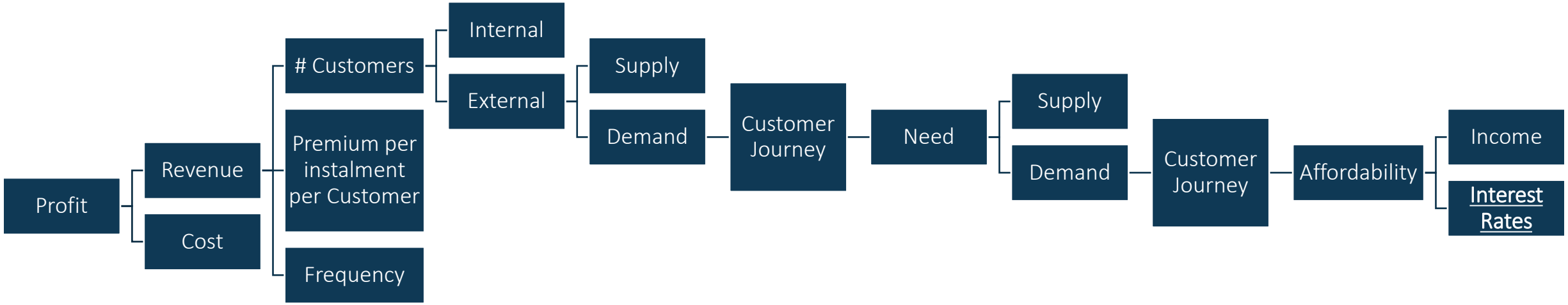
No information is known for that. Can you suggest recommendations?

Yes. We can focus on the farmers who already own a tractor, and reduce premiums so that the ones who do not have an insurance policy for their tractor can buy one. We can also backward integrate, and offer loans at a lower interest rate than the banks (if feasible) to help farmers finance their tractors.

That would be all, thank you.

INSURANCE PROVIDER

Summary: The client is an insurance provider providing tractor insurance, facing decline in profits. This was due to the decline in the number of tractors purchased by farmers. Recently, the banks had increased their interest rate since a lot of farmers had defaulted on loans, hence many farmers could no longer afford tractors. The client can look into reducing the premium to target farmers who don't have an insurance for their tractors currently. They can also consider backward integration, and offer loans to farmers at lower interest rates.



Note: This is a typically tough case because the problem doesn't lie within the industry in question, but an industry which is indirectly linked to it.
Customer journey framework needs to be applied twice to deep dive into the problem.
These type of cases are generally longer, and it is essential that they are started well, with appropriate preliminary questions to understand the context well.
The recommendations also urge the interviewee to think out of the box, since very less information is available.

AUTOMOBILE MANUFACTURER

Your client is in the automobile industry & is facing profit declines. You have to investigate the reason & suggest solutions.

Is it an industry wide problem & since when is the profit declining ?

No, it is company specific , & declining for last 3 years

Which automobiles does the client manufacture? How many variations of motorbikes do they sell? Any competitors? Raw materials required? Processing? Distribution?

Motorbikes-2 types- economy range & premium. We have 3 competitors – they sell both kinds of products

For other things, Assume it according to industry practices in automobiles.

Okay, Since the client is facing declining profits, It could be due to decreasing revenues or increasing costs. Are the total revenues declining?

Yes

Since there are 2 streams, is the revenue declining for both?

No, revenue is declining for premium bikes.

Are revenues stagnant for economy range ?

No revenues are increasing for economy range

For premium bikes, revenue could go down because of no of units sold, or because of cost per unit. Has any of these changed?

No of units sold has changed.

Is it a supply side issue ? Have we had any issue in making the bikes available in the market ?

No.

So it must be a demand side issue. I. would like to look at the customer's journey in making a premium bike purchase, following from awareness, likeability, availability, affordability. Are the customers aware that our product exists?

Yes

Since our other competitors are not facing this issue, I am assuming that market for premium bikes is unaffected. So, has the likeability of our premium bikes gone down since last 2 years ?

Yes.

This could be due to multiple reasons like product change, marketing change, perceived brand image change or better offerings by competitors. Are any of these reasons true?

Yes, the brand image has changed.

Since the revenue for economy range has gone up, I would like to know when was the economy range launched?

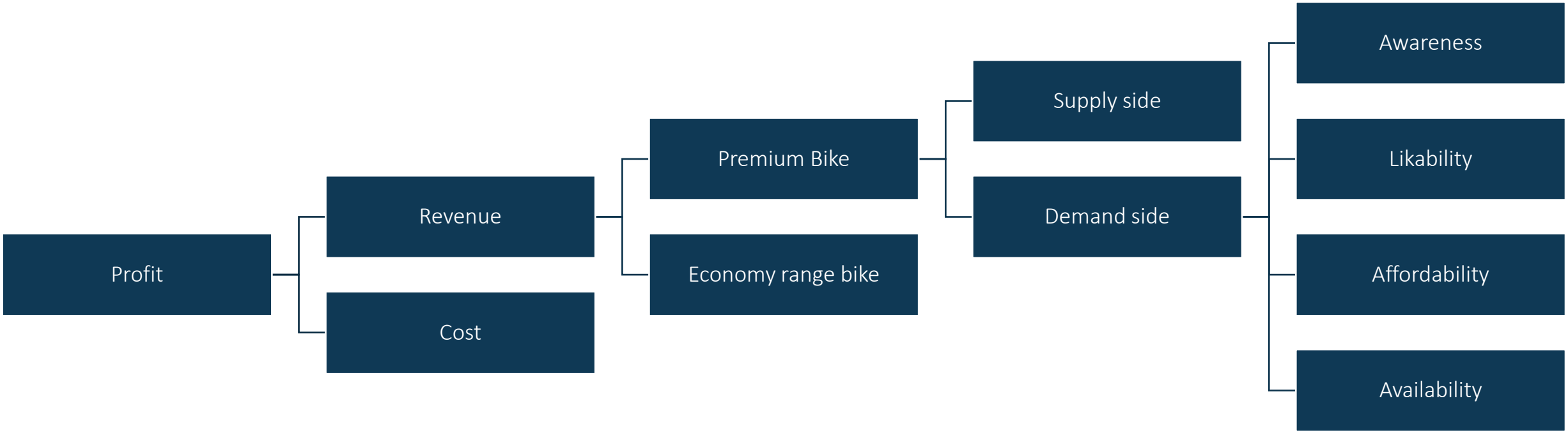
It was launched around 3 years back

Are economy and premium bikes under the same brand name ? If yes, then the image of premium bikes could be downgraded as image as economy range improves. Is that the case?

Yes, that is correct.

AUTOMOBILE MANUFACTURER

Summary: I had to determine the reasons for declining profits of a motorbike manufacturer who manufactured both economy & premium range bikes. The reason identified is that due to the newly introduced economy range, there was brand erosion of the premium bikes. People were looking at this brand as an economy range brand rather than a premium range brand. I recommended that the two bikes should be launched under different brand names to prevent such brand erosion.



HIGH-END RESTAURANT

Your client is a high-end restaurant in Khan Market, Delhi. Their profits have been declining for the past 2 months. Identify the root cause .

I would like to start with a few preliminary questions. What kind of cuisines does it serve? Is it dine-in only? Should I consider the COVID scenario? Are there any competitors in the locality? Have they faced similar decline?

Consider a pre-COVID scenario. The restaurant serves Italian cuisines. We offer dine-ins, takeaway and delivery orders. We do have several competitors in the locality, however, none of them has faced a similar decline.

Okay. I would like to start the analysis now. Profits is basically Revenue minus costs. A decline in profits can be due to a decline in revenues, an increase in costs or a combination of both. Do we know what is happening?

It is a combination of both.

Sure. I would like to start with the revenue side if that's fine.

Go ahead.

Revenues would be a sum of the three kind of orders. Have we faced a decline in all three or a particular segment?

Only dine-in revenues have declined.

Alright. Dine-in orders would depend on the number of tables in the restaurant, average occupancy and average order value. A decline can be due to a decline in either or all of these. Do we know what's the case?

The average order value (AOV) has increased.

Oh. Interesting. A higher AOV implies that either we are serving larger groups or premium clients. Do we have any information on this?

Yes, we have started serving larger groups now. In fact, to accommodate larger groups, we have clubbed some of our smaller tables to make room for more people on the same table.

This would have decreased the number of tables for couples/smaller groups. Have we seen a decline in these customers?

That's Right. The number of couples/smaller groups has declined sharply.

I think we have arrived at the root-cause for the revenue decline

Yes, Let's analyze costs next.

Costs can be divided into the following – Variable costs (Raw material costs, cooking costs, servicing costs, billing costs) and fixed costs (Rent, Utilities and Salaries). Do we have any information on what has increased?

The raw material costs have increased.

Despite a lower raw material consumption, our costs have increased. Have we changed the supplier? What is our arrangement with the supplier?

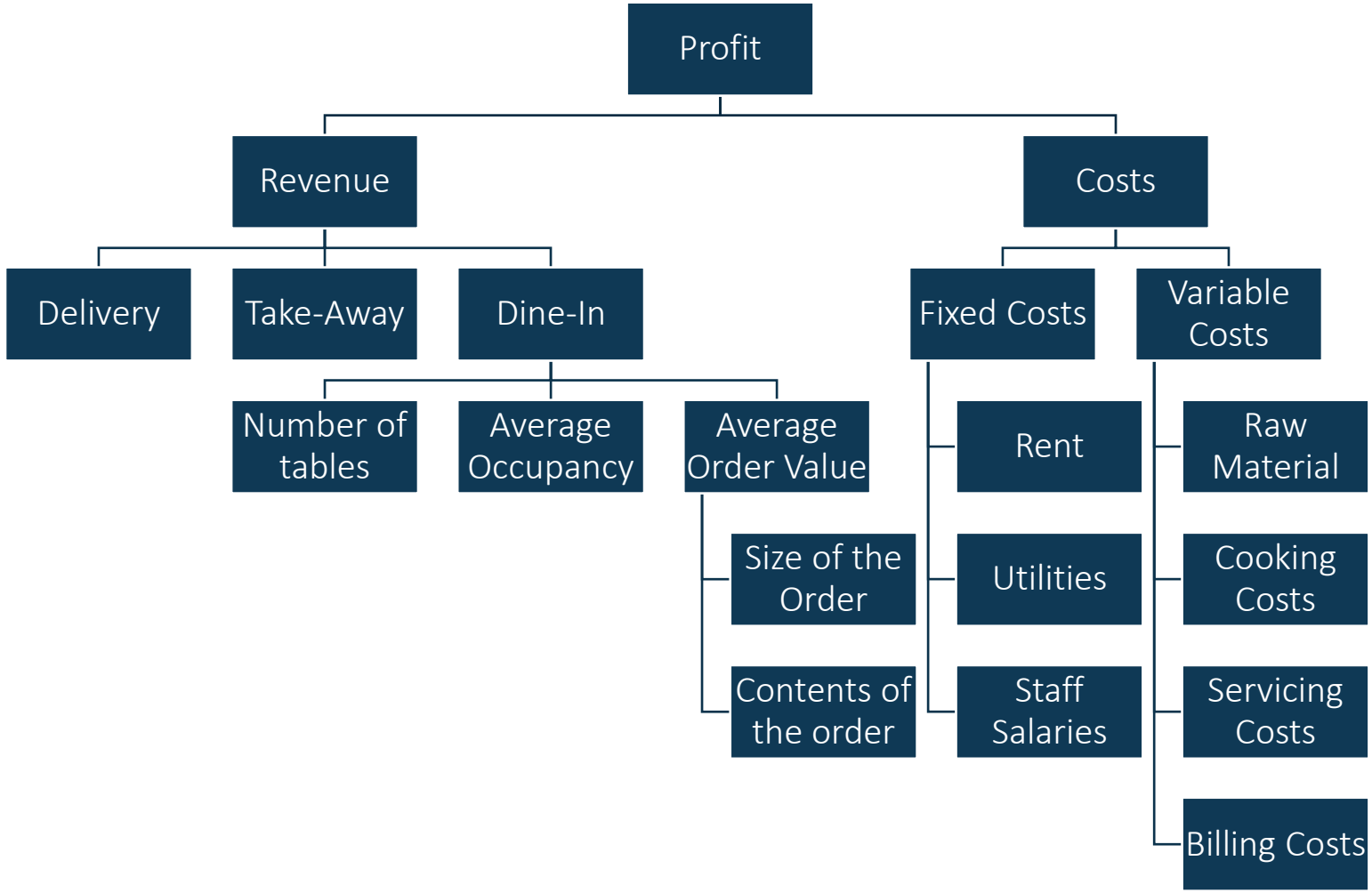
No, we haven't changed the supplier. Our supplier provides all raw material every morning. He offers additional discount for larger orders.

Alright. Since our orders would have become smaller due to falling demand, the discounts would have reduced. Hence higher costs. Is it the reason?

Right. We can close the case here.

HIGH-END RESTAURANT

Summary: I had to figure out why the High-end restaurant was witnessing a decline in profits. We found out that the revenues had declined due to a change in the table orientation in the restaurant, leading to loss of a particular customer base (couples). Additionally, the costs had gone up as a consequence of the revenue decline – with the supplier stopping bulk discounts due to a decrease in our order size.



FRENCH MUSEUM

Your client is a museum in Toulouse, a city in France. They have witnessed a decrease in their profits and have hired you to find the root-cause and provide recommendations.

I would like to start with a few preliminary questions. What kind of museum is it? How long have they been facing these issues? What is the magnitude of the decrease? Are there any competitors? Have they also faced similar issues?

It is an arts-museum, and the only museum in the city. They have been facing this issue for the past 1 year. We don't have information on the magnitude of the decline – Consider this as a qualitative assessment.

Sure. I would like to start the analysis now. Profits is basically Revenue minus costs. A decline in profits can be due to a decline in revenues, an increase in costs or a combination of both. Do we know what is happening?

The costs have remained the same. We have seen a decline in revenue.

Sure. Now, the major revenues for a museum would come from ticketing, and auctions. Are there any other revenue streams?

We don't conduct auctions. Our major revenue streams are ticketing (80%) and food and beverage sales from an in-house restaurant (20%)

Alright. Since the F&B sales would be dependent on the number of people coming to the museum, which also constitutes the ticketing sales – I would like to analyze the ticket sales

Sure. The ticket sales have decreased

The ticket sales would depend on the number of people visiting the museum and the average ticket price. Have we changed the ticket price?

No, we haven't changed the ticket price. The number of people visiting the museum has declined.

The number of people visiting would depend on the number of people visiting the city and preference for visiting the museum. Has any of these changed?

Apparently, the number of tourists in the city have increased

Interesting. This means that the preference of visiting has museum has decreased. I would like to divide it further into internal and external issues.

There are no issues with the museum. It is an external issue.

Okay. Since it is an external issue, I would like to analyze the journey of a tourist in the city – They would arrive in the city, stay at certain hotels, would hire a guide/tour planner, and follow their plan for the visit. Is it right? Do we have partnerships with the tour planners/guides?

Right. We have a partnership.

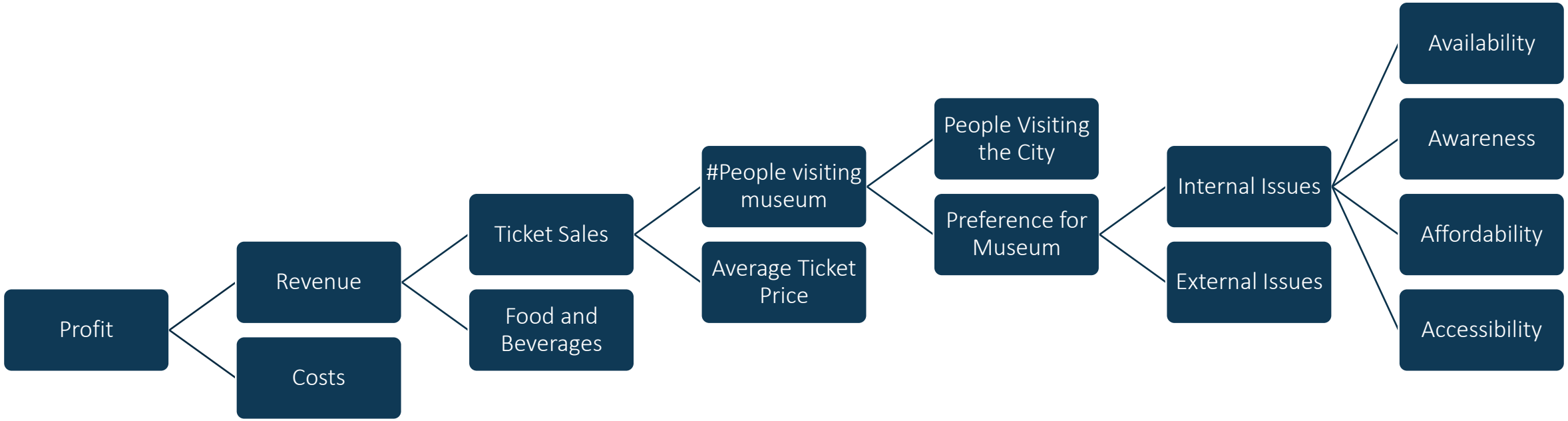
Have we reduced their incentives, or has some other tourist attraction paid additional incentives?

Disneyland has opened in the city, and guides are diverting all tourists there.

Ah. Alright. I would give a few recommendations to potentially increase our revenues: 1) We can incentivize the guides, 2) We can organize special talks with artists to attract the right audience.

FRENCH MUSEUM

Summary: I had to determine the cause of profit decline for a museum in France. I found out that a Disneyland had opened up in the city, leading to a decrease in the tourists' preference for the museum. To potentially increase the revenues, I recommended incentivizing the guides and organizing special talks with artists to attract the right audience.



BAJAJ FINSERV

Your client is Bajaj FinServ who have been facing a decline in their profits since the last 2 years. Analyze the problem and suggest recommendations.

Understood. Before I commence with the analysis, I wanted to ask some clarifying questions. Given that Bajaj FinServ operates in a variety of insurance products, is there a specific domain where this effect has been observed? Any particular geography that has been affected or has this been happening pan-India? Also, is this an industry wide phenomenon or company specific issue?

Yes, the decline has primarily been in Home insurance. No, this has been a pan-India phenomenon. Moreover, this is happening only with our client, Bajaj FinServ.

Right. And how does Bajaj FinServ make Home insurance sales?

It has mainly operates through 2 channels - online through its app and offline through door-to-door sales as well as tie ups with banks during time of home loan purchase.

So I'll begin my analysis by breaking down profits into revenues and costs. Is there any information about any of them changing?

Costs have remained same but revenues have declined.

Okay, so this is a revenue issue. The major source of revenue for Bajaj FinServ would be premiums. I'll split the total premiums as total no. of customers and average premiums collected per customer. Has any of them changed?

We've witnessed the no. of customers to have declined with time.

Right, so I'll further break it down as no. of new customers and no. of renewals with existing customers. Is there any information about them?

No. of new customers which get added over time have seen a decline as opposed to historical numbers.

Understood, there seems to be an issue in the sales process of new customers. I'll trace the customer journey to zero-in on the exact cause. I'll split it as 'Before Sales", "During Sales" and "After Sales".

No need to look into "Before Sales", let's discuss "During Sales" bucket.

During Sales bucket can be analysed by using 'People, Process, Product' framework. Here, 'People' would mean salesperson; 'Process' would be sales delivery process and ‘Product' would be insurance product.

Let’s look at the salesperson.

