FMS

The Consulting Club

Faculty of Management Studies
University of Delhi

# FMS
# Consulting Case Book
# 2023-24

# Copyright Notice & Issues





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|---|---|
| Issue #1 | 2019 |
| Issue #2 | 2020 |
| Issue #3 | 2021 |

**Issue 4**
**August 2023**

# Foreword

The FMS Casebook issue of August 2023 documents the interview experiences of students across consulting firms to assist the students of FMS Delhi in their preparation for case interviews during placements.

The aim of sharing these experiences is to inform students about the case interview experiences of past batches and to help them prepare for their placements accordingly.

The experiences listed below are not necessarily the best way to handle case interviews. They only serve to give students an idea as to what to expect when they walk into a case interview. Every individual could have his/her unique way of tackling consulting interviews, each of which could be correct.

This document has contributions from students who appeared for campus interviews conducted by consulting firms during the placement process over the past years.

**Casebook 2023-24**
**The Consulting Club, FMS Delhi**

**Issue 4**
**August 2023**

# Acknowledgement

The Club is grateful to all the people who have helped us by sharing their cases and interview experiences, which has enabled us to put together a comprehensive preparation resource for the future batches.

We would also like to acknowledge the efforts of our entire batch as well, and thank the senior batches for their help in putting together this case book. They have ensured breadth and depth in the cases to give the reader a comprehensive view of the kind of cases they may be administered.

We are also grateful to the alumni of the Consulting Club, FMS Delhi for their valuable feedback on the cases which has helped us further enhance the overall quality of the book. We would also like to extend a special acknowledgement to the contributors of the previous editions of this FMS Case Book. Last but not the least, we would like to thank Faculty of Management Studies for giving us this opportunity.

# The President’s Desk

The team is very delighted to share The FMS Consulting Casebook for the academic year 2023-24 with you. With every edition, the club looks to move from strength to strength and foster a culture of consulting. This edition, like the previous ones, will not only help you prepare for consulting case interviews, but will also provide an approach for developing an analytical mindset, and the casebook's universal applicability will help students formulate and implement strategy in their professional roles.

In line with the feedback and interview requirements, this edition has been revamped with expanded industry overview and case studies from recent interview processes has been added to ensure thorough preparation. We hope that this casebook not only helps you land your dream consulting job, but also helps you create a long and successful career in management consulting.

All the best!

**Kumari Shambhavi**

# Contents

# Contents

# Part A - About Consulting

Main Index

# What is Consulting?

## What is it?

In very crude terms,

***"It is an outsourcing of business objectives, to people with huge accumulated expertise in relevant field who offer customized solutions to the client's stated objectives."***

## How is it helpful?

Objectives could be of various types:

- Often it is problem within a business that the client is unable to address or even identify, many a times due to lack of qualified personnel.
- It can be related to business expertise that a client doesn't have but requires for planned tasks in present and/or future.
- Also it could be targeted at improving business performance and/or profitability by exploring opportunities to improve, grow or divest.

## Top Players

| | | |
|---|---|---|
| accenture strategy | Alvarez & Marsal | Bain & Company |
| BCG The Boston Consulting Group | EY Building a better working world | GEP |
| Kearney | McKinsey & Company | Oliver Wyman |

## Why is it so sought after?

- With enormous amounts of subject knowledge of accumulated expertise that they possess, consultants can drastically transform a business in a relatively quick span of time.
- From turning around loss making businesses to managing highly important political election strategies, they offer customized solutions for every problem.
- Consultants can pinpoint the challenges that are being faced by their clients today or anticipate the ones that might be in future. This proves them effective in finding and implementing solutions that are concurrent with the client's definition of success.

# Roles/Hierarchy of a Consulting Firm

Almost all consulting firms follow a flat hierarchy and up or out kind of career trajectory.