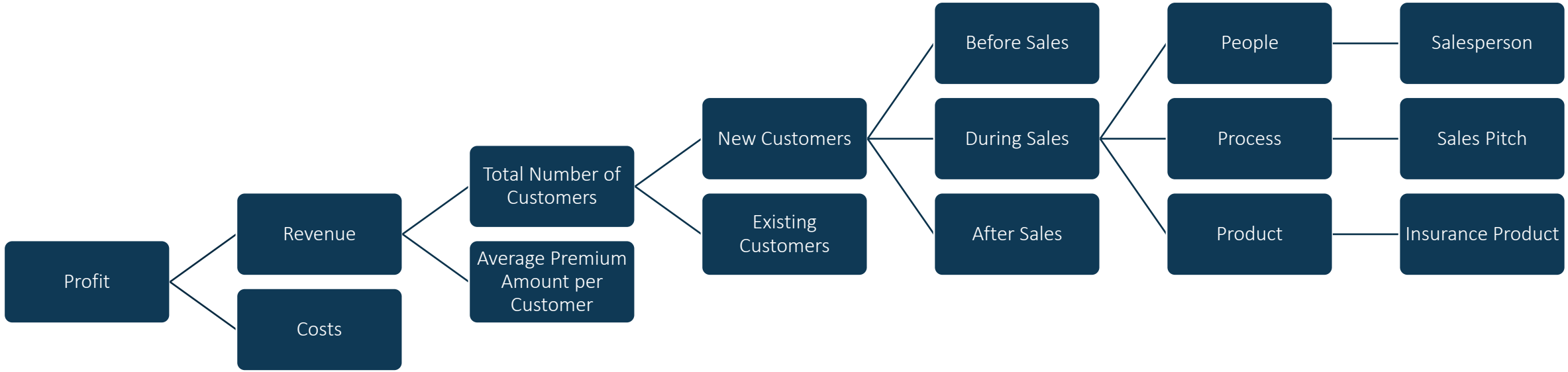
The performance of salesperson depends on 2 factors - Ability and Motivation. Ability is determined by their degree/college as well as training undertaken. Motivation is driven by monetary and non-monetary factors. Have we changed the compensation policy or hiring process?

Wstarted hiring from tier-2/3 colleges recently and sales made by them have not been upto the mark. What are your recommendations?

Sure, I'll suggest Bajaj FinServ to do the following - 1. In the short term, consider hiring majority of sales people from tier-1 colleges only and in the long term, craft detailed training program for all tier-2/3 hires 2. To increase motivation, they can provide monetary and non-monetary incentives

BAJAJ FINSERV

Summary: I had to determine the cause of profit decline for Bajaj Finserv. Upon analysis, I found out that we had starting hiring incapable salespeople from Tier-2 and Tier-3 colleges, leading to a decrease in the new customers for our home insurance product, leading to a decrease in the revenue. To counter this, I recommended hiring from Tier-1 colleges in the short term, and developing detailed training programs for Tier-2 and Tier-3 colleges in the long term. Moreover, I recommended having monetary and non-monetary incentives for the salespersons to motivate them.



BPO COMPANY

Your client is a BPO company operating out of India. They have witnessed a 15% decline in profits over the past 6 months. Help them identify the cause and give recommendations.

What kind of customers do our client serve? Where are they located? What is the timeline of the problem? What all competitors do we have? Are they also facing similar decline in profits?

Our client serves customers across IT, Pharma and Banking industries based in Europe. They have been facing this issue for the past 6 months. We have several competitors; they aren't facing this issue.

Is the problem specific to any customer segment? Are we considering the COVID scenario?

Yes, the decline is majorly due to banking customers. There is a COVID component as well, however, the problem is broader than that.

Sure. I would like to start the analysis now. Profits is basically Revenue minus costs. A decline in profits can be due to a decline in revenues, an increase in costs or a combination of both. Do we know what is happening?

It is a combination of both. The revenues have declined by 10% and the costs have gone up by 5%. Let's start the analysis with cost.

Alright. I would like to list down the major cost headers for a BPO company. The major ones are staff costs, server costs, utilities. Do we know what is causing the increase?

The staff costs have gone up.

Interesting. The staff costs would be #employees multiplied by average salary per employee. Do we know what is it?

The number of employees has gone up. We had made hiring commitments before COVID and went ahead with that. We currently have an overcapacity. Also, we incurred additional costs in providing work from home infrastructure to our employees. Let's move to the revenue side.

Sure. Revenue would be dependent on number of contracts and the revenue per contract. Since the revenue per contract can't change in a 6-month period as most BPO contracts are longer than that, I assume it's due to a decrease in the number of contracts that we have. I would like to analyze the same along the lifecycle of a contract.

Yes, that's right. We have lesser contracts now. Go ahead.

The contract starts from the sales team pitching to potential clients, then we work on the assigned tasks, deliver the same to the client and finally revenue is realized. Are we facing an issue at a certain step.

Yes, we are facing an issue at the sales step. We are pitching more than ever but not winning enough contracts.

Interesting. The sales would depend on the number of clients pitched and conversion rate. As mentioned by you, here the latter has decreased. It could be due to internal reasons like the ability of our sales team as well as external reasons like competitors offering better services.

BPO COMPANY

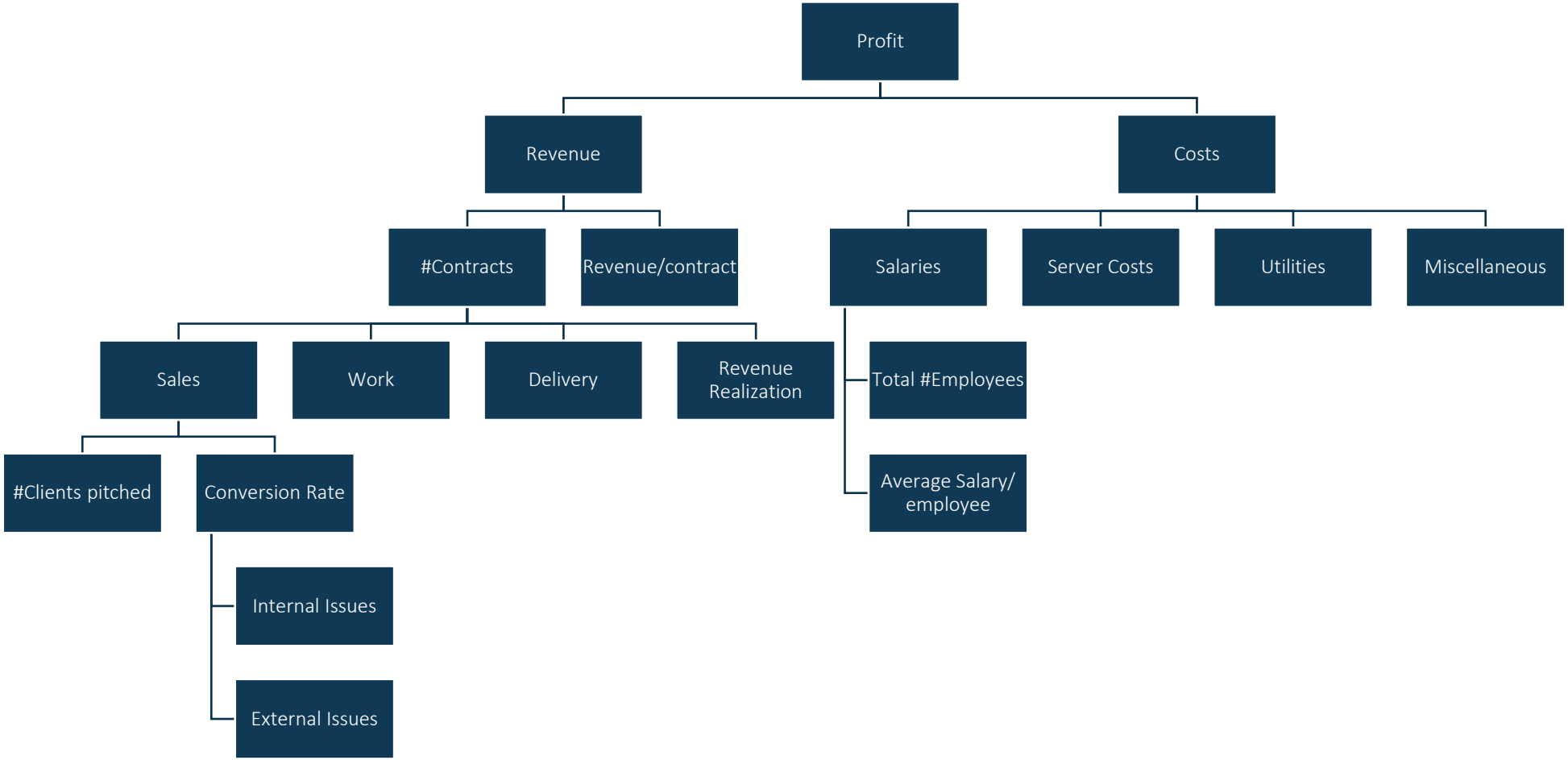
Right. The clients are moving to our competitors. The clients in Europe desire integrated services and our competitors are selling a bundle of consulting, IT and BPO services, whereas we offer only BPO services. We want to improve our revenues in the next 6 months. What should we do?

Setting up our own consulting and IT verticals won't be possible in the given timeline. Hence, we can explore M&A with some local firms offering these services, which will bring in their clients and complement our BPO services. Local firms will have local sales-personnel who'd help us understand the local landscape and help in better conversion.

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

BPO COMPANY

Summary: We had to determine the cause of profit decline for a BPO company. Upon analysis, we found out that the revenues had declined because of a decreasing in the conversion rate of sales pitches made by the company, which had happened due to the competitors offering better services. The costs had gone up because of a increase in the number of employees. To improve the revenues in the next 6 months, we recommended acquiring a local European company to offer integrated services similar to our competitors



MARKET ENTRY

FRAMEWORK

OVERVIEW

Client is considering entering a new market. Your goal is to recommend whether or not they should enter it (through various means). For these types of cases, it is common that the client is looking to invest in the expansion and get returns. In addition to financial feasibility of the plan, one must also test:

- Likelihood of implementation success based on industry conditions and firm capabilities
- Risk Assessment

Strategy

- **Why are they thinking of market entry?**
  - Growth
  - Mature current market
  - Response to competitors
- **Resources and Capabilities**
  - What does the firm have that makes them think they will be successful?
    - Brand
    - Patents
    - Local Expertise
- **Mode of Entry**
  - Self Launch
  - Acquisition
  - Joint Venture

Economics

- **New Market Conditions**
  - Market Size
  - Possible Revenue
  - Possible Growth
- **Competition in New Market**
  - Market Share
  - Pricing your product vis-à-vis competitors
- **Parameters to Consider**
  - Investment Required
  - Client Capacity to invest
  - Expected Revenue
  - Expected Profits
  - Payback Period for investment

Risks

- **Barrier to Entry**
  - Regulatory Barriers
  - Financial Capabilities
  - Existing Players and their market share
    - Porter's Five Forces
- **Risks**
  - Implementation
  - Political
  - Currency
  - Other macroeconomic factors

PRELIMINARY QUESTIONS TO CONSIDER*

- What business is the client operating?
- How the client performing currently?
- Does the client have any prior experience in the new market/geography?
- What is the aim of the client? (Revenue, Profit, Payback Period etc.)
- How is the competitive landscape in the new market?
- What are the client's capabilities and bottlenecks?

*3CP Framework can be used

FRAMEWORK

$$\text{Profits} = \text{Market Size} \times \text{Market Share} \times \frac{(\text{Price} - \text{Cost})}{\text{Unit}} - \text{Fixed Costs}$$

MARKET SIZING

Once the preliminary questions have been answered and the situation looks favourable, market sizing needs to be done to understand the financial viability of the market entry. This guesstimate can be done either through a top-down or bottom-up approach.

MARKET SHARE

Understand incumbents' market share and estimate the possible market share for the client. This is essential to understand the serviceable obtainable market (SOM) for the client

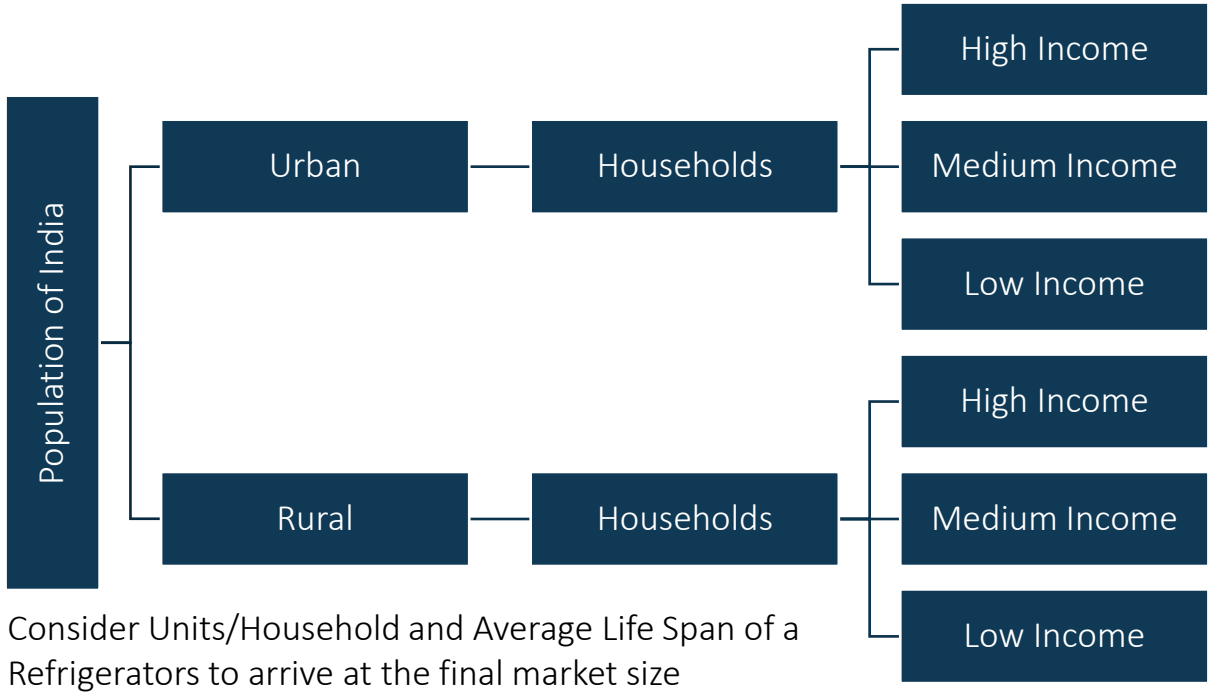
PRICE

If the client does not have a price point for the product/service in mind, you can use any of the approach covered under 'Pricing' frameworks to estimate the price.

FIXED COST

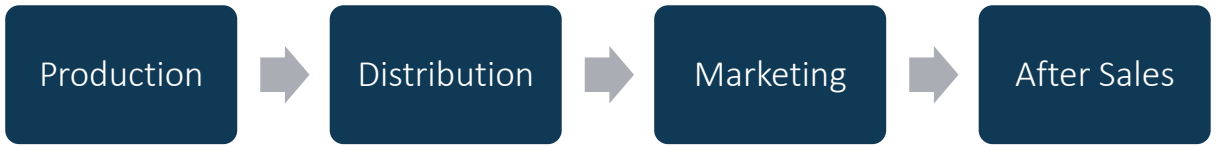
This is the initial capital invested by the client in building capacity and adding resources when entering the market

Example: Estimate the market size of refrigerators in India



Consider Units/Household and Average Life Span of a Refrigerators to arrive at the final market size

Once the market size and other financial parameters have been estimated, conduct a feasibility study for implementation.



EDIBLE OIL MANUFACTURER

Client is an India-based edible oil manufacturer. They are strong in the Southern part of India with ~98% market share. They want to enter new markets – you need to draft GTM strategies for the same.

Okay. Can you tell me more about the client? Is edible oil their only business or they have any other source of revenue as well? What is their product mix? Do they manufacture the products inhouse? How do they distribute it? Does the client want to enter new markets because the market has saturated in South since they already have a high market share, or is there any other reason as well?

Edible oil is their only business. They have 2 types of oils – sunflower oil or vegetable oil, and health-based oils (soybean, coconut, mustard, etc.). They manufacture it inhouse, and distribute it through third party distributors. They want to enter new markets because the current market is saturated.

Okay, thank you. Are there any particular markets that are being considered? Is it restricted to India or can we explore international markets as well? When is the client looking to enter these markets?

The aim if revenue growth since the south Indian market is saturated. We are currently considering the north, east, west and central India. We are open to international markets as well, but for this case consider India only. You need to figure out which market to target first.

Is the demand of both products similar to South India in each of these regions? Can you tell me if the market is growing for each of these products?

No, the demands and growth rates are different.

Growth	North	West	East	Central
Sunflower Oil	-4%	0%	2%	15%
Health Based Oil	12%	5%	25%	50%
Demand				
Sunflower Oil	80%	80%	10%	95%
Health Based Oil	20%	20%	90%	5%

North	West	East	Central
85% - 3 players	85% - 2 players	25% - 2 players	35% - 3 players
15% - 10 players	15% - fragmented	75% - fragmented	65% - fragmented

This is the data available, you can recommend basis these numbers.

As per this data, firstly I will not target North because 3 players have dominated the market and it would be tough penetrating the market. Additionally, in sunflower oil even though there is high demand right now it is declining. Next, I would also not target West because majority of the market is of sunflower oil but it is stagnant. When I look at the other two markets, I would target health-based oil segment in East region, because it has a high demand and is also growing at a high rate. In Central even though health-based oil segment has a very high growth rate, the market size is not attractive. I can look at expanding into sunflower oils in the central region after entering the East region.

That sounds good. Thank you.

BIKE TAXI LAUNCH

Your client is a cab hailing app. They have developed a new product for Delhi-NCR Market. Devise an end-to-end strategy for the launch.

I would like to ask a few preliminary questions. What exactly is the product? What is the objective of the client? Is there a similar product in the market?

The product is a bike-taxi, you can consider it like UberMoto. The objective here is to devise a strategy for the launch – market selection, pricing and implementation. Assume there are no similar products in the NCR market.

Sure. That's interesting. I would like to start with the market selection part. It would depend on state regulations (as NCR consists of Delhi, parts of UP and Haryana mainly), and demand of the product.

That's a great insight. Can you elaborate about regulations and demand?

Yes sure. There are certain rules limiting operations of commercial 2-wheelers in the state of Delhi, hence we should start by launching either in Noida or Gurgaon. The demand would depend majorly on the customers we serve. I believe a good use case would be providing end-mile connectivity for metro passengers. Since metro coverage is better in Gurgaon and there are several corporate offices, we should focus on that for the launch.

Great. Let's say we start with Gurgaon. How would you price the product?

I think we should use cost-based value pricing, using the cost to set a minimum price, whereas analyzing willingness to pay to estimate the upper cap.

Sure. Go ahead.

The major costs would be a) R&D costs and b) Variable costs like fuel, driver salary. On top of that, our client would expect a margin. Do we have any numbers for these or should I assume some?

That sounds right. We expect no margin initially, but the drivers expect 20k income per month, out of which he'd be paying the bike EMIs as well.

Assuming 10 trips of average 5 km per day, and a bike mileage of 50/km, we can calculate the fuel costs. We can also do a similar analysis to estimate driver costs per trip. <Do calculation> This comes out to be around Rs.70/trip. However, per km rate would be better way to describe, which would be about 70/5 = 14 Rs/km.

That's the cost. How'd you set the price?

Willingness to pay can be estimated by using proxies. An auto rickshaw is a good proxy for end mile connectivity, and they charge around 15/km. Since we are providing a convenient experience, we can set around Rs 20/km.

Sounds fair enough. We have the details now. How would you implement the product? What all is to be taken care of?

Implementation would start with onboarding drivers, launching the app, and bringing in customers (promotion).

Yes. Launching the app is simple. What would be an ideal candidate for a driver?

BIKE TAXI LAUNCH

I want you to list down the criteria for onboarding drivers.