**Partner/Director**

**Principal/Sr. Manager**

**Manager/Project Leader**

**Senior Consultant**

**Consultant/Associate** ← ***Post MBA***

**Analyst**

Not all firms have the same nomenclature for their roles as above

# How to Get into Consulting from Here?



**Resume & behavioural preparation**

**Use next 3 months to improve your skills**

**Prepare for the interview process**

Prepare Hard

- Guesstimates
- Case Interview
- HR Answers

Prepare Smart

- Communication
- Business Acumen
- General Awareness

**Crack the interview**

*It's a rigorous selection process which requires structured preparation plan and serious efforts. Both the hard part and the smart preparation part are equally important and would require efforts at the individual level.*

# Part B – Basic Concepts

Main Index

# 3C's

- What is the Business?
- Where is it present?
- Scale and Trends?

**Government**

**Industry**

**Company**

- Who are the customers?
- Where are they present?
- How do they buy?
- Segmentation ?

**Customer**

**Competition**

- Major Players & Market Share
- Benchmarking with competitors
- How is the Industry doing?

| **Other C's:** | **C**ollaborators | **C**hannels | **C**osts | **C**ompetencies | **C**ulture |
|---|---|---|---|---|---|

***Understanding the layer/level of business at which you are doing the analysis is very important and it sets the context of the case. Useful while opening a case to set context for problem at hand. Other C's could be useful in further analysis of case.***

# 4P's and 7P's

- What are the product characteristics?
- Product differentiation (i.e. USP.)
- Product segments (i.e. product lines.)

**Product**

- Price in the market
- Price Benchmarking
- Changes in Pricing

**Price**

**Promotion**

- Marketing Activities
- Promotion Mediums
- Ad Strategies

**Placement**

- How is the product distributed to customers
- Inventory-Transportation-Channels

Other 3 P's:

- **People:** Staff involved in entire value chain
- **Processes:** Processes involved in value chain
- **Physical Evidence:** Tangible component of product/service

***Useful in the market entry and GTM category. E.g. revenue related problems, new product launch.***

# Porter's Five Forces



**Bargaining Power of Buyers**

**Bargaining Power of Buyers** increases with:
- Concentration of buyers – higher number of buyers
- Lower switching cost for buyer
- Buyer's ability to integrate backward
- Availability of substitutes
- High Price Elasticity
- Lower Product Differentiation
- Lower Impact on Buyer's product Quality

**Threat of New Entrants (or Barriers to Entry)**

**Barriers to Entry** increase with:
- Economies of Scale
- Proprietary Product Differentiation
- Brand Recognition
- High Switching Costs for Customers
- Capital Requirements
- Hard to access distribution channels
- Regulatory constraints and restrictions

**Bargaining Power of Suppliers**

**Bargaining Power of Suppliers** increases with
- Input differentiation
- Degree of importance of supplier's product/service – Impact on cost or differentiation
- Lower switching cost for suppliers – lower importance of volume sold
- Lower number of substitutes available – less supplier concentration

**Industry Rivalry**

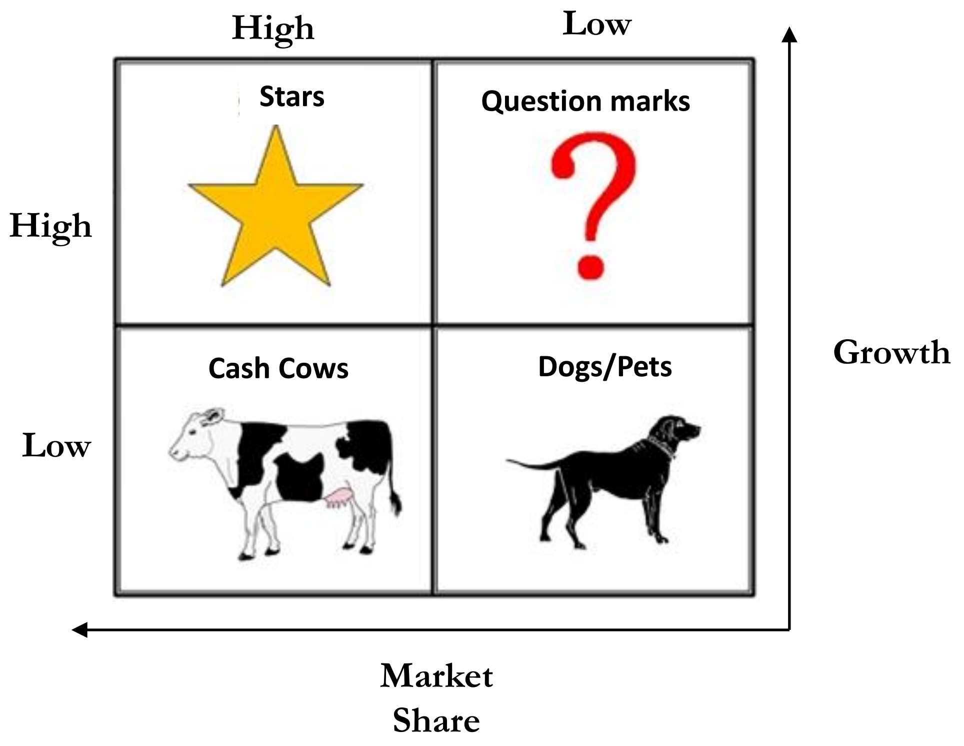
**Industry Rivalry** Increases with:
- Industry Growth & Number of Competitors
- High Fixed Costs and Barriers to Exit
- Lower product differentiation & brand recognition
- Highly Specialised Assets