The candidates should own a bike and have a driving license. I would imagine a young/mid-age man who is comfortable using mobile apps. The food delivery professionals are a good proxy

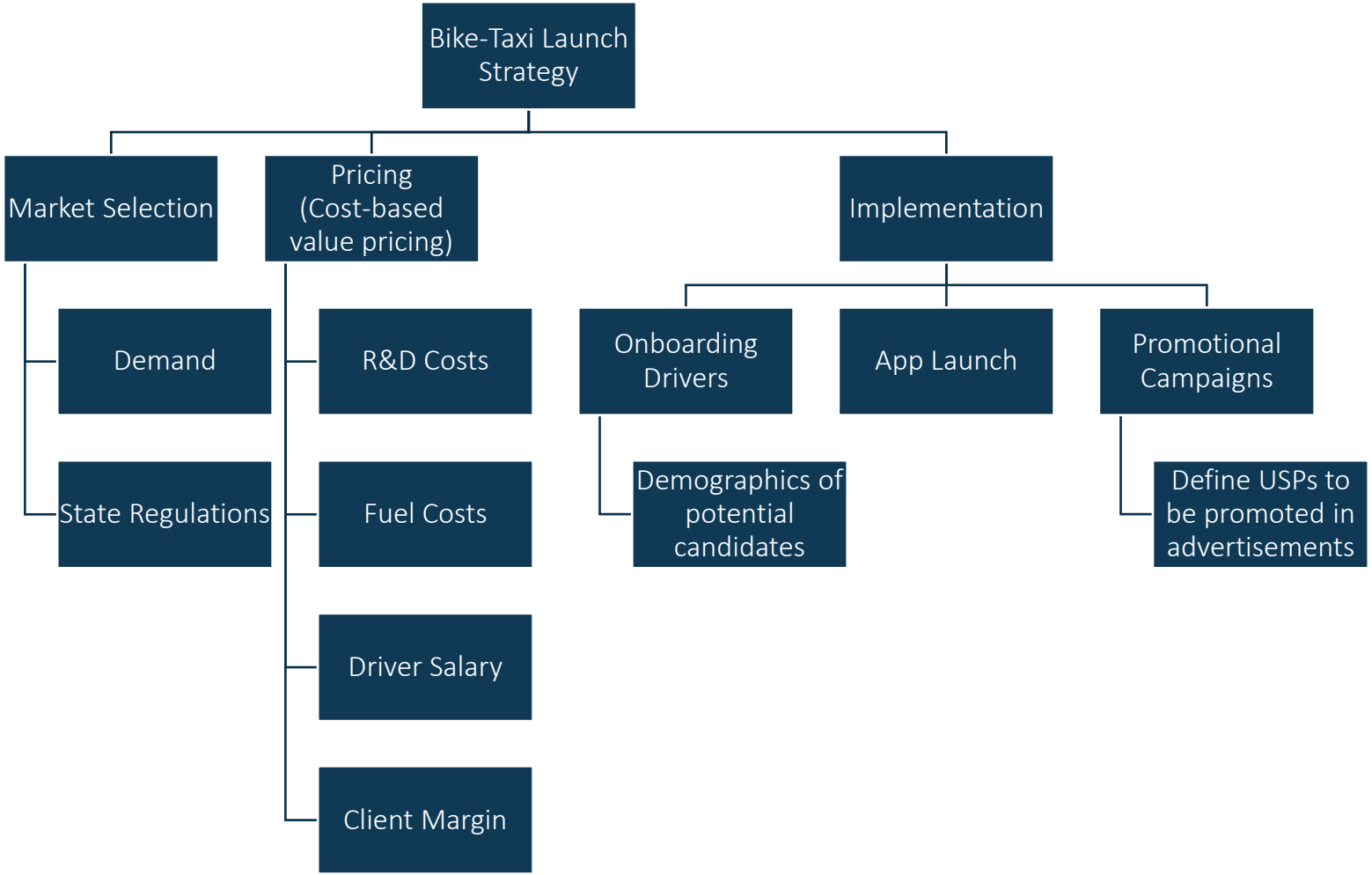
Alright. Moving on to the promotional campaign – What would be the USPs of your campaign? What channels would you use to promote?

Under the promotional campaigns, I would highlight 3 things – a) Affordability, b) Time saved in traffic, and c) Safety. Since we are offering end-mile connectivity to metro passengers, we can place hoarding inside metro trains and metro stations. We can also set up billboards at office spaces near metro stations where people would use our product to go to the metro station post office hours.

Great. That'll be all. Thank you!

BIKE TAXI LAUNCH

Summary: The client had to launch a bike-taxi service in the Delhi-NCR market. We recommended starting with Gurgaon as an end-mile connectivity option at metro stations. We recommended a price of INR 14/km based on cost-based pricing. For implementation, we recommended hiring drivers similar to food-delivery riders, and advised using affordability, time and safety as the USPs in the promotional campaigns.



PRICING

FRAMEWORK

OVERVIEW

While pricing can be standalone cases, they can be asked in conjunction with market entry cases to estimate the potential revenues generated by the client upon entry. You objective is to identify the best approach to estimate the price of the product.

- Pricing
  - New Product (Innovation)
    - Value Based Pricing
    - Cost Based Pricing
  - Existing Product (Modified)
    - Competition Exists
      - Cost Based Pricing
      - Competitor Based Pricing
    - No Competition
      - Value Based Pricing
      - Cost Based Pricing

Value Based	Cost Based	Competitor

• Willingness to pay
• Benchmark against similar products
• Opportunity Cost
	• R&D Cost
	• Production Cost
	  • Fixed Costs
	  • Variable Costs
	• Breakeven Period, Margin
		• Existing Products
		• If new product, NPV of substitutes
		• Supply-Demand Considerations

Note: Consider implications of price elasticity on demand of the product

PRELIMINARY QUESTIONS TO CONSIDER*

- What business is the client operating?
- What is the product or service that is being offered?
- What are the various uses of the product?
- How is it different from what is being offered by the competitor?
- Who are the competitors and what are their prices?
- Expected margin
- Substitute products
- Capital investments and expected payback period

KOREAN FERTILIZER MANUFACTURER

Client is a Korean conglomerate, and wants to launch a new fertilizer in the US market. Monetize the fertilizer.

Okay, can you tell me more about the client? What is the main business of the client? Where does the client currently operate?

The client manufactures chemicals, fertilizers, and other petroleum products. They currently operate in the Asian market.

Since the client operates in the Asian market, why are they targeting the US market?

Fertilizers is not a big market in Asia due to low income of farmers, hence for high profits the clients want to launch it in US directly.

What is the new fertilizer? Is it different from the fertilizers people generally use in US?

Yes, it accelerates the growth of fruits.

Does it work on all kinds of fruits or any specific types of fruits?

It has been tested successfully on apples, hence the client wants to launch it only for apples as of now.

Does the client have a patent for this product? Does any similar market already exist in US?

Yes, the client has a patent. No such market exists.

Okay. Does the client plan to set up a manufacturing plant in US or import the product? How are they planning to sell to the customers?

That will depend on the revenues we are expected to generate, you can ignore that for now. They plan to sell it through retail chains across US.

Okay. To price the fertilizer, we cannot use competition based pricing since there is no competition, and cost-based pricing also cannot be used since we don't know about the cost details, hence I think that value based pricing will be the best way to monetize this fertilizer. You mentioned that it accelerates the growth of fruits. By how much does time get reduced?

The time gets reduced by 20%.

How much time does the normal cycle of apples take to grow?

It takes 90 days.

Okay. This means that a farmer can grow 4 cycles in a year, taking 360 days. Reducing time by 20% means the new cycle will be complete in 0.8*90 = 72 days, and the farmer can now grow 5 cycles in a year. What is the price of the fertilizer that they currently use?

There is only one type of fertilizer in the market, which costs $40/kg.

How much quantity do they generally require?

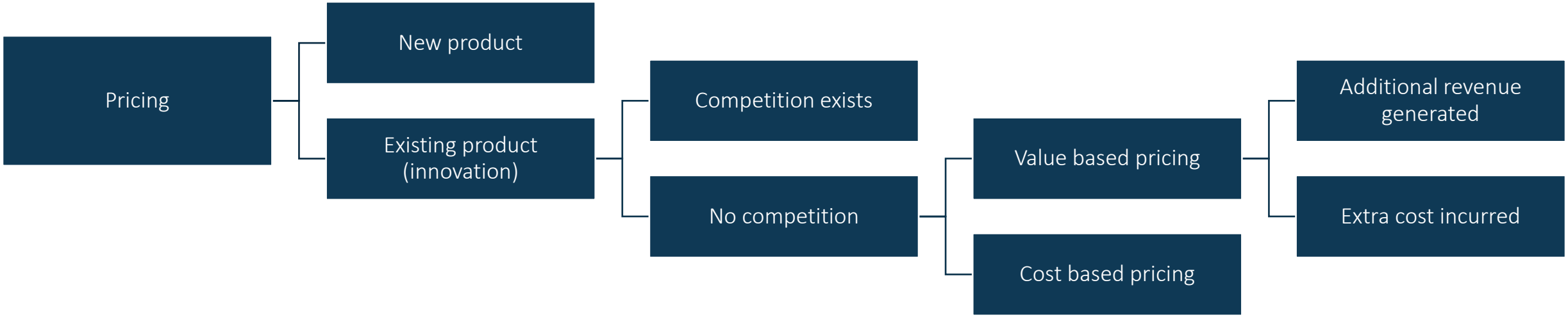
5kg of fertilizer is required for 1 acre of land.

Okay. Now considering that we price the new fertilizer at $40/kg, we can say that the customers spend $40 for 0.2 acre land per cycle, and an additional $40 for the 5th cycle. In addition, they would be making an additional revenue from the 5th cycle. Added profit would be *profit per cycle* per 0.2 acre, from 1 kg fertilizer, per year. We can add a premium to the base price of $40 depending on this value, it should be lower than the value (profit per cycle)/5, since for the new fertilizer the customer will be paying this amount every cycle.

That looks good, thank you.

KOREAN FERTILIZER MANUFACTURER

Summary: The client was a Korean fertilizer manufacturer who wanted to launch a new fertilizer in the US market, and wanted recommendations regarding its pricing. The fertilizer accelerates the growth of fruits, and enables farmers to grow one additional cycle per year. To price the fertilizer, we can add a premium to the current fertilizer of $40/kg, which is less than 20% of the additional profit generated by the farmer so that they have an incentive to buy the product.



TOOTHBRUSH MANUFACTURER

Client is a toothbrush manufacturer. It has recently come up with a toothbrush which can last forever. The client has hired you to suggest a price for this toothbrush.

Ok, to begin with, I would like to ask a few question regarding the product. Could you please tell me a more about the product functionality and features?

So, it looks like a normal toothbrush only, but it can last the entire lifetime of a person. Its used as the same way as a regular toothbrush.

What is the cost associated with manufacturing such a product?

The company spend 10 million dollars in R&D. Now it takes around 50Rs to manufacture this brush.

How does the company plan to distribute this product? Is there any geography in mind to launch this product?

Initially we plan to sell via retail grocery stores and on OTC medical shops. We plan to make it available in major Indian cities.

Are there any existing similar products currently in the market?

No there exists no such product which can last for a lifetime.

Does the company plan to recover its R&D cost through its pricing model?

No you can assume the R&D cost to be sunk cost.

Since there are no current competitors, I would like to ignore the competitor based pricing. I would like to proceed with Cost based and value based pricing.

Sure that makes sense.

Is there a fixed margin that the client is looking for the product?

They would ideally like a 50% margin over revenue.

Ahh, ok. Since the cost to produce the brush is 50 Rs, the brush can be priced at Rs. 100, to give a margin of 50% on revenue. This price looks very low for such a novel product.

Ok, sounds good.

Let me move on to value based pricing. I would like to calculate this using the value i.e. lifetime functionality the product fives over normal toothbrushes.

Go ahead.

Considering an average age of a person to be 70 years, and if we ignore infant and old age period, we can assume that a person uses a toothbrush for 60 years and current toothbrushes are typically changed every 2 -3 months.

That's a fair assumption. You can assume 2 months and go ahead.

This would mean that a person uses around 6*60 = 360 toothbrushes in their lifetime. If we assume a price of Rs 50 per toothbrush, the ideal value of our product is 360*50 = Rs 18000.

Ok. What do you think are the factors that will change this price.

I would like to split the factors in two. Factors that will reduce the price and others that will increase the price.

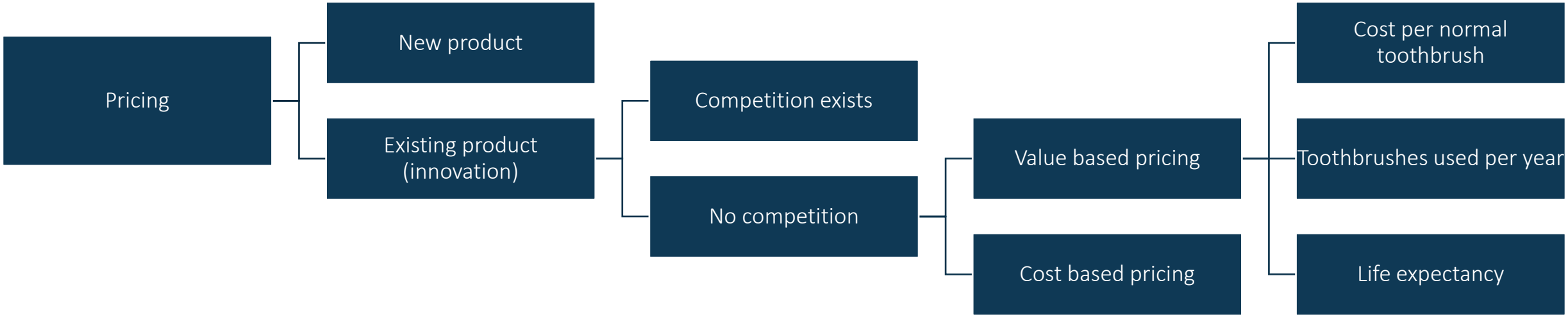
Sure sounds good. What will the be?

I think the factors that will increase this value is inflation, time value of money, convenience of one time buying and the factors that will reduce the price would be fear of loss, boredom of single product for entire life .

Awesome. We can close the case here.

TOOTHBRUSH MANUFACTURER

Summary: The client was a toothbrush manufacturer who recently came up with a toothbrush that can last forever, and I had to price the product. The ideal value of the toothbrush should be Rs. 18000, but it can increase due to inflation, time value of money, convenience of one time buying and the factors that will reduce the price would be fear of loss, boredom of single product for entire life.



TELEPORTING MACHINE

Your Client has created great innovation, a teleporting Machine. They have approached you to price the product.

Can I assume the significant feature of the teleporting machine is to transfer to any part of the world? Is there any specific feature for this?

Yes, you can make that assumption.

Alright. I have a few preliminary questions – Is there any competition for the client? Where is the machine located? Can that be considered as the starting point? How much time does it take to teleport someone?

There are no direct competitors. The machine is located in Mumbai – you can consider that as the starting point. It takes approximately 30 mins to transfer you to any place.

Great. Pricing can be done in 3 ways – 1) Cost-based Pricing; 2) Competitor-based Pricing and 3) Value-based Pricing. Since it is specialty product/service, cost-based pricing can be ruled out. Since there are no competitors, we can rule out competitor-based pricing as well. I'd use value-based pricing here.

Sure. Go ahead.

The pricing can be done by using the value of time saved as a proxy. The target customers can be three major segments – 1) CXOs who lose a lot of valuable time during international travels, 2) Diplomats who have to travel abroad for urgent matters, 3) Travels related to medical emergencies. I'd like to price the product for the first segment to begin with.

Seems okay. Let's focus on the first segment only.

Alright. I'd consider the average yearly salary for CXOs to be approximately INR 10 crores, which means the hourly earnings are somewhat around INR 40k, assuming he/she works 10 hours a day for 250 days in a year.

Seems like a fair assumption. Go ahead.

A typical international trip takes 15 hours on an average. Using the teleporting machine, it can be completed in 1/2 hour, which indicates a time saving of 14.5 hours. Now, assuming the CXO can use 70 to 80% of the time saved in doing other essential work, the actual time benefit for the CXO is around 10-12 hours. Taking a conservative assumption, I'd assume a total benefit of around 10 hours. Using the hourly salary of CXO calculated earlier, this translates to a price of ~INR 4 lacs per use.

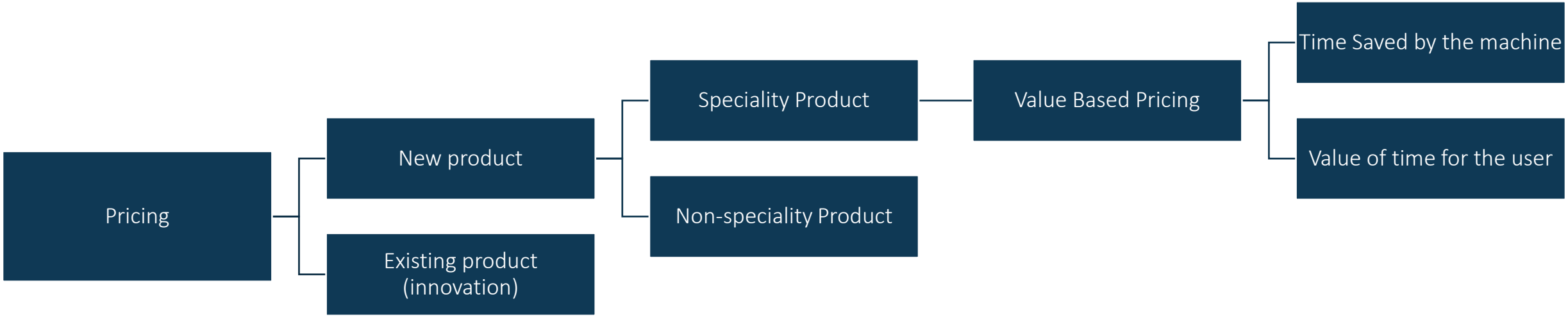
Fair logic. Anything else you would like to add to justify your costs?

Yes. We can use a business-class ticket price to justify this price. On an average, a typical business class international trip costs around INR 2 lacs. Our price is a 100% premium over this, which seems fair to me. We can certainly tinker with the price on the basis of the destination of the person using our machine.

Makes sense. Thank you. We can close the case here.

TELEPORTING MACHINE

Summary The client was a company who recently came up with a teleporting machine that can transport anyone from Mumbai to anywhere in the world in 30 minutes, and I had to price the product. The ideal value of the service should be Rs. 4 lacs per use, but it can be increased based on other factors like the user of the machine and destination of the user.

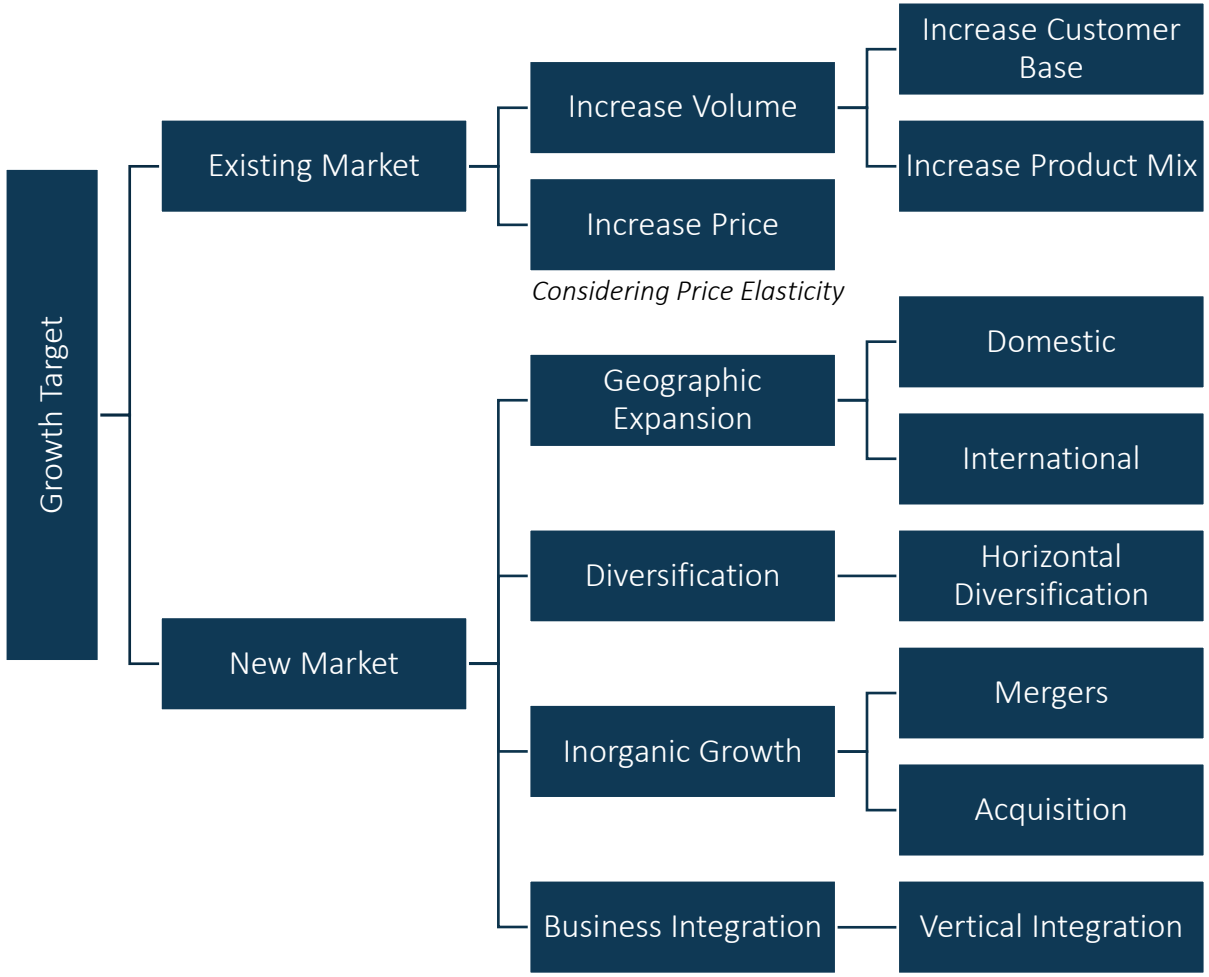


GROWTH

FRAMEWORK

OVERVIEW

In growth cases, the client is typically expecting to see some year-on-year growth. You are expected to understand growth targets, evaluate methods, and suggest recommendations to achieve the targets.