**Threat of Substitutes**

**Threat of Substitutes** increases with:
- Relative performance of Substitutes
- Lower Switching Costs
- Higher Buyer Propensity to Substitute

***Useful in various types of cases like market entry, growth strategies, new product launch.***

# BCG Matrix

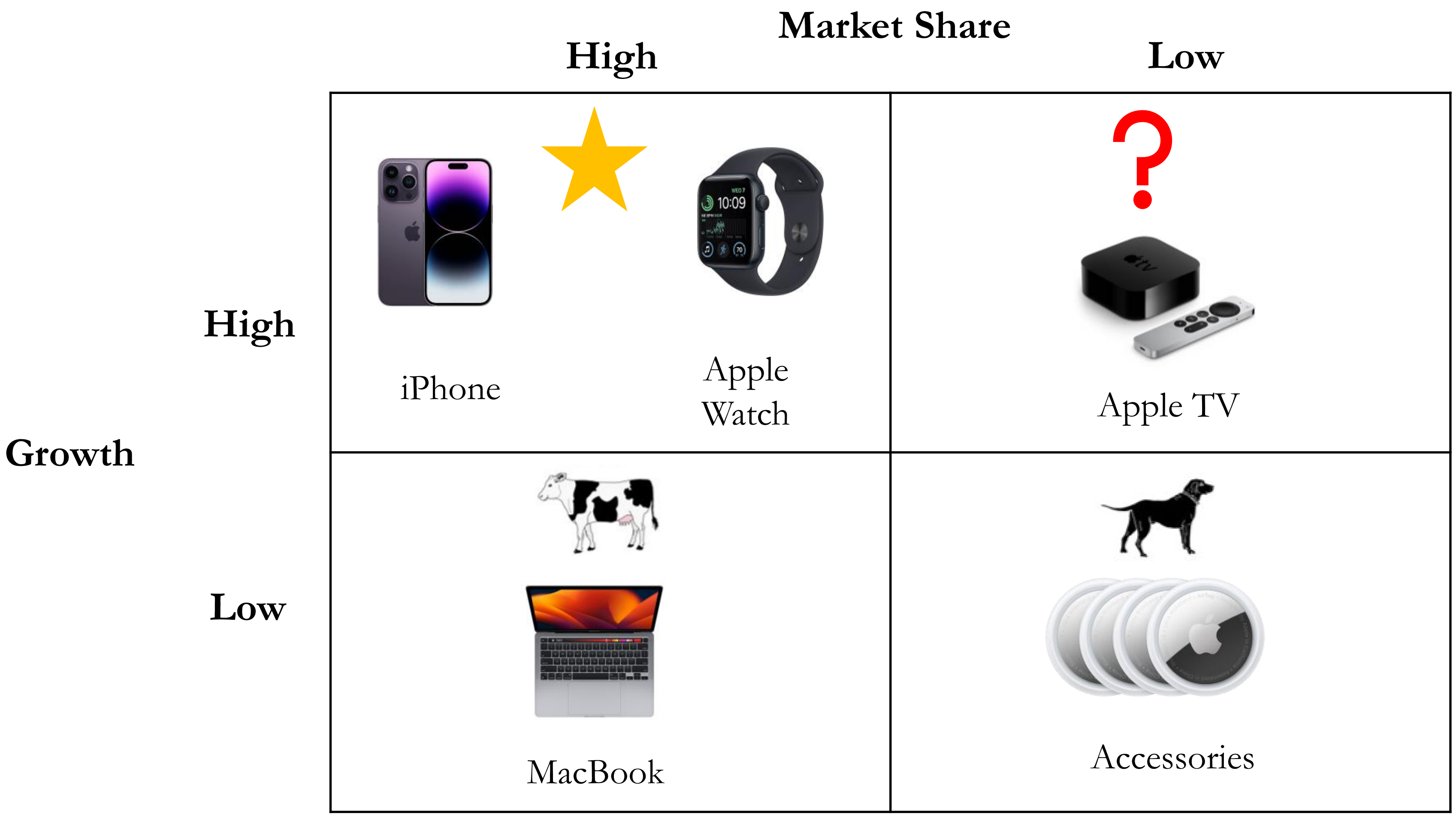



| | | |
|---|---|---|
| Dogs/Pets | Low Share/Low Growth | Sustained cash flows but will never be stars; companies should liquidate or divest |