PRELIMINARY QUESTIONS TO CONSIDER*

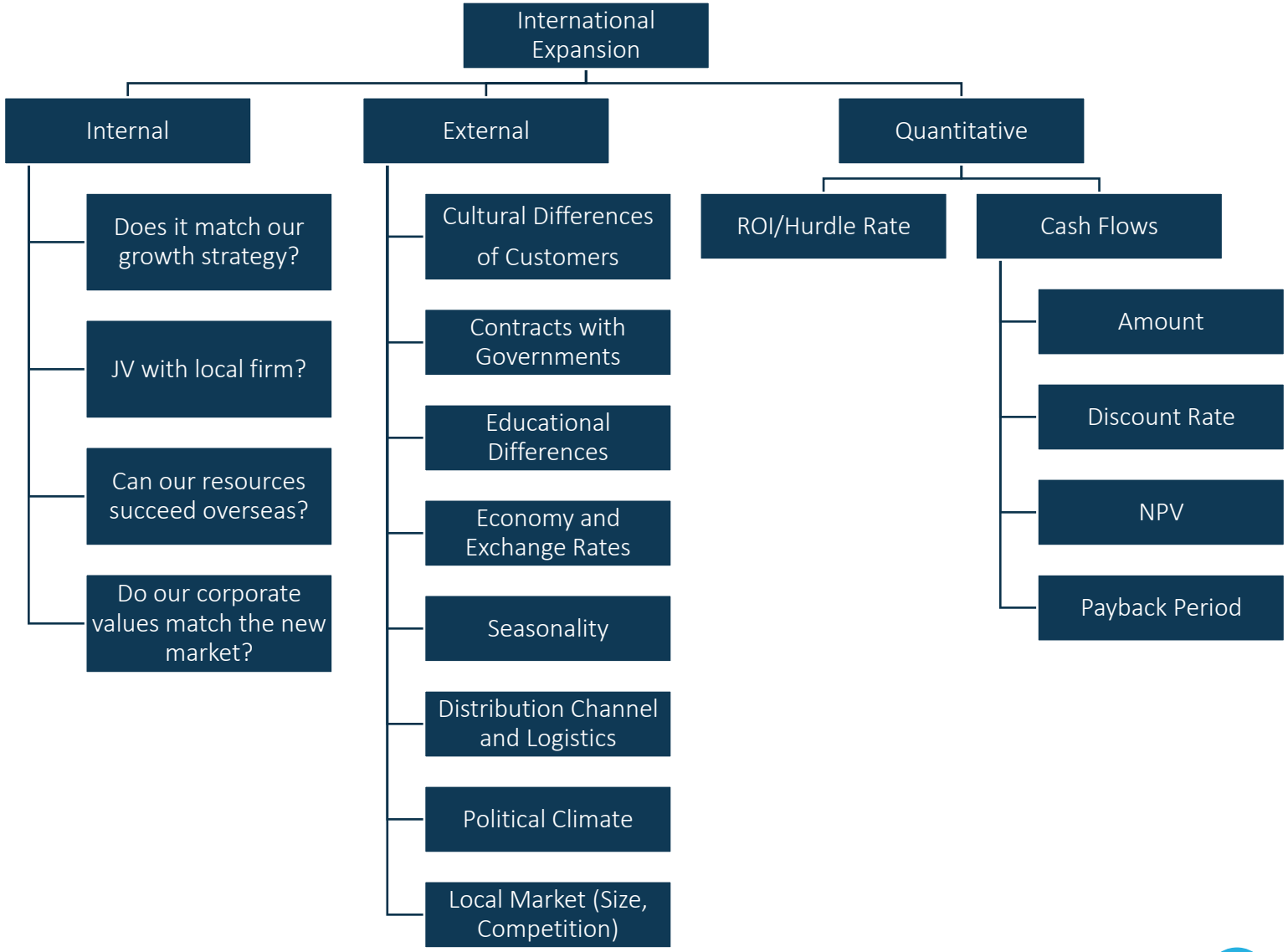
- What is the growth objective/target of the client?
- What is the time period in which the client wants to achieve the target?
- How has the client's industry been performing?
- Where does the client stand vis-à-vis competitors (number and respective market shares)?
- Does the client have the capacity to meet increase in demand?
- Does the client have any financial constraints for investment?

Each L3 unit (Merger, Acquisition, etc.) require additional considerations.

INTERNATIONAL EXPANSION

OVERVIEW

The following framework can be considered if you are faced with a problem statement which involves international expansion growth strategy.



AUTOMOBILE PARTS MANUFACTURER

Client is an automobile parts manufacturer. They want to grow to 2X in the next 5 years. Analyze the possible options and give recommendations

Alright, I'll start with a few preliminary questions to get a better understanding of the problem at hand. Where is the client based out of? What do you mean by growth – Is it in terms of revenue or profit or market share? What is the current market scenario?

Sure. The client operates Pan-India. They want to grow their revenues. The market is quite competitive- There are a total of 5 players including us, each having 20% market share.

Okay. The business seems to be a B2B one. I assume automobile manufacturers are the major customers for the client. Is it so? What is the selling process?

Good Insight. Yes, 90% of our customers are automobile manufacturers. We manufacture plastic parts for cars – like steering wheel, dashboard etc. The selling process is via tenders.

I would like to understand about these tenders. What is the bidding process? What is the timeline? What is the delivery mechanism if we get the contract?

Sure. The tender is floated when a company decides to launch a new car in the market. If you win, you get the contract for the entire lifecycle of the vehicle. The contract is given based on price quoted and existing relationship with the car manufacturers. Once you get the contract, you set up a factory adjacent to the car manufacturer and start production.

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 Geographical Expansion, Product diversification and Business Integration.

What exactly do you mean by diversification and Integration. Also, how would you narrow down the geographies to expand to?

By diversification, I mean expanding into new product lines – like we can explore manufacturing parts for other vehicle segments like 2-wheelers. Next, Integration can either be forward or backward. Forward integration would be manufacturing the automobiles ourselves, which is not feasible. Backward integration would be to acquire a plastic manufacturing unit to cut down on our raw material costs. For geographical expansion, I would start by exploring international clients who have been working with us in India, say someone like Suzuki. Since relationship is an important component in the B2B business, the existing relationship will help us enter the new markets.

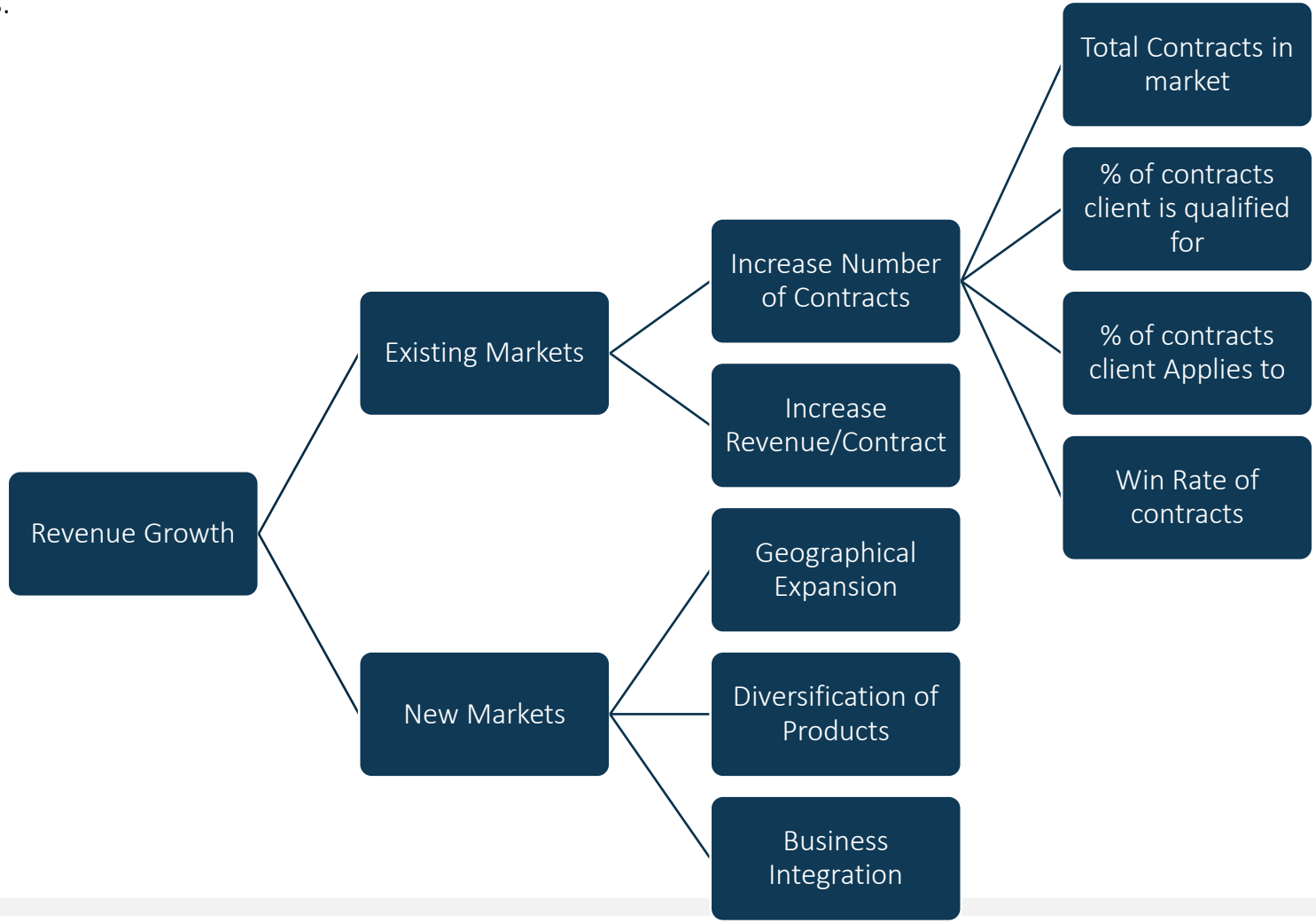
Great. Let's talk about the existing markets.

Revenue in existing markets depends on number of contracts and the revenue per contract. Since increasing revenue per contract might not be possible as the market is competitive, we should focus on increasing number of contracts. Our Contracts is a function of total contracts in the market, % of contracts we're qualified for, % of contracts we apply to and our win rate. We can't control total contracts. The ones we're qualified for – we can increase that by focusing on R&D and understanding market trends. For the ones that we apply to – we need to understand the internal processes of decision making. Our win rate can be improved by better relations with the OEM

Great. That'll be all. Thank you.

AUTOMOBILE PARTS MANUFACTURER

Summary: The client is an automobile parts manufacturer, operating in the B2B space, selling parts to OEMs and wanted us to develop a growth strategy. In the existing markets, we recommended partnering with new OEM entrants like MG and Kia, and building better relationships with existing OEMs to increase the win rate of contracts. Under new markets, we recommended geographical expansion to countries with similar car manufacturers as India and diversifying to 2W and larger automobile vehicles.



CONSULTING FIRM

Client is a partner at a leading consulting firm. He wants to understand how they can potentially grow the revenue at a faster rate.

Okay. Where is the firm based? What are the types of clients that they generally work with?

The firm is based in India, with offices in Bangalore, Delhi and Mumbai. They deal with clients across India and Southeast Asia, in the oil and gas, consumer and financial services industries.

What is the growth in revenue that we are targeting? Does the partner have any number in mind?

No, he just wants to explore options right now.

Okay. Can I assume that the only revenue stream is from the consulting services that we provide to the clients?

Yes.

Should I consider only the revenue or the cost as well?

Consider only the revenue.

Okay. I would first look at organic growth opportunities, and then move on to inorganic growth.
I would break down the total revenue into the average revenue per client and the number of clients, and look at each of these separately.

Go ahead.

The average revenue per client would be a function of the number of projects that we have and the price that we charge for it. I don't think we would be willing to charge a higher price, so I'll look at how we can increase the number of projects that we have. Is that a fair assumption?

Yes, that is fair. Go ahead.

To increase the number of projects, firstly we can look at how we can increase the number of modules per client. The firm can pitch different modules while working on one module, and suggest their recommendations in other areas as well. They can improve their services by over delivering, which can increase the customer loyalty and will help in increasing modules from existing clients. We can also look at bundling, where we can offer discounts if the client hires us for multiple modules.

Good. You can now go to the number of clients.

To increase the number of clients, we can diversify into different geographies. We can approach clients in countries we haven't worked yet. We can also look at taking projects in more sectors.

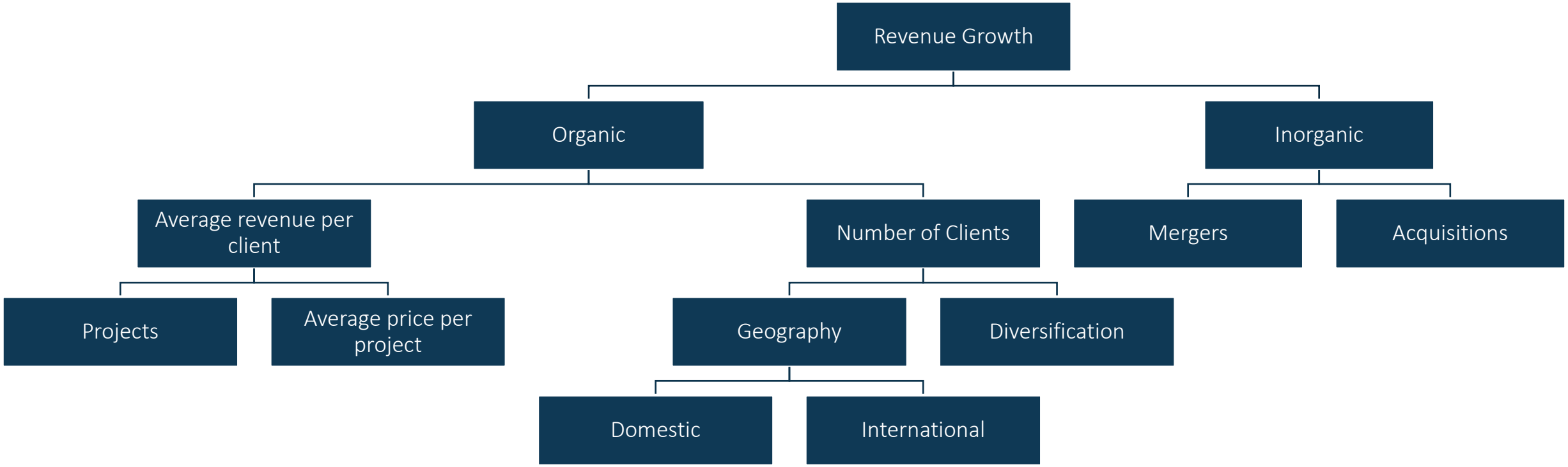
Okay. Anything else you want to add?

Yes. We can also look into expansion if the client is open to new investment. They can increase their employee base so that they can cater to more clients and projects, and also expand office space. They can also increase on-shore projects and promote work from home policies.
In case of inorganic growth, the client can also look into acquiring small consulting firms or merging with other consulting firms. Although this is rare, that can be looked into.

That would be all. Thanks.

CONSULTING FIRM

Summary: The client was a partner at a leading consulting firm, and wanted to understand how they can grow revenue at a faster rate. They can pitch different modules while working on one module, and suggest their recommendations in other areas. They can improve their services by over delivering, which can increase the customer loyalty and will help in increasing modules from existing clients. They can also look at bundling, and offer discounts if the client hires them for multiple modules. To increase the number of clients, we can diversify into different geographies. We can approach clients in countries we haven't worked yet. We can also look at taking projects in more sectors.



PHARMACEUTICAL INDUSTRY

Your client is in the pharmaceutical industry & is facing stagnation in growth. You have to investigate the reason & suggest ways to improve?

Is it an industry wide problem?

No, it is company specific.

What are the products & their prices?

Only one medicine- Rs 10 per tablet

What kind of disease does it solve?

A rare blood condition, in which if blood starts flowing a little, it does not stop. It is a fatal disease.

Any competitors?

No – ours is the only medicine to treat this disease.

Okay, Please give me a minute to gather my thoughts.

Sure

Growth can be made by increasing the market size or by increasing our share of the market. What is our share in the market?

Around 95%

Since there is a growth stagnation, we have no competitors & we have almost full share of existing market, we need to increase the market size. I understand that the market size comprises of patients who have been diagnosed with this disease. Is that correct?

Yes

So I am looking at the patient's journey in getting diagnosed, to understand how we can increase the market size. My first question is , how does the patient get diagnosed?

There is a test for Rs. 2500

Why does the customer go for the test?

He goes for the test if there is a major injury & the bleeding does not stop. It is on the recommendation of the doctor.

So do customers know about this disease before that ?

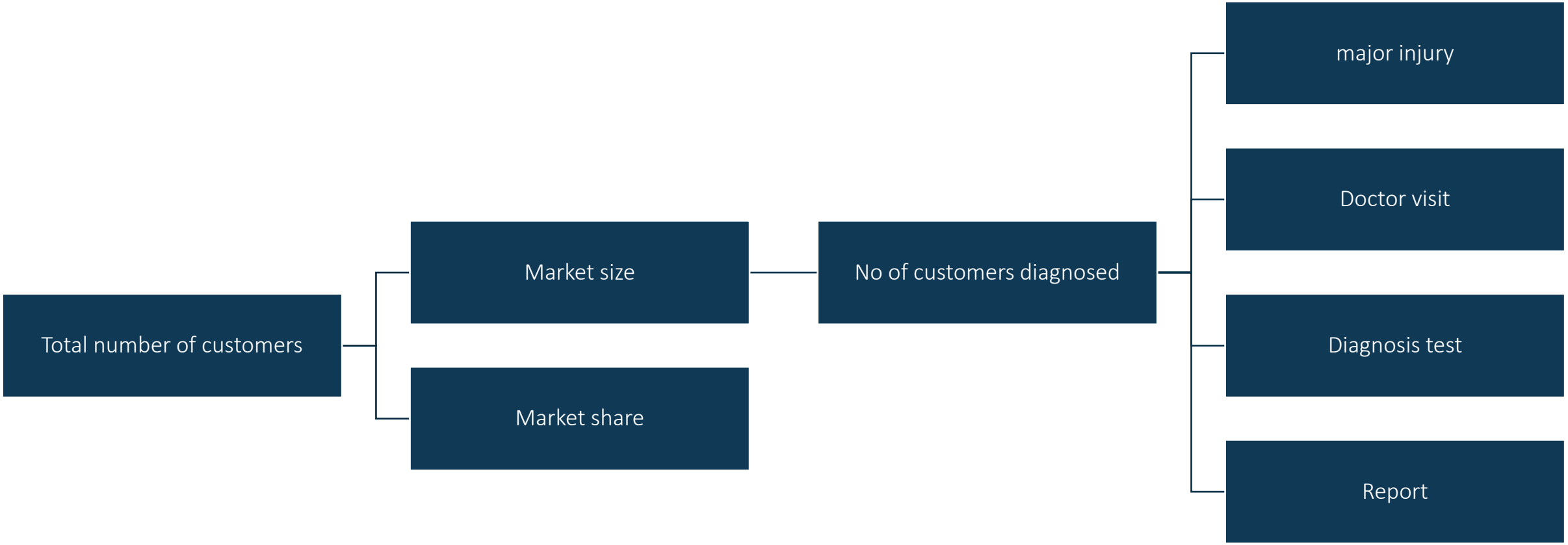
No.

So as I understand, the major problem is a lack of awareness about the disease. Since the disease is diagnosed only when the customer is badly injured, most people would never know that they have the disease.

Yes that is correct.

PHARMACEUTICAL INDUSTRY

Summary: I had to figure out why the manufacturer of medicines for a rare disease was facing stagnation, despite having no major competition. The main issue was to have growth despite having saturation in the current market. The identified reason was a lack of awareness about the disease itself as the disease was being diagnosed only when there was a major injury. The problem can be solved by undertaking a major awareness campaign through partnerships with NGOs, hospitals, schools & corporates, to conduct free tests.



FLIPKART

Your Client is Flipkart, and it is the year 2017-18, and they have asked you to develop their strategy for the next 3-5 years

What are the current features that are available with Flipkart?

Consider that it has a basic application where users can order the product and get it delivered

What is their primary goal for their strategy? Where are they currently operating?

They want to increase profitability and increase the customer base as well. Their current growth rate is 20%. They operate in Top 4 Indian cities only

There are two types of growth feasible: 1. Organic, 2. Inorganic. So do you want me to concentrate on any particular type?

Let's start with Inorganic Growth

As the company is at the beginning phase for inorganic growth, the better option would be to go into a partnership rather than a merger or set up alone. I would begin by evaluating the customer journey and the feasible option for inorganic growth at each point. Broadly the customer journey involves four significant buckets: 1.Searching for relevant products, 2.Checkout, 3. The transaction, 4.Delivery & Pickups.
For searching, the company can explore the option of vernacular startups, Voice-based search options, For checkout to increase the basket size, Flipkart can look at partnering with sub-products forex: insurance for laptop, etc., For Transactions, Flipkart can evaluate the option of Credit service startups which can help them underwriting the customers and give out the risk.

For Delivery & pickup services, the company can evaluate integrating with any of the logistics startups to strengthen and increase their reach.

Ok. Can you deep dive into the organic branch now?

For the organic structure, we can divide it into three major buckets, namely: 1. New Products, 2. Improving Existing Product Sales, 3. Geographic Expansion. For the New Products category, Flipkart can look at diversifying its business from the traditional eCommerce platforms. This can involve: 1.Customer Engagement Platforms like gamming & Live feed, 2. Video Platform. 3. Can diversify the range of the products available on the website.

Seems good. Let's move into the next bucket.

For improving the revenue from existing products, there are two ways: 1. Increase the frequency of buying, 2.Increase the basket size. For increasing the frequency of buying, Flipkart needs to concentrate on building a strong customer loyalty program and partnering with banks to increase the number of offers. To increase the bucket size, Flipkart needs to build a strong recommendation system to constantly nudge the users.

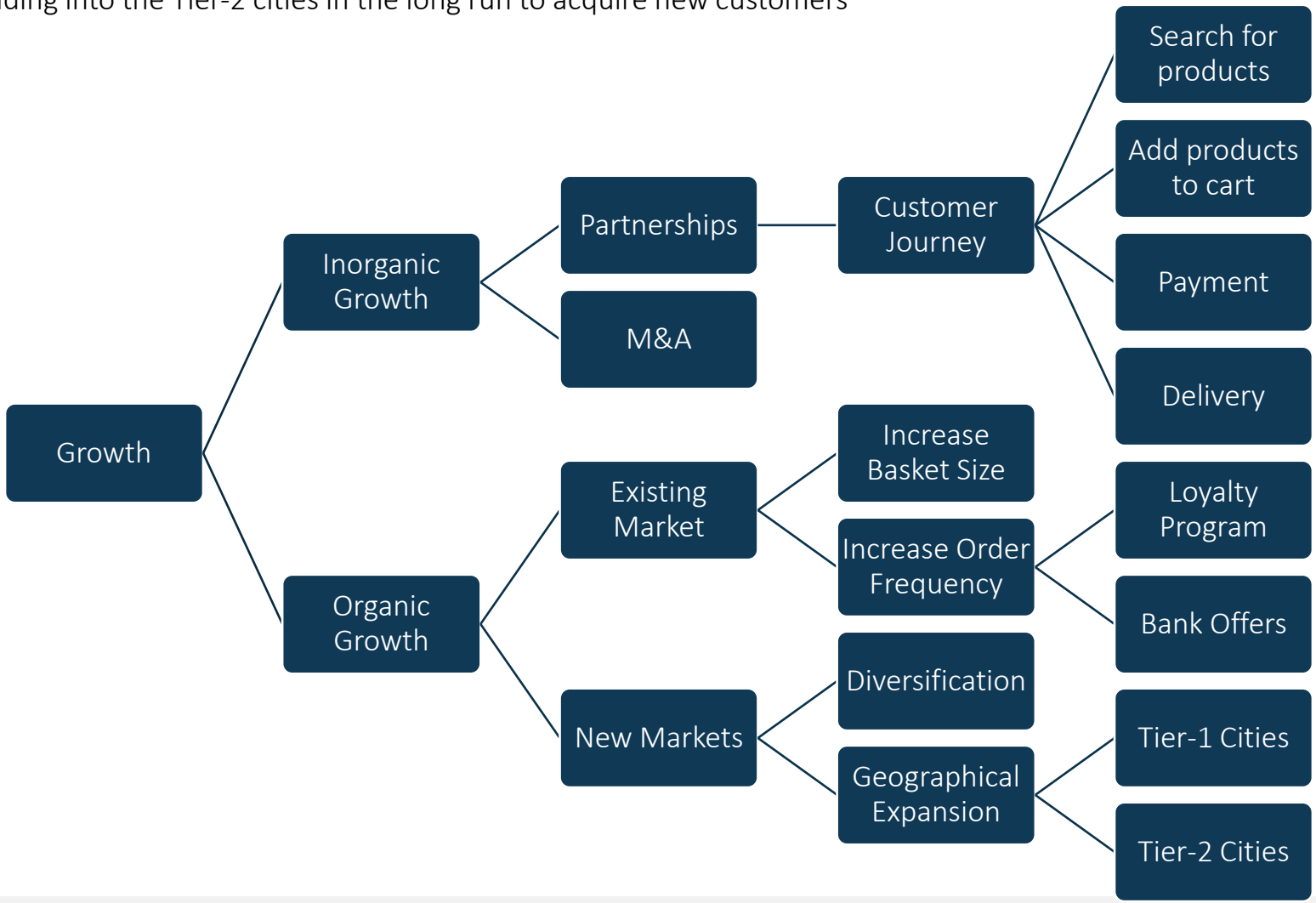
Good points. Let's discuss your final bucket.

For expanding into new geographies, Flipkart needs to first increase its reach in all Tier-1 cities in the next 1-2 years and then concentrate on reaching out to Tier-2 cities. For the Tier-1 customers, the primary requirement would be a hassle-free experience with minimal involvement, so Flipkart can explore reducing the customer clicks via Voice checkouts, offering more payment methods, and hassle-free experience in delivery

Thank You. We can close the case here.

FLIPKART

Summary: The client is Flipkart, and wanted us to develop their strategy for the next 3-5 years. We recommended partnering with companies along the value chain in the e-commerce space for inorganic growth. For organic growth, we recommended launching loyalty programs and bank offers to increase order frequency of the existing users, and expanding into the Tier-2 cities in the long run to acquire new customers

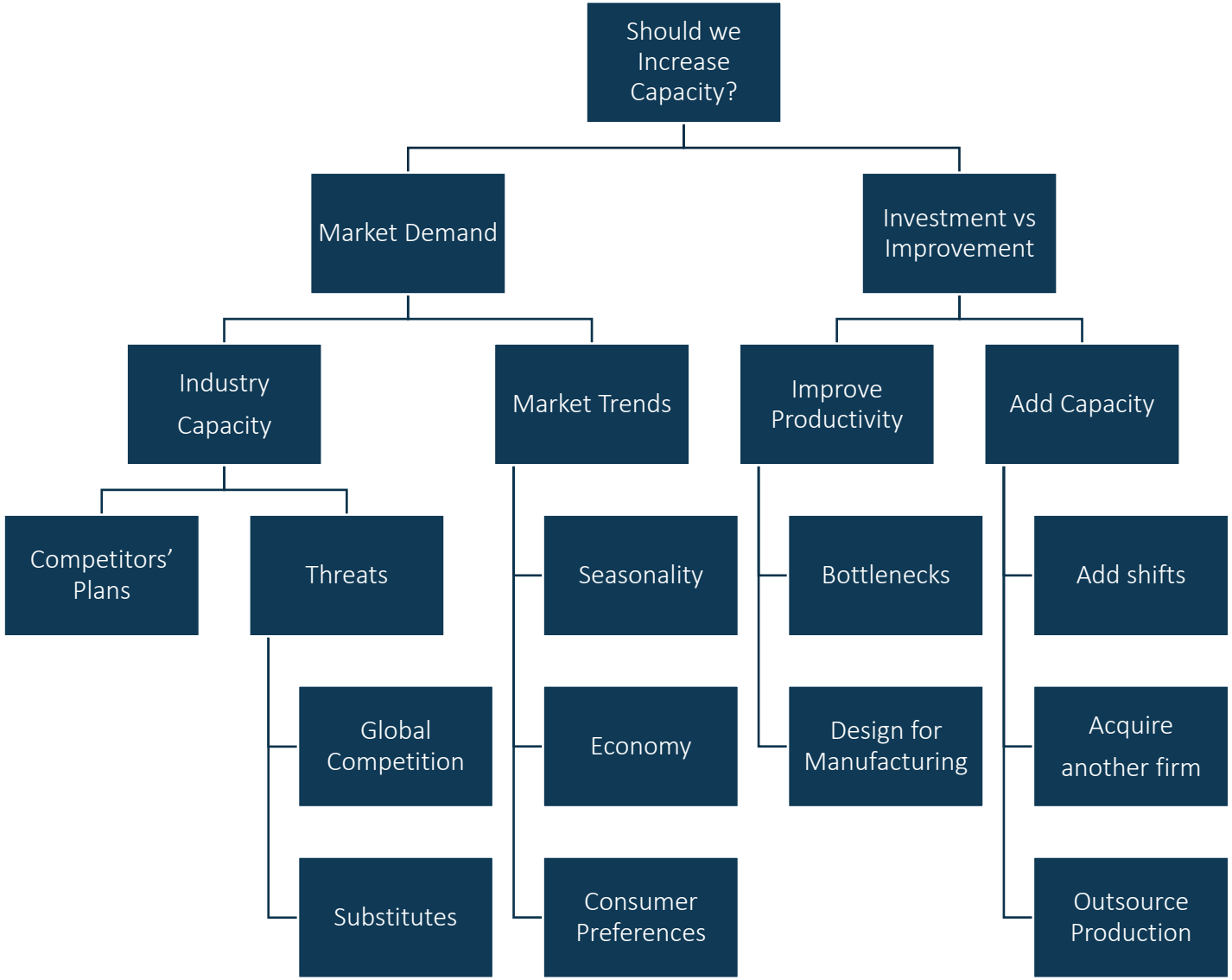


UNCONVENTIONAL

INCREASING CAPACITY

OVERVIEW

The following framework can be considered if you are faced with a problem statement which requires understanding capacity expansion. This can be an extension of a growth or profitability case where the client is looking to increase volumes and required additional capacity.



MERGER AND ACQUISITION

STRATEGIC FIT

Deal Rationale
- Cost synergy
- Revenue synergy
- Technology transfer (early stage start-up)
- Response to competitor

Type of Deal
- Vertical integration
- Horizontal diversification
- New market entry

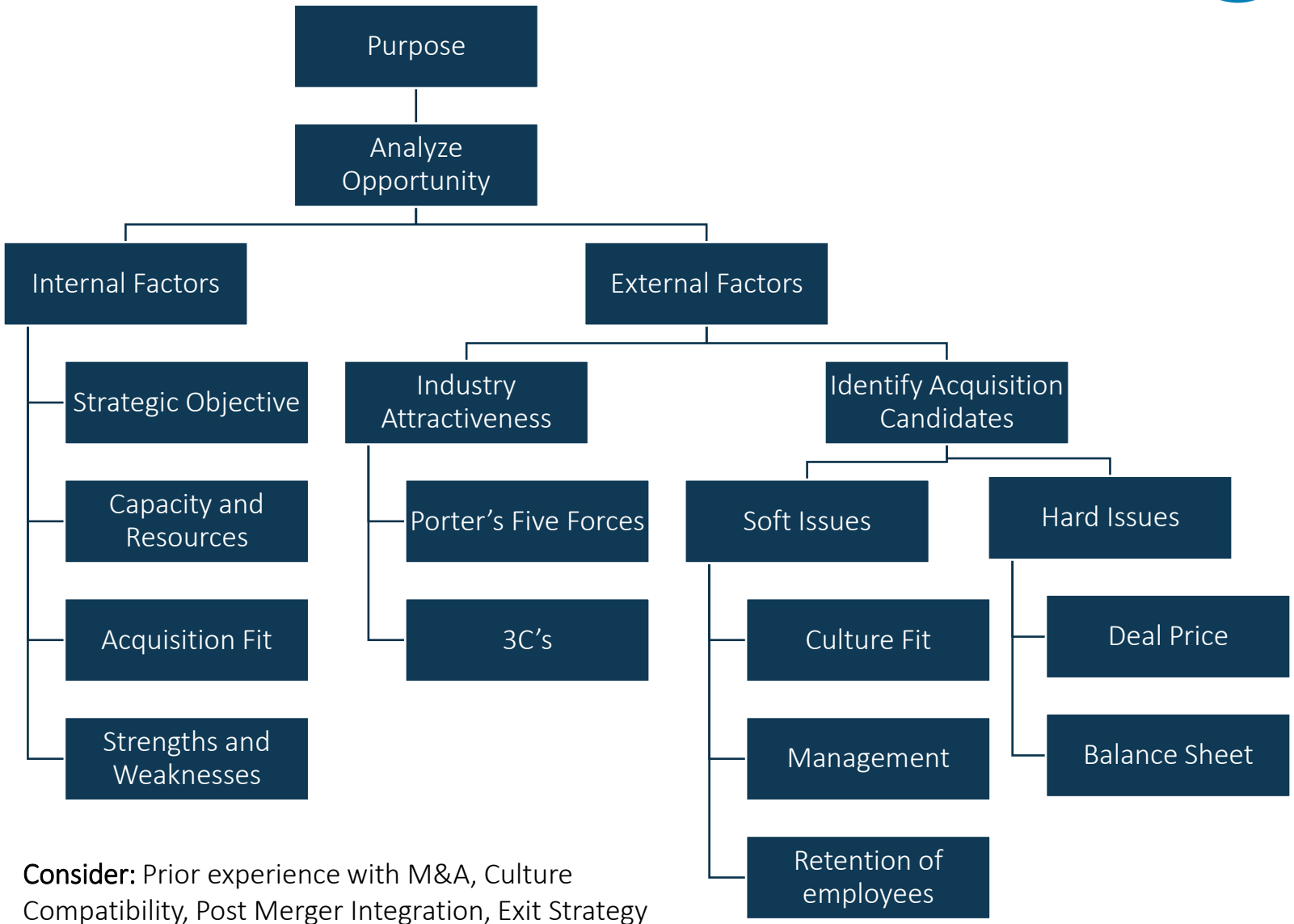
DEAL ECONOMICS

Valuation
- Revenue and cost analysis
- CAPEX and Working Capital
- PBT
- PAT
- Cost of Capital (R)
- Value = PAT/R

Deal Price

Synergies
- Cost and Revenue – New Firm Value

New Firm Value > Deal Price



Consider: Prior experience with M&A, Culture Compatibility, Post Merger Integration, Exit Strategy

IT SERVICES

Client is an IT services player. The number of applications for entry level training program have been reducing. They want to figure out why.

Okay. Can you tell me more about the client?

The client is a top tier IT player, ERP support is outsourced to them. They provide offshore support.

Okay. Can you also tell me more about the training program? From where do we hire, what is the salary, what all do we expect from the applicants, etc.?

We hire freshers from engineering colleges across India, and we are open to off campus applicants as well. Salaries are 20-30k per month. We hire software engineers only.

But we are not receiving enough applications as we used to, is that correct? Since when has this been happening?

Yes, that is correct. It has been an issue for the past 2 years.

Okay. I will go through the whole journey of the application process and see where the issue is. Does this work?

Yes, go ahead.

The journey starts when the students apply for jobs during their final year. After graduation, there are three most common options that students have – taking up a job in different fields like core, software, or any other non-technical field, going for higher studies, or starting their own venture. So firstly I would like to understand if the preference of the students has changed in the last couple of years – that less students are now applying for these software jobs and have different preferences.

No, the total applicants for taking up a job in colleges are the same.

Now looking at the external factors, we can look into our competition. There could be other companies offering extra salaries or better profiles. There could also be a possibility that more companies are visiting campus which gives students a wider pool to choose from and hence they are not considering applying to our firm.

Yes, recently a lot of start-ups have started recruiting from these campuses which offer better profiles and better exposure, hence students are preferring those over us.

Okay.

There is another reason why the applications are reducing. Can you continue your analysis?

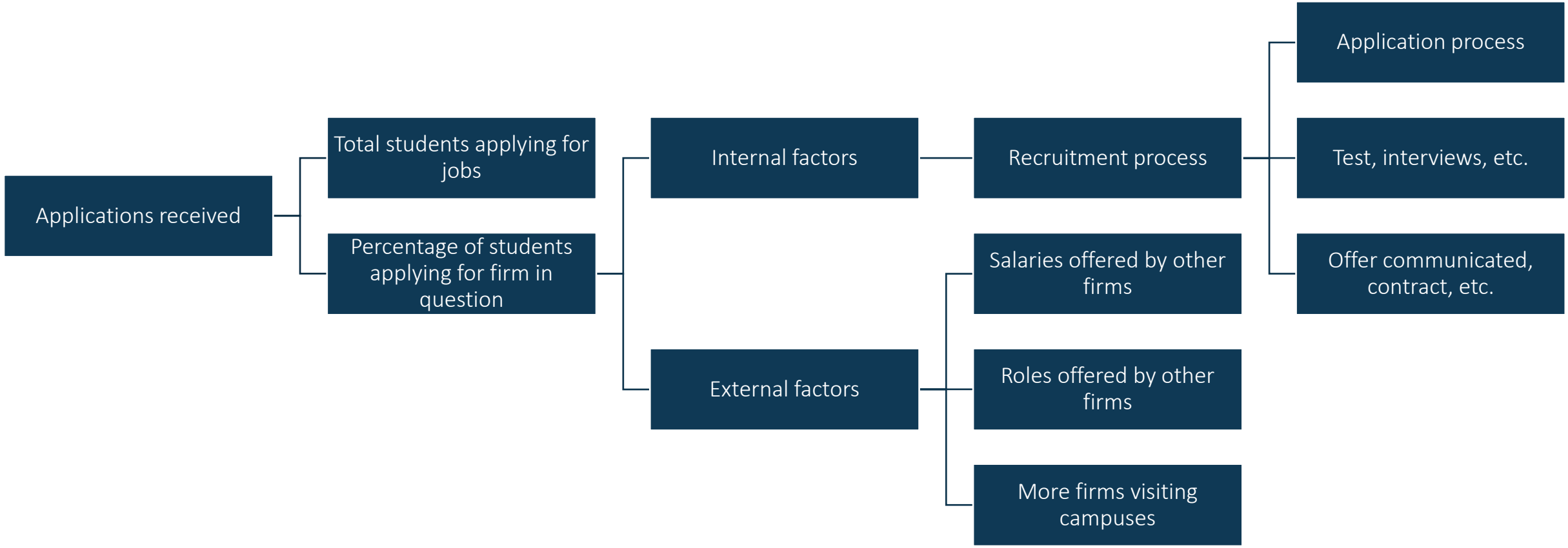
Sure sir. I would like to continue the journey and now further look at the process. After the students apply, there is a recruitment process like tests, interviews, etc. and then finally some candidates are offered full time employment. Has there been any change recently in the application or recruitment process, for instance, being longer or tougher?

Yes, we recently moved to an online process since we found the offline process quite cumbersome, but we are facing issues with it and are still in the process of fixing it. That would be all, thank you.

Thank you.

IT SERVICES

Summary: The client was an IT services player and the number of applications for their entry level training program were declining. They mainly used to recruit freshers from engineering colleges. There were mainly two reasons for the decline – first was increase in the number of startups that had started coming to campuses for hiring, and students were preferring those roles over the one offered by the client. Secondly, they had recently moved to an online application process but they have been facing many issues with it due to which students find it cumbersome to apply.



GOOGLE - MSMEs

Google wants to onboard more MSMEs onto the new Google Store platform. Figure out the specifics and make recommendations.

Sure. Do they have a particular goal number of merchants in mind?

Let's say, 1/3rd of the market. So that amounts around 20M enterprises.

Okay. There are 2 broad methods to enter this new space, organic and inorganic methods. So do we any have particular preference from the client? Can you elaborate a bit on this split first?