| Question Marks | Low Share/High Growth | Companies can invest (can turn into stars) or discard (can become dogs/pets) |
| Stars | High Share/High Growth | Large cash flows, market-leading; companies can heavily invest to turn into cash cows |
| Cash cows | Low Share/Low Growth | Don't require further investment, can be used to reinvest if properly "milked" |

*Useful while analyzing costs related problems, also in new business setup*

# BCG Matrix Example: Apple





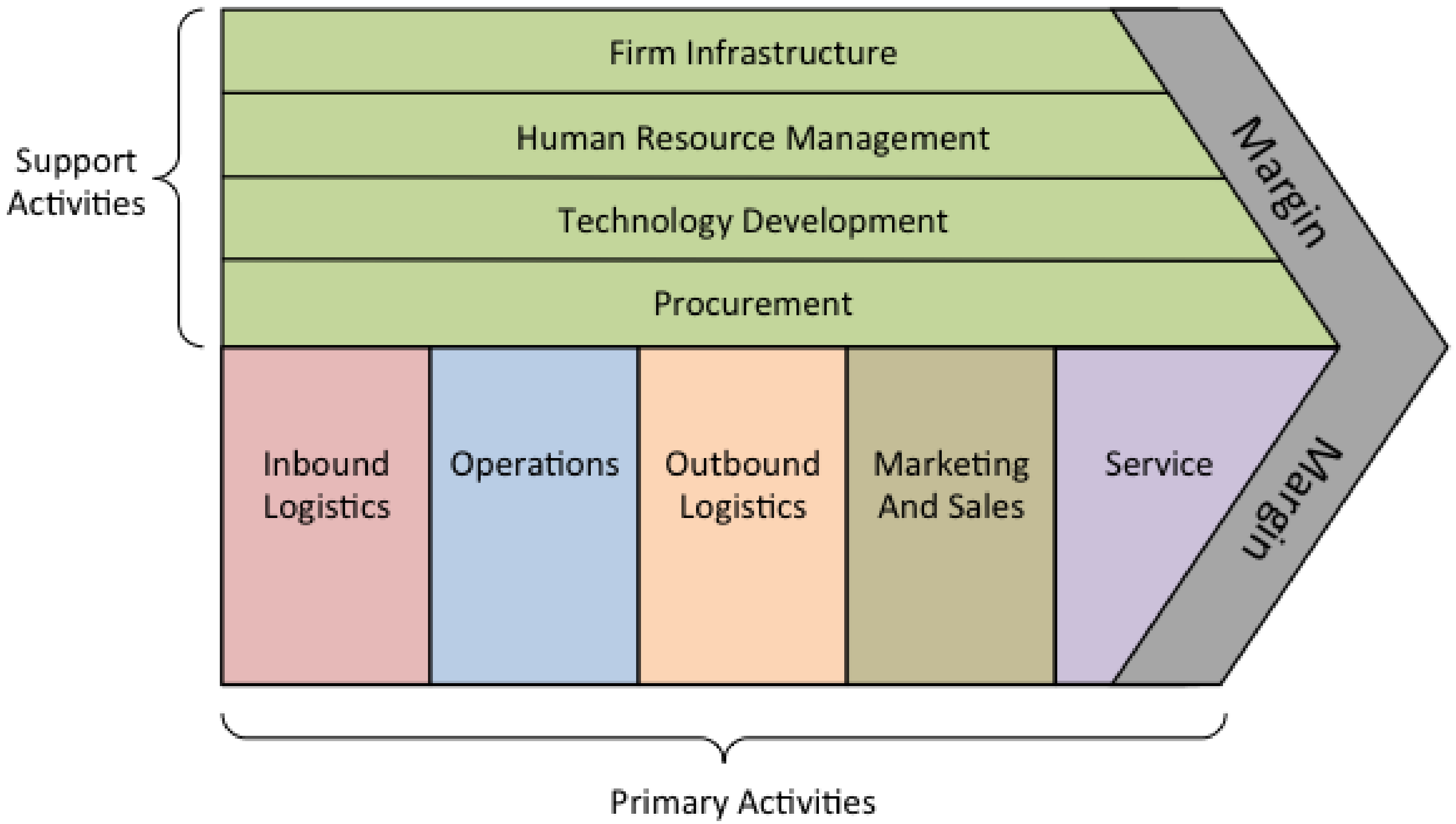
# Porter's Value Chain & Process Mapping