Sure. Organic methods include customer/merchant acquisition through feature enhancements and marketing. Inorganic methods would include partnerships/acquisitions with other firms

Okay. The client doesn't have a preference as such, but they want to do it as quickly as possible. What do you think would be the right way to do so?

Inorganic methods will get us bulk merchant acquisitions at once. However there is the factor of discussions for partnership details. So it'll be better to go for a hybrid approach. Use partnerships to get quick jump while simultaneously working on marketing and feature enhancements.

Okay. Let's focus on the partnerships for now. How will choose potential partners?

We can break it down to few important factors. 1) Current merchant count 2) Growth 3) Financial & operational health of the partner company 4) Additional value proposition 5) Value proposition from Gpay to partner.

Makes sense. What value proposition do you think that Gpay can offer to the potential partners?

Gpay's value prop will be on 3 fronts, 1) Monetary – Discount on transactions, cash backs for the merchants accessing Gpay through the partner 2) Non-monetary – Mini-app, notifications or other linkages with the partner apps 3) Special features – will depend on partnership details.

Okay. Now let's look at the feature enhancements part. How should they go about adding more features, given that they already have a lot of features targeted towards MSMEs? I would like you to talk about feature selection rather than the specific features themselves.

Sure. Given that MSMEs in itself is an umbrella term and has lot of internal categories, we can focus on the needs of these particular categories for further feature ideas. For example: For small /medium retail category, inventory management could be an issue. We can filter ideas based on 3 factors. 1) number of merchants in the particular category 2) ease of implementation 3) potential impact.

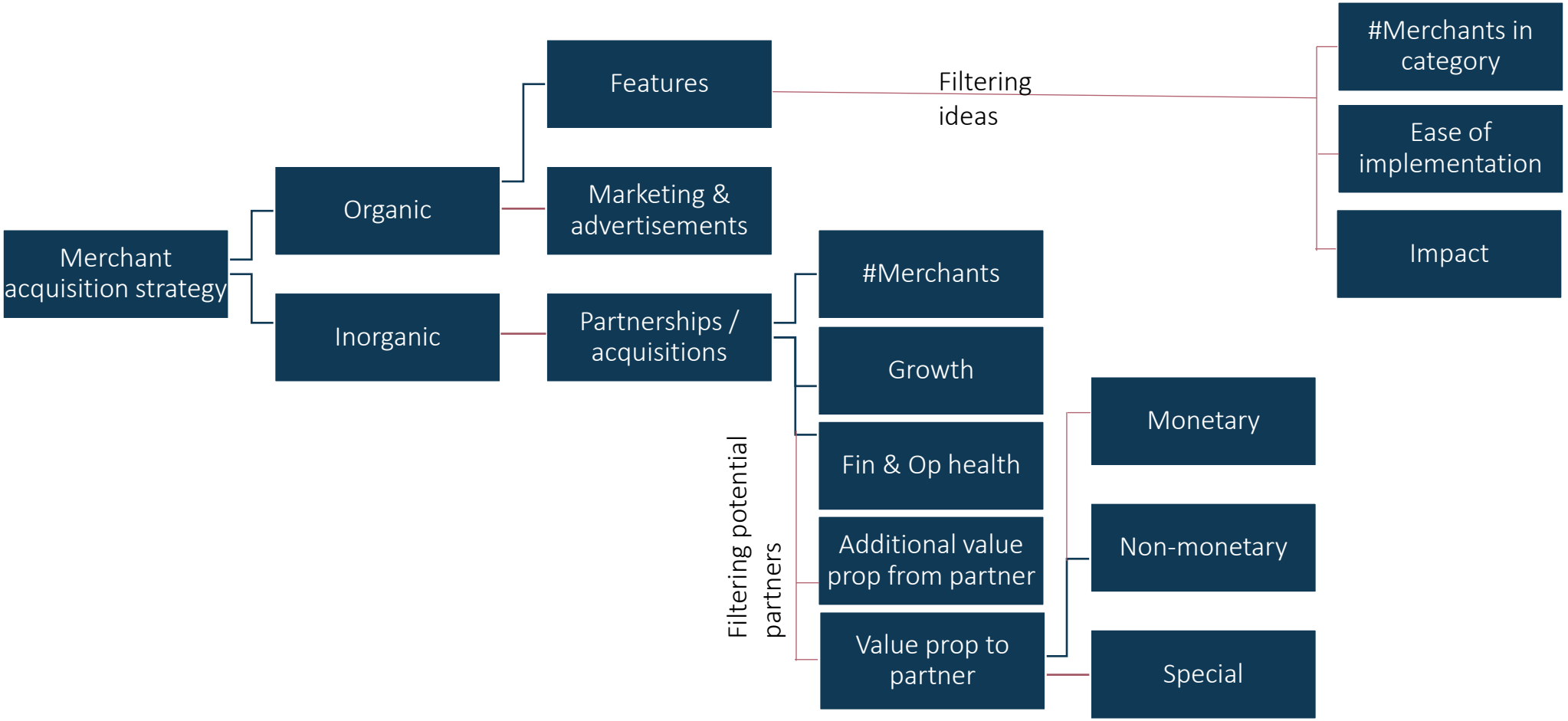
Okay. Anything else you would like to add?

Yes. We can use the category wise approach to also filter down potential partners, i.e. on the basis of the distribution of merchants on their platform. This will ensure that there is synergy between the organic and inorganic effort.

That would be all. Thanks.

GOOGLE - MSMEs

Summary: I had to figure out a kind of merchant acquisition solution for Google Stores for the MSME space. The main idea of the case was to test if I am able to structure a broad set of ideas into a proper structure.



OIL MANUFACTURER

Your Client is an Oil Manufacturer, who is concerned about the transportation of produced oil. They want you to develop a framework through which they can predict the cost of transportation.

Okay, I would like to ask a few clarifying questions. Where is our client located, what parts of the value chain do they occupy and who are their competitors?

Our client is based in the Middle East. They have their own rigs and they are involved in the initial processing. Competitors in their country are none.

Does our client want a model for worldwide shipping or to any particular location?

Consider the costs of shipping to India for the purpose of this case.

I would like to now know about the transportation. I assume it is a third party transportation company who does the job. How many players are in this business in the Middle East?

You're correct, it is a third party company. There are a few players who do this job so you can assume there is moderate competition.

Okay. The transportation costs for our clients can be modelled as Volume*Cost/Volume/Km*Distance + Mark-Up. We can assume the Distance to be fairly constant for a given shipping route. Cost/Volume/Km for the transporter is a function of their fuel costs + a constant overhead. The volume shipped is determined by our client. I think it would make sense to understand what the Mark-Up is determined by. Do you think this is a good way to go ahead with this?

Absolutely, go ahead.

Thanks! The mark-up is a function of the demand and supply of the transportation ships. Since there is not much competition, we can assume that there is not an infinite supply. If I assume that the transportation company serves all the Middle East players, demand is determined by how much our client and competitors are willing to ship to India. This is a function of the Demand of Middle Eastern Oil in India and the Supply of the same. Indian Demand for ME Oil is determined by total Oil demand in India and the availability of other (cheaper) sources for oil and any political considerations on importing from the Middle East. Total Oil Demand can be divided into Industrial Demand and Retail Demand. Since oil is inelastic in the medium to short term, I will not consider the price. Do you suggest I go into analysing the components of Industrial and Retail Demand?

I think this is good enough. What do you mean by political considerations?

For example, if there are sanctions against Iran for example, India would not import as much from there. Or if there is any diplomatic fall-out, it might result in trade-barriers.

Good, what do you mean by supply of ME oil?

Any OPEC decision to cut oil production might push India to look for other sources such as Russia, Venezuela etc.

Okay. How do you break-down the supply of transportation ships?

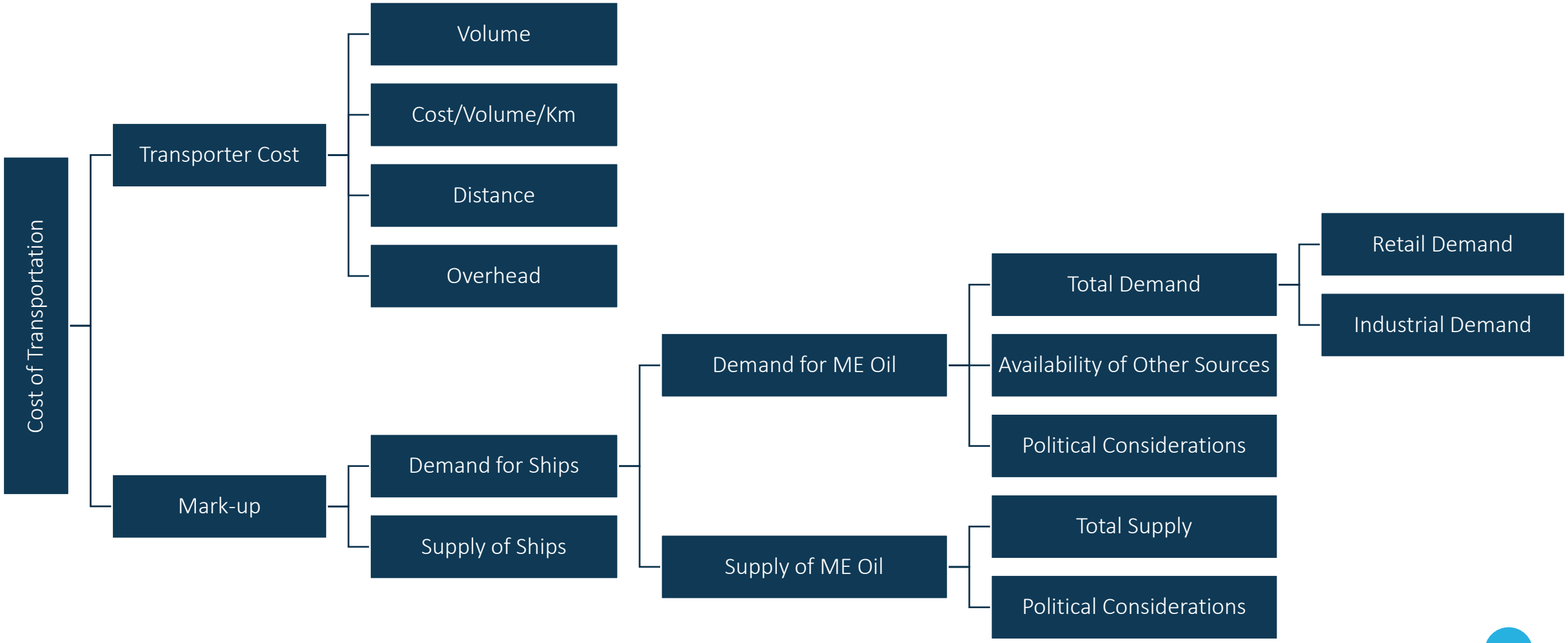
Supply can be split into number of serviceable ships with the players *Availability in the Region*Competitors' share. Availability in the region is a

OIL MANUFACTURER

dependant on better offers available elsewhere for the transporters. I will now try to split up each of the above to understand them better.
That's not necessary. Name three key recommendations for our client to minimize costs
Okay. Our client can 1. Lease out storage in the destination and ship when the costs are low, 2. Enter into long term agreements with any player to supply at a fixed mark-up and 3. Pass on the responsibility to the buyer by engaging in FOB Origin as much as possible.
That's all. Thank you!

OIL MANUFACTURER

Summary: The client was an oil manufacturer, and I had to come up with a framework to predict their transportation cost. I considered the following factors to construct a framework.



CONSULTING FIRM

You are an associate at a consulting firm. You have been noticing that recently a partner at your firm has been coming late to office. You need to figure out why.

Okay. How does he come to office? How long has this been happening for?

He comes to office by car. This has been happening for about a week now.

Has such an event happened before?

No. He is generally regular in coming to office, and very particular about punctuality.

There could be two reasons why he could be late. Either he is leaving home late, or there is a delay on the way. Do we know which one of these is the reason?

He is leaving at the same time everyday. There is a delay on the way.

Since time = distance/speed, either he is taking a different and longer route to office, or his speed has reduced.

He is taking the same route.

Hence, there is a delay because his average speed has reduced. Reasons could be internal or external. External reasons refer to issues like traffic, while internal would be issues related to the car, or he or the driver is generally driving slowly. Has any of these factors changed recently?

His driver drops him to office, but no changes in his speed of driving. The car is also fine.

Okay. Shall I ignore internal factors and deep dive into external factors?

Sure, go ahead.

Since average speed is reduced but the driver is driving at the same place, can I assume that they stop somewhere on the way, and time taken there has increased?

Yes, you can assume that. Can you figure out why?

Generally people stop on petrol pumps or tolls.

Yes, that is correct. Which one of these do you think would be the reason?

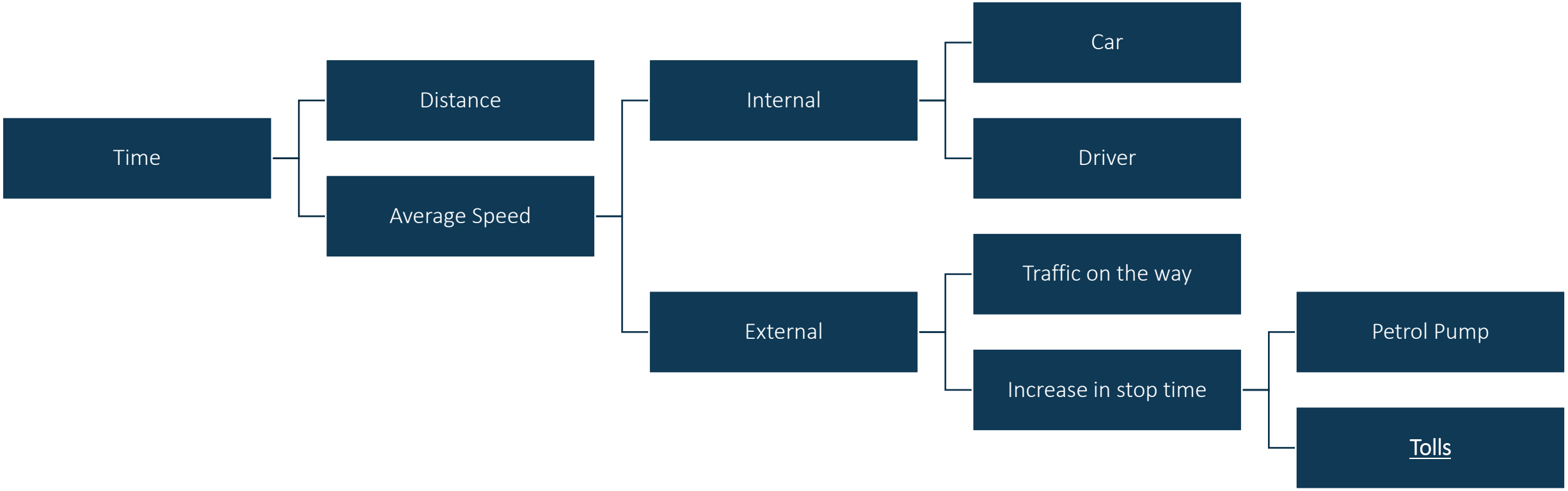
I think tolls could be the reason. People generally don't stop on petrol pumps everyday, so being late everyday for a week would not be due to this reason.

Yes, that is right. Since last week two toll booths have not been functioning, due to which he takes a lot of time to cross it, which is the reason for his delay. Well done!

Thank you!

CONSULTING FIRM

Summary: I had to figure out why the partner at a consulting firm was being late to office for a week. He used to pass by a toll everyday, and since a week two of the booths had shut down due to which it was taking a lot of time for him to cross it.



EDUCATION MINISTRY

Client is the education ministry of Rajasthan. They have hired you to improve the state board results for the students of Class X & XII in Rajasthan

Ok. To begin with, could you please let me know what exactly constitutes improving Board results? Is there any metric we are looking at?

That's a good question. You can look at Pass % for a metric to be improved for now

Will we be looking at both private and public schools?

Lets focus only on public schools affiliated to the Rajasthan Education Board

Are there any particular problems that are causing poor board results for the state?

Students often complain that they don't get enough practice before the board exams. They also complain that teachers are unable to finish the syllabus on time and skip important topics towards the end

What do teachers currently do to ensure that students get enough practice before the exams?

Apart from their regular teaching, there are monthly tests and 1 full syllabus exam towards the end of December.

Can I assume that board exams typically happen in the month of March?

Yes they start in the first week of May

Ok. I would like to approach this by looking at the various stakeholders involved in the education scene. To improve the board results, I would like to look at changes that can be implemented w.r.t to these stakeholders

Sure go ahead.

I think the 3 major stakeholders would be Government (Education officers), School (Principals & Teachers) & Consumers (Students & Parents)

That sounds good. We can start one by one.

On the government side, I believe past board data should be used to identify subjects and schools that require the most intervention. Using that data, a monitoring team can be formed in each district which will visit these schools regularly. A syllabus completion planner can be formed centrally which will ensure uniform syllabus completion across schools and will help in identifying schools which are lagging behind

Ok

Moving on to Schools, to ensure more practice for students, I would recommend 2 Pre-Boards to be conducted in the month of January & February. Based on the results of first Pre-board, remedial classes should be conducted for poor performing students before the 2nd Pre-Board. Good performing students may be excused from the 2nd Pre-Board to avoid burn out

That sounds good

Finally moving on to the 3rd Stakeholders, I believe involvement of Parents in the process should be increased. Monthly Parent teacher meetings should be organized at every school with feedbacks of student performance being shared to the parents

Those are good recommendations. I think we can close the case here

VC FIRM

Your client is a VC firm. They are currently valuing a group of semiconductor start-ups for home IOT devices. How will you value these startups? (Asked if I have prior knowledge in startup valuation)

Not really.

Okay, so let's go to the basics. How would you value a company in very basic terms.

Mainly by it's financial health and operational health.

Right. These are early phase startups, so assume they don't have significant operations or significant revenue. What now?

We can look at how existing companies in the industries are valued.

Right. What else?

1) We can also look at how much the different part of the company, like production, development etc would cost. 2) We can do a discounted cash flow calculation for the projected revenue in future maybe.

Right. So, the first approach is called market multiple. Essentially we valuate existing companies as Value = MM x revenue. MM is determined by other companies in the industry. But again these are non revenue generating companies. So what do we do now?

We can go for other 2 approaches or adjust the valuation by 1) adjusting MM – based on historical data for other companies and projected revenue value 2) an absolute adjustment in the valuation based on which stage the company is and how much they usually raise in seed fund.

Right. The second method is called cost-to-duplicate. But let's focus on MM now. The industry MM is 15x. The 3 companies have requested valuations at J- 10x, K- 20x and L- 25x of their revenues. How will you choose among them? (J,K,L are company names)

Do we have their projected revenue numbers and which funding stage they are in?

Yes. I have both. J – 1M in 1 yr (series A), K – 3M in 5 yrs (series C), L – 10M in 4 yrs (series B). Just tell me which company you would pick amongst these and why?

I would go with K. Given that this is it's 3rd round of funding, I took there revenue projections as the most reasonable baseline. So company L is obviously inflating the revenue numbers. Also, it seems unrealistic for company J to be able to start generating such a high revenue from the first round itself.

But K has a very high MM compared to J.

Right, I am assuming that would be because they assumed their would negotiation on that and that's why went with a higher start point. Moreover, J looking for a valuation of 10M in 1 yr and K of 30M over 5 yrs, which spreads to 6M per year. This allows us the spread the investments over 5 years based on their performance. The 1yr time period of J makes that investment riskier,

Right. I think we will wrap it up. All the best.

MINISTRY OF TRAVEL & TOURISM

Your client is Ministry of Travel & Tourism, Government of India. The tourism revenues have suffered due to the COVID-19 pandemic. You are approached to develop a framework to analyze the situation and give recommendations.

What is the objective of the client here? What is the timeline for the same? By tourism, do you mean the local tour and travel industry at tourist spots or the travel and accommodation as well?

We want a framework to understand the situation, and recommendations to improve the situation. Tourism covers everything – starting from Travel, accommodation to the employment of locals at tourist spots.

Sure. I would start by dividing the problem into three components – Travel, accommodation and local tours and markets.

Sounds good. Let's start with travel.

Travel can further be divided into three means – Railways, Roadways and Airways – Airways can be further divided into National and International travel. Since international travel is restricted due to COVID, I'd focus on domestic travel only. Roadways and Airways are not directly operated by the client, so we can focus on spreading awareness and promoting tourism with precautions. Railways is directly operated by the client, so we can make major changes there. The government can launch tourist special trains, with all COVID regulations, to promote tourism to places where COVID cases are low. Next, the government can look into two schemes – a) Tourism subsidies via railways, and b) Bundling of tourism plans – with travel via railways and accommodation at local government guest houses.

Great. Let's move on to accommodation now. How'll you analyze that?

From my experience, there are three major accommodation options at tourist places – Hotels, Homestays and government guest houses. Hotels can further with classified into low, mid and high-end ones. I would like to focus on hotels as that is the most significant category.

Sure. Let's consider low and mid-end hotels to be the same. What would you suggest the hotel owners so that they can improve their profits?

Sure. Profits depend on revenues and costs. For the low-end category, increasing revenues is not an option as the number of tourists are falling, and they can't increase prices as low prices is their value proposition. They should focus on reducing costs by eliminating complementary services like free breakfast (will also help improve the contactless experience). They can also launch plans for long-term room rentals for activities like work from mountains etc. High-end hotels have the advantage of serving the premium customers who'd be willing to pay more. They can charge additional sanitization fees and sell complementary services like hotel stay insurance.

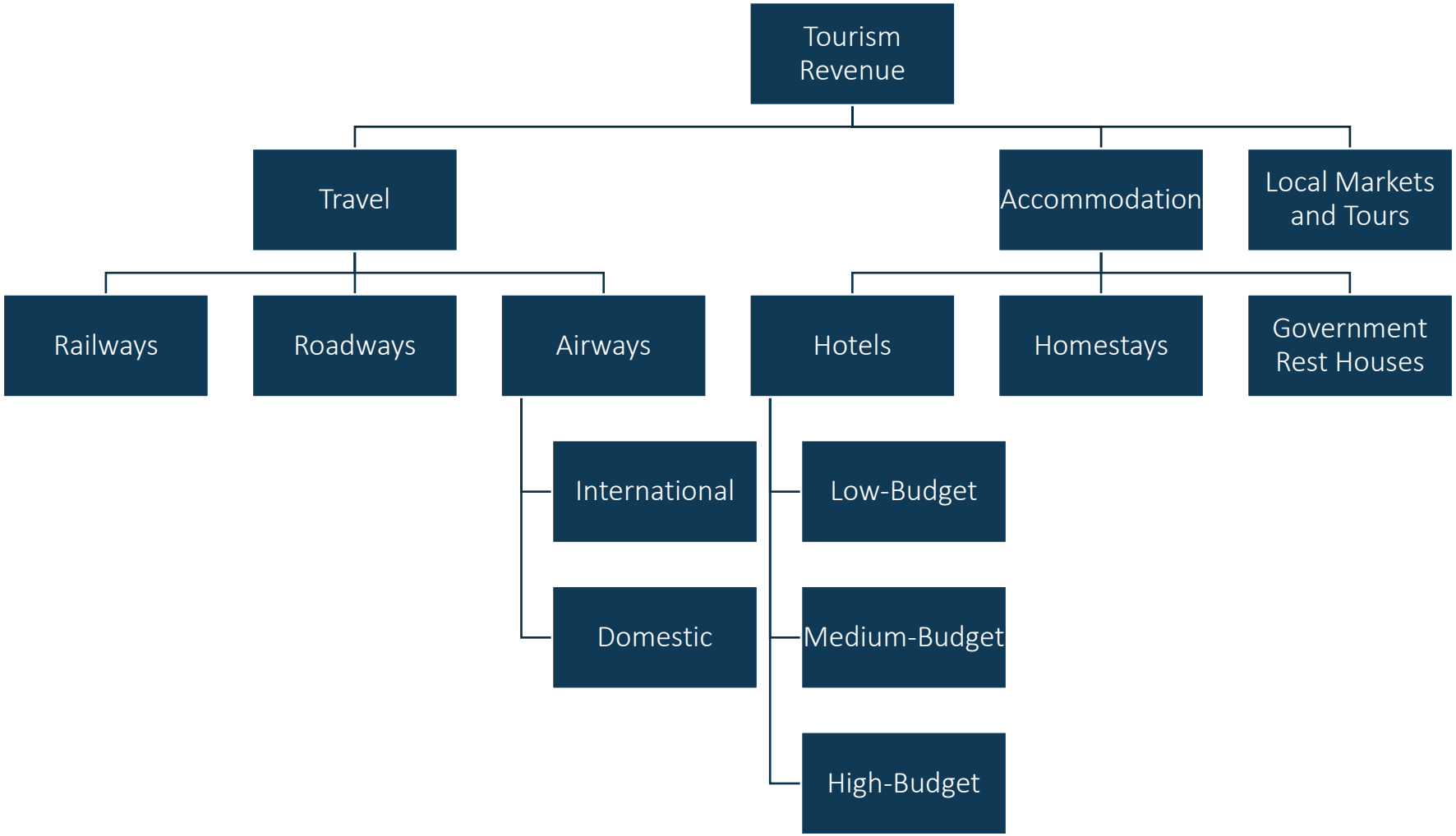
Let's talk about local tours and employment. What can the government do?

I would like to divide my recommendations here into three major categories.
1) Focus on awareness – New or less explored places should be promoted for tourism. New kinds of tourism like Agricultural Tourism etc. can be promoted.
2) Digital Tours – Videos of tourist places can be compiled into digital tours
3) Skill Development – The government should focus on skill development of local population so that they can provide better services to tourists later on and help drive tourism revenues in the long run.

Great. That'll be all. Thank you.

MINISTRY OF TRAVEL & TOURISM

Summary: The client was Ministry of Travel and Tourism and wanted out help to grow the tourism revenues post-COVID. We divided the problem into travel, accommodation and local market economy and gave recommendations for each of the buckets.



GUESSTIMATES

GUESSTIMATES

Guesstimates are estimates based on a mixture of guesswork and calculation. They can be given independently or as a part of a case. The interviewer is generally looking to assess:

- Structure of your approach
- Comfort level with numbers and quick calculations
- Ability to make back of the mind checks to validate the numbers

As a part of the guesstimate you will required to make reasonable and logical assumptions, it is important to state them clearly and seek confirmation from the interviewer. You will not be expected to calculate the exact value, but a rough number.

Approaches to solving guesstimates:

<u>Top-Down approach</u>

Involves starting with an entire population (in other words, the "top" level) and then breaking it down until you arrive at an answer.

The major elements of a top-down approach are:

- Identifying the correct starting universe
- Applying the right set of filters and relevant conditions. Segmentation can be carried out as follows:
    - Demographics (age, sex, income, ethnicity, etc.)
    - Psychographics (attitudes, behaviour, values, e.g. smoker vs non-smoker, dog vs cat person, etc.)
    - Geography (urban vs rural, Tier I/II/III cities, country, continent, etc.)
    - Channels (offline vs online, mobile app vs website, etc.)

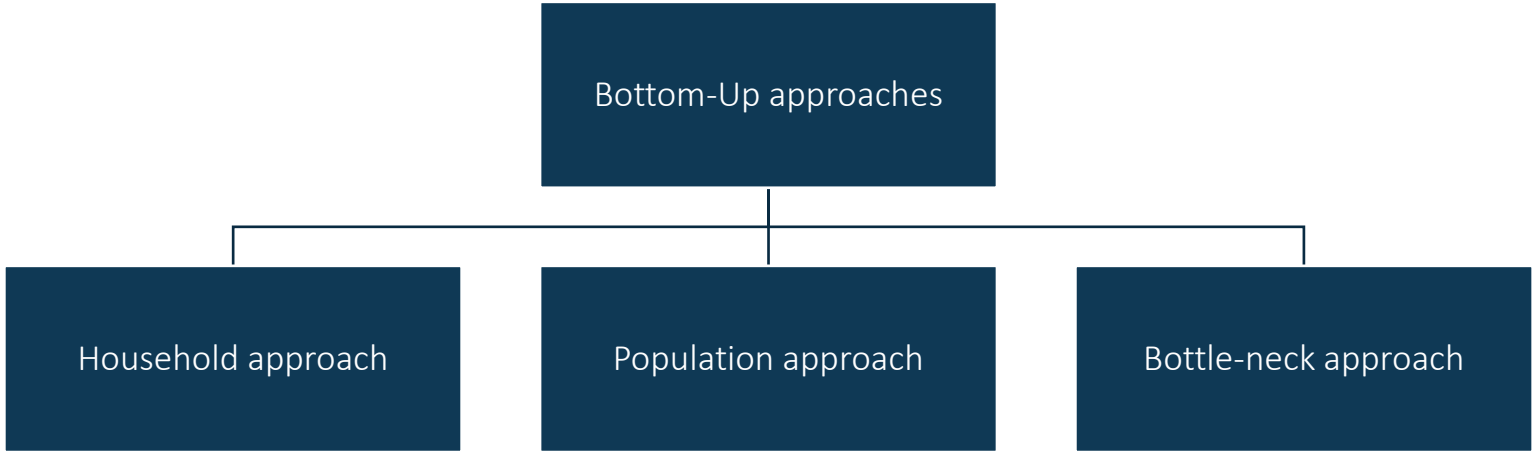
GUESSTIMATES

<u>Bottom-Up approach</u>

For this approach, rather than starting from the “top” with a high-level figure such as population, the best approach is to start from the “bottom”—some low-level statistic, such as Revenue per customer, and build your way up to the answer.

Some common bottom-up approaches:

- Household approach
  - Example: For a guesstimate involving the number of cars, washing machines etc driving calculation using a household approach is easier
- Population approach
  - Example: For estimating the number of mobile phones, chocolates consumed, apparel bought a population approach can be used
- Bottle-neck approach
  - Example: For estimating the number of flights per day in a busy airport the number of available runways would serve as a handy bottleneck to base your calculations. There could also be a limitation on the production capacity of the manufacturer in certain cases

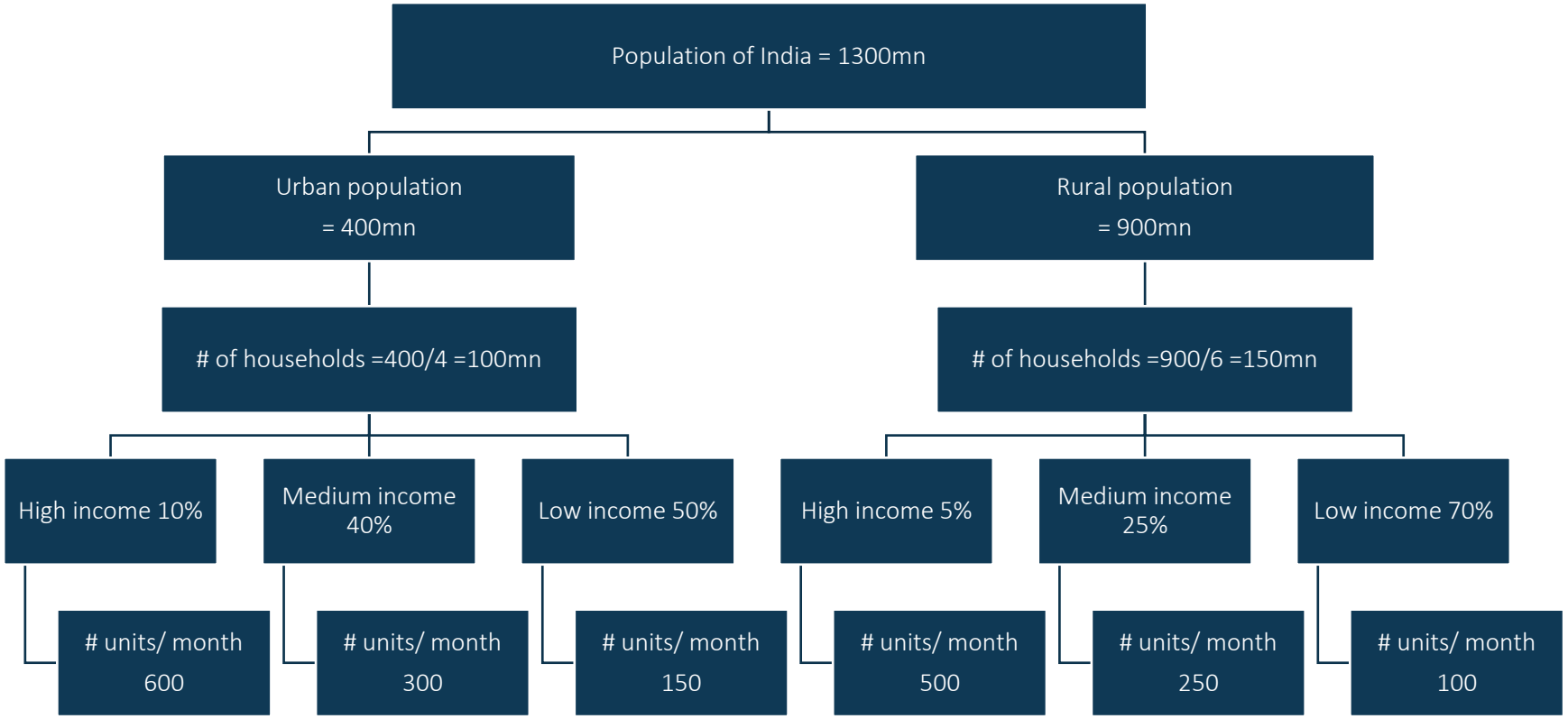


GUESSTIMATE 1: Monthly residential electricity consumption in India

Notes and assumptions

- The 30/70 split of urban/rural population has been considered
- The average household size assumed for urban and rural areas is 4 and 6 respectively
- Additionally, division of the income groups into high, medium and low has been considered. The candidate can confirm the same with the interviewer before proceeding

Approach

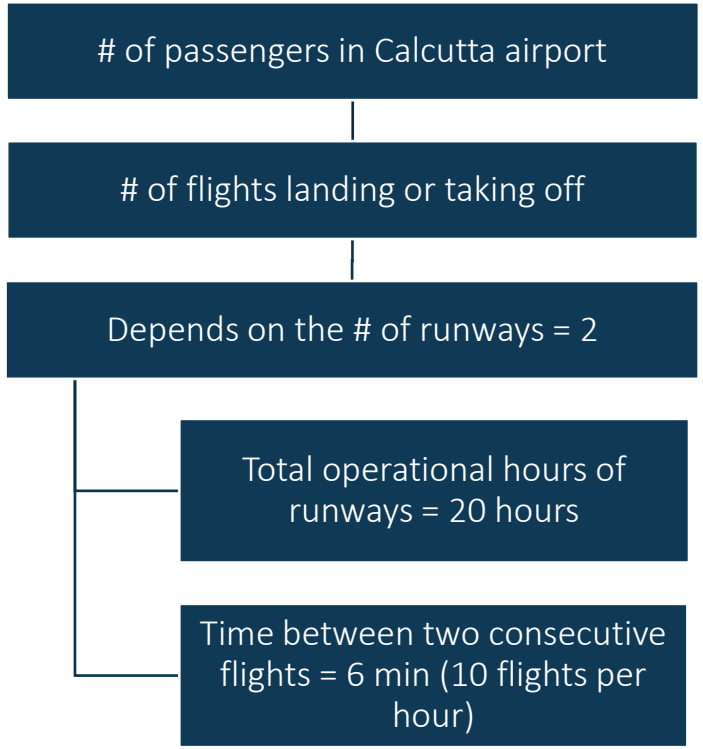


GUESSTIMATE 2: Daily passengers in Calcutta airport

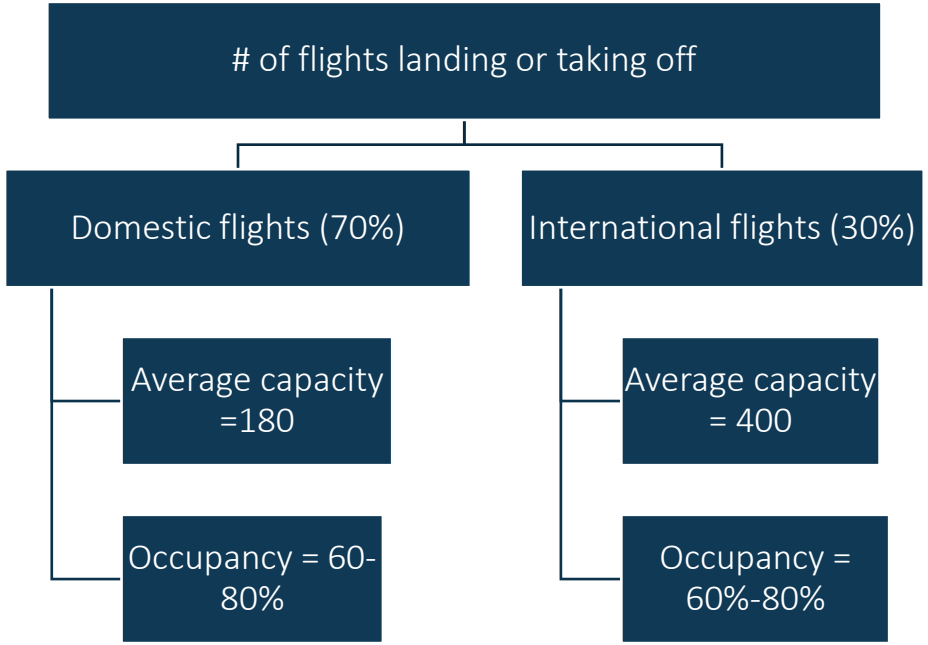
Notes and assumptions

- The daily # of passengers depends on the # of flights handled which in turn depends on the # of runways
- The total operational hours of each runway has been considered to be 20 hours (an alternate approach can be considering peak hours for the runway)
- Split of domestic vs international flights is 70/30

Approach



Hence total flights handled in a day= 2*20*10 = 400 flights



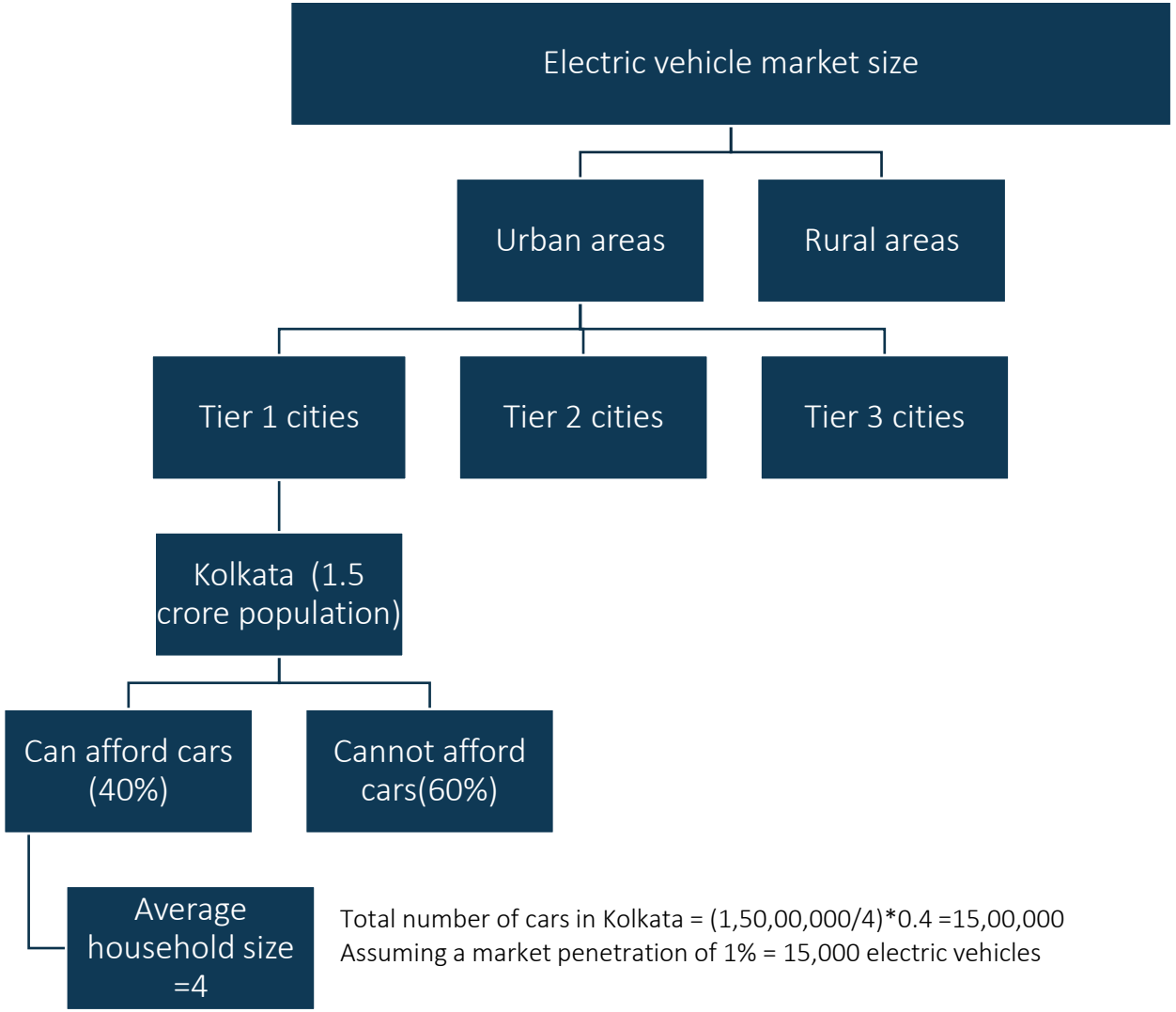
Total domestic passengers per day = 400*70%*180*70% = ~35,300
Total International passengers per day= 400*30%*400*70%= 33,600
Hence total daily passengers = 69,000

GUESSTIMATE 3: Estimate the electrical car market size in India/ any city

Notes and assumptions

- The calculations have been performed for a specific example of Kolkata, the same approach can be extrapolated to other Tier 1 cities
- Rural areas, tier2 and tier3 cities can be neglected stating a 80/20 rule, that majority of the electric vehicle penetration would be in Tier 1 cities

Approach



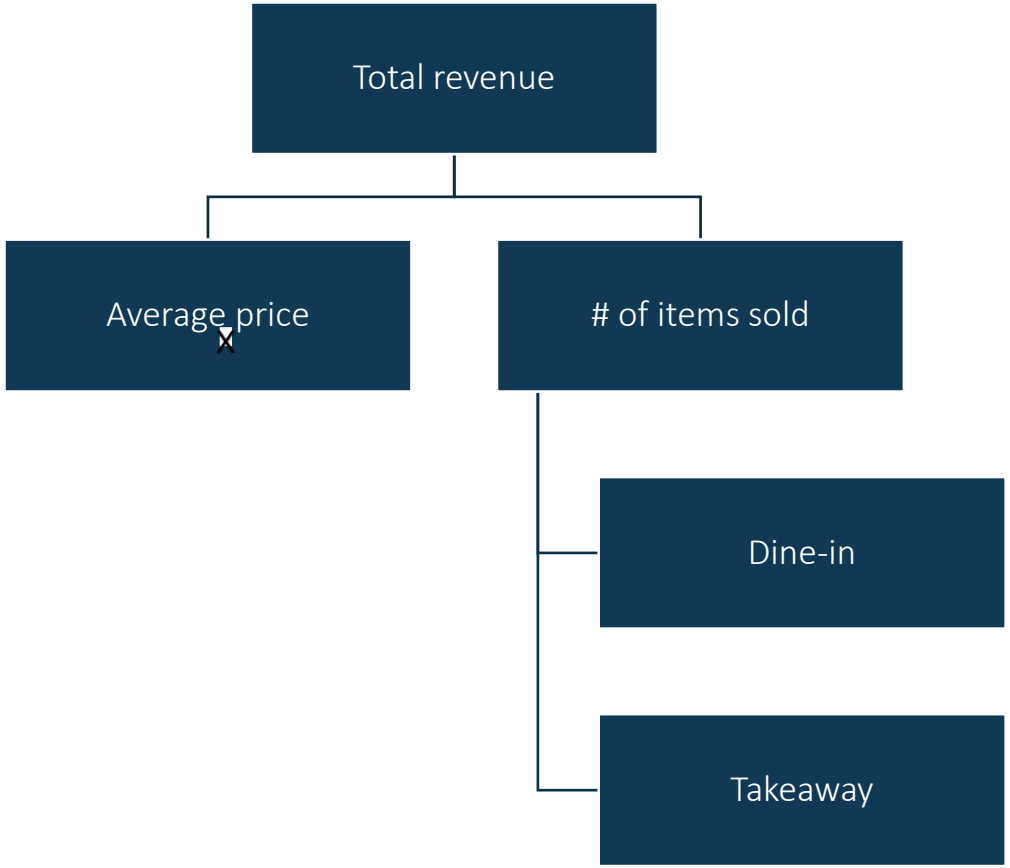
Total number of cars in Kolkata = (1,50,00,000/4)*0.4 =15,00,000
Assuming a market penetration of 1% = 15,000 electric vehicles

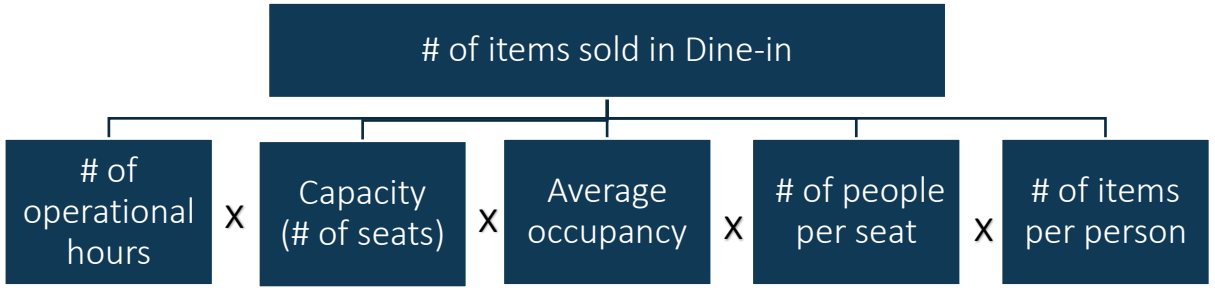
GUESSTIMATE 4: Total revenue of a fast food chain/restaurant

Notes and assumptions:

- The total revenue of a fast food chain is through two sources dine-in and takeaway
- MECE to calculate the # of items sold through drive-in can be handled through a comprehensive mathematical formula

Approach





# of operational hours = 12 hours
Capacity (# of seats) = 50
Average occupancy= 70%
# of items per person = 2
# of people per seat/ hour =2
[The average time every person eats at a fast food restaurant =30 min, therefore 2 (60min/30min) people occupying a seat per hour]

=12*50*0.70*2*2
=1680 items

GUESSTIMATE 5: Foreign Nationals in Commonwealth Games

During the Commonwealth Games in 2006, how many foreign nationals entered India?

Do you want me to calculate the total foreign nationals coming during that period or those coming exclusively due to the games?

Exclusively due to the games.

I would like to split the total number into two broad segments: Spectators and Non-Spectators. Non Spectators can be divided into the organising officials for the overall games, Neutral Staff and country-wise contingents. Does that seem like a good way to go about it?

Yes, you can proceed.

Okay. Starting with the organising officials, I would assume five major functions like sports, liaisons, events etc. and consider roughly 5 officials per function in addition to 5 more at the top making it roughly 30 members. There are approximately 20 individual sports and 10 team sports in the games. In the initial phases, we can assume each individual sport will have 4 games running simultaneously and each game requiring a panel of 3 judges and 2 referees, which makes it 400 neutral staff. For the team sports, we can assume 2 games per sport, 3 referees and 3 judges, giving us 120 neutral staff. In total, we can expect about 500 neutral staff.

That's good. How would you estimate the number of people in the contingents?

I will assume roughly 15 countries participating in the games. First, I will count the players. For each individual sport, I will assume there are 3 players in the squad, 2 support staff and 1 coach. For the team sports, we can approximate 10 players + 3 more in the squad, 5 support staff + 2 coaches. Apart from this, we can assume 3 administrative officials from each country to manage the contingent and act as liaisons. This would give us 20*(3+2+1) + 10*(13+7) or 320 per contingent. 15 contingents would mean 4800 individuals. Does this seem decent enough?

It is fine. How would you estimate the spectators coming in to watch the games?

Since it would be difficult to measure on a per game basis due to repetition and absence, I would like to consider the opening ceremony and work forwards from there. I will first assume that a majority of the foreign nationals who come to India, would plan to attend either the opening or closing ceremonies or both. Let's say 75% of all foreign nationals attend the opening ceremony. In a stadium with a capacity of 100,000; We can assume one stand to be filled with foreigners. This is about 1/10th of the stadium capacity or about 10,000 individuals. Going forward, it gives us a total of 13000 foreign nationals as spectators.

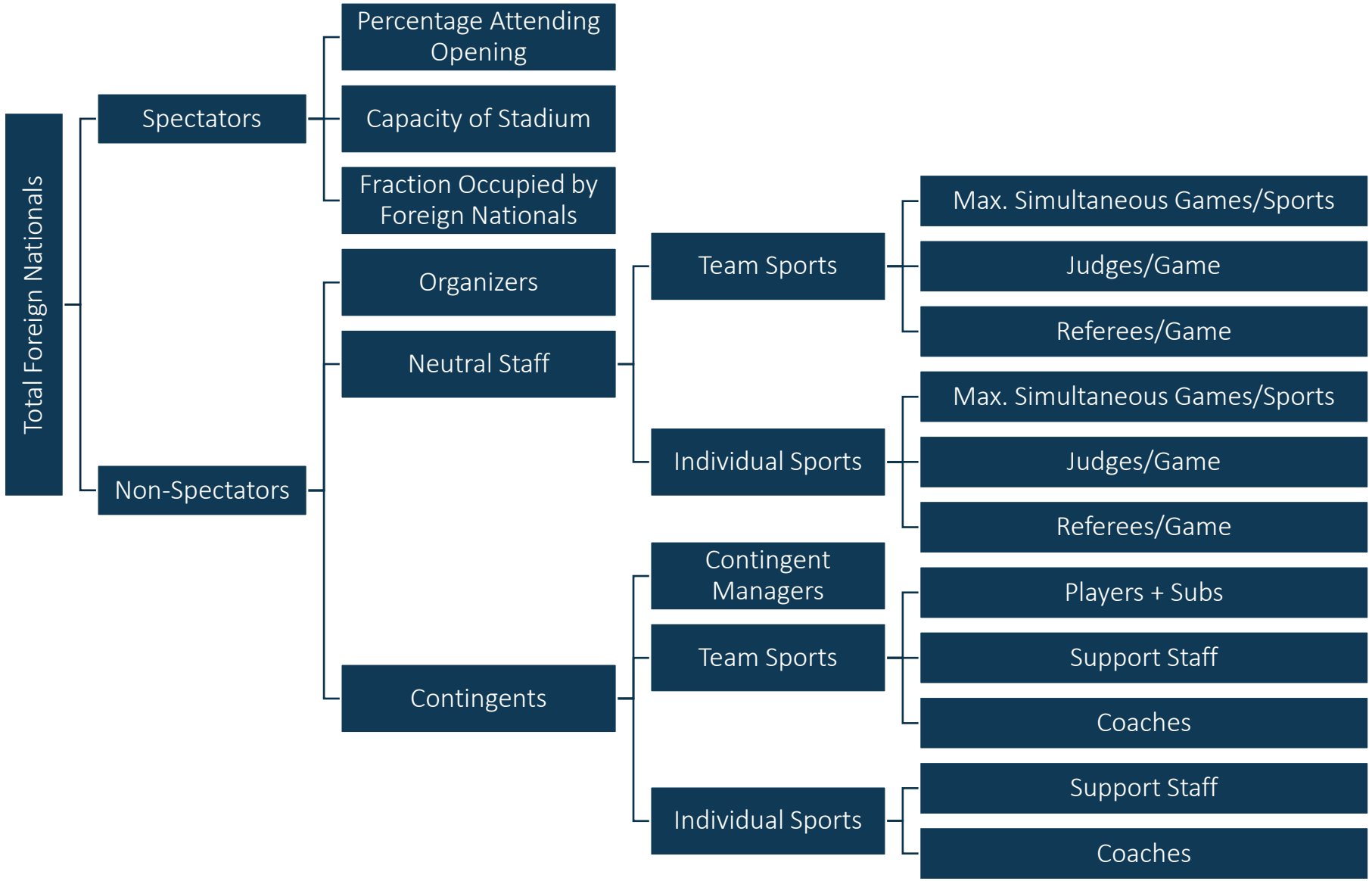
That is good. Can you give me your total estimate?

Sure. Organising Officials ~30, Contingents ~ 4800, Spectators ~ 13000 for a total of ~18000 foreign nationals who come to India for CWG.

The guesstimate is done. Thanks!

Thank you!

GUESSTIMATE 5:FRAMEWORK



APPENDICES

APPENDIX A

GUESSTIMATE STATISTICS

Following are some important statistics to keep in mind for solving guesstimates for market sizing and otherwise.

Population Distribution in India (in Millions)

Total Population	1300

Gender	(in Millions)	%Total
Males	684	53%
Females	616	47%
Sex Ratio (M/F)	1.11	

Geography	(in Millions)	%Total
Urban	390	30%
Rural	910	70%

Age Groups	(in Millions)	%Total
0-14	390	30%
15-24	260	20%
25-34	195	15%
35-44	195	15%
45-54	130	10%
55+	130	10%

Note: 50% of the population is under 25, 65% under 35

Income	(in Millions)	%Total
Below poverty line	260	20%
Low income	520	40%
Middle income	390	30%
High income	130	10%

Area wise Distribution of India (in '000 sq. kms)

Total Area	3300

Terrain	(in '000 sq. kms)	%Total
Land	2310	70%
Water	330	10%
Forrests	660	20%

Population Distribution by Religion

Religion	(in Millions)	%Total
Hindu	1040	80%
Muslim	195	15%
Christian	26	2%
Sikh	19.5	1.5%
Others/Unspecified	19.5	1.5%

Population and Area of Major Cities

Cities	Population (in Mn)	Area (in sq. kms)
Mumbai	13	600
New Delhi	11	1500
Kolkata	5	200
Chennai	4	400
Bangalore	5	750
Hyderabad	4	600

Tiers	Population (in Mn)	%Urban
Tier 1 (Top 10)	60	15%
Tier 2 (Next 50)	60	15%
Tier 3 (Next 100)	45	12%

APPENDIX B

GLOSSARY

Following are definitions to some key terms often used during case analysis

Term	Definition
Adverse Selection	Situation in which an individual's demand for insurance is aligned to their risk of loss (i.e. people with the highest expected value will buy insurance) and the insurer cannot account for this correlation in the price
Arbitrage	The purchase of securities on one market for immediate resale on another market in order to profit from a price discrepancy
Break-Even	Total amount of revenue needed to offset the sum of a firm's costs. Implies that the firm's profit will be $0
CAGR	Compound Annual Growth Rate: [(Ending Value/Beginning Value)^(1/n)]-1, n=no. of years
Capacity	The maximum level of output of goods and/or services that a given system can potentially produce over a set period of time
Competitive Advantage	When a firm is able to deliver benefits equal to competitors but at a lower cost OR able to deliver greater benefits than competitors
Consumer Surplus	Economic gain achieved when consumers purchase a product for a price less than their willingness to pay Consumer Surplus = Willingness to Pay - Price
Contribution Margin	C=P-V, where P is unit price, and V is variable cost per unit
Core Competencies	The activities that a firm does well to create competitive advantage

APPENDIX B

Term	Definition
Customer Segmentation	Subdivision of a market into discrete groups that share similar characteristics
Discount Rate	Also known as cost of capital. There is an opportunity cost associated with every investment, with the cost being the expected return on an alternate investment
Economies of Scale	The average cost per unit for a business entity is reduced by increasing the scale of production
Economies of Scope	The average cost for a business entity is reduced by producing two or more products
Elasticity	If E>1, decrease price to increase revenue If E<1, decreased price leads to lower revenue
Entering New Market	Three main methods: start from scratch, form joint venture, acquire an existing player
Fixed Costs	Costs that do not change with an increase or decrease in the amount of goods or services produced
Gross Margin	A Company's total sales minus its cost of goods sold, divided by the total sales revenue, expressed as a percentage
Horizontal Integration	The acquisition of additional business activities at the same level of the value chain
International Expansion	Main mechanisms: exporting, licensing, franchising, joint venture, foreign direct investment (acquisition or startup)

APPENDIX B

Term	Definition
Inventory Turnover	A ratio showing how many times a company's inventory is sold and replaced over a period. Should be compared to industry averages: low turnover implies poor sales or excess inventory; high ratio implies either strong sales or ineffective buying
Law of Diminishing Returns	At some point in the production process, the addition of one more unit of output, while holding everything else constant, will eventually lead to a decrease in per unit returns
Learning Curve	Visually shows how new skills or knowledge can be quickly acquired initially, but subsequent learning becomes much slower. A steeper curve indicates faster, easier learning and a flatter curve indicates slower, more difficult learning
Marginal Cost	Cost of one more unit of output
Market Share	The percentage of market size controlled by an individual firm
Market Size	Total size of a population (usually measured in number of people or actual dollar value) that would purchase a company's goods or services. Market size is always relevant and is a question that should be asked
Monopoly	Entity is the only supplier of a particular good. • Lack of competition → produce less and charge more • Barriers may include government regulation, networks, patents, scale, etc. • Revenue is the midpoint of the demand curve
Net Present Value	The difference between present value cash inflows and present value cash outflows
Payback Period	The length of time required to recover the cost of an investment

APPENDIX B

Term	Definition
Perfect Competition	Firms take price → MR = P Maximum profit = MR = MC P<AVC → shut down
Price Discrimination	Situation in which identical goods are sold at different prices from the same provider. • 1st degree → Different price for different willingness to pay • 2nd degree → Different price for different quantities • 3rd degree → Different price for different segments (attributes)
Product Lifecycle	Four main stages: market introduction, growth, maturity, decline
Product Mix	Total number of product lines that a company offers to its customers. Often an important area to explore in profitability cases to identify loss-making products
Promotion	Coupons, discounts, trials, etc. designed to increase sales of a product or service
Risk Averse	Individuals who prefer certainty over the uncertain for the same expected value (EV)
Risk Neutral	Individuals who are indifferent on risk taking if the EV is the same
Risk Seeking	Individuals who prefer risk even if the EV for a certain event and the risk is the same

APPENDIX B

Term	Definition
Sales per Square Foot	The average revenue a business creates for every square foot of sales space. Used in the retail industry as a measure of efficiency
Same Store Sales (SSS)	A statistic used in retail industry to determine what portion of new sales has come from sales growth and what portion from the opening of new stores
SWOT Analysis	Strengths, Weaknesses, Opportunities and Threats. Very basic framework, probably not a good idea to put down as your case framework, but good to have as a mental checklist
Synergies	The idea that the value and performance of two companies combined will be greater than the sum of the separate individual parts. Used mostly in M&A
Value Chain	Another concept from Michael Porter. His Value chain: Inbound Logistics, Operations, Outbound logistics, Marketing and Sales
Variable Costs	Costs that vary depending on a company's production volume; they rise as production increases and fall as production decreases
Vertical Integration	Degree to which a firm owns its backward suppliers or forward buyers

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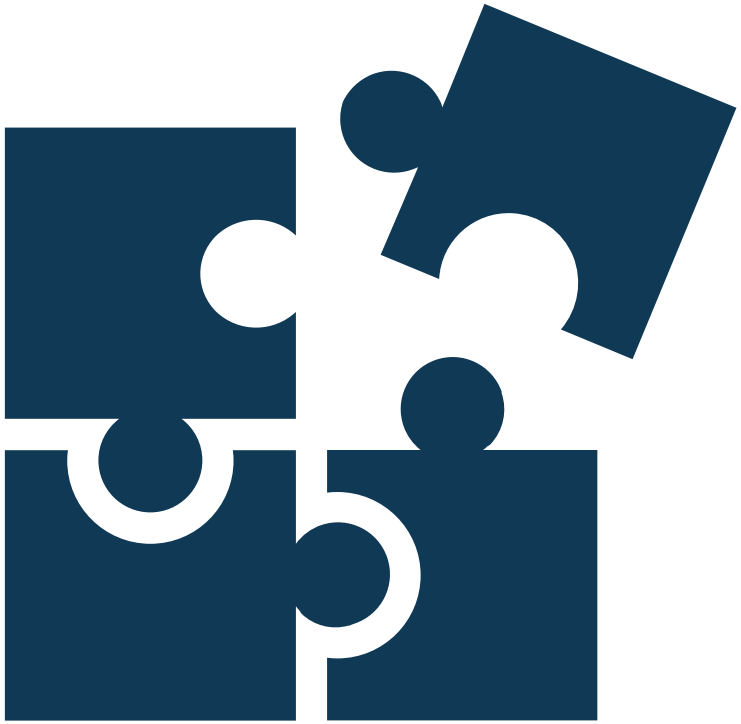

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