## Support Activities

- Procurement: Gathering all the inputs, resources
- Technology Development:
  - Hardware, software, equipment, procedures and technical knowledge.
- Human Resource Management: Activities such as
  - Hiring/recruiting, training, compensation, laying off personnel
- Firm Infrastructure:
  - Accounting, legal, finance, planning, public affairs, government relations, quality assurance and general management.

## Primary Activities

- Inbound Logistics:
  - Receiving, storing and disseminating inputs
- Operations:
  - Transforming inputs to outputs
- Outbound logistics:
  - Collecting, storing and distributing outputs
- Marketing and Sales:
  - Awareness of products and facilitate purchase
- Service: Post-sales customer service activities




*Useful for portfolio analysis, investment decisions, growth strategies.*

# Cost-Based Value Chain

| R&D | Raw Material | Processing | Storage & Transportation | Distribution | Marketing | Customer Service |
|---|---|---|---|---|---|---|
| Equipment | Cost of RM | Machinery | Transport for Warehouse | Sales Channel | Marketing Channel | Repairs |
| Human Capital | Contracts/Bulk Deals | Factory Rent | Storage (Rent, Labour, Inventory) | Sales Force | Sales Force | Spare Parts |
| Cost of Finance | Quantity Used | Labour Hours | Transport to Customer | Training | | Returns |
| | | Technology | | | | Service Contracts |
| | | Capacity Utilization | | | | |
| | | Packaging | | | | |
| | | Utilities | | | | |
| | | Scrap/Wastage | | | | |

*Useful for cost analysis.*

Main Index

# Ansoff Matrix

| Product \ Market | Existing | New |
|---|---|---|
| Existing | Market Penetration | Market Development |
| New | Product Development | Diversification |

***Best suitable for Growth Strategy cases, also handy for Market Entry, Revenue Expansion***

# Ansoff Matrix Example: Coca Cola

<table>
<tr><th></th><th colspan="3">Market</th></tr>
<tr><th>Product</th><th>Existing</th><th colspan="2">New</th></tr>
<tr><td>Existing</td><td>Market Penetration<br></td><td colspan="2">Market Development<br></td></tr>
<tr><td>New</td><td>Product Development<br></td><td>Related Diversification<br></td><td>Unrelated Diversification<br></td></tr>
</table>

# The Company Environment

A good strategy aligns a business' internal attributes, things like its mission, vision, capabilities in organization with its external environment.
A useful way to think about the relationship between a company and its environment is that it is nested in three layers: macro environment, industry environment and company environment. All the three layers influence size of market by defining the scope and constraints of the potential market.

### Total Addressable Market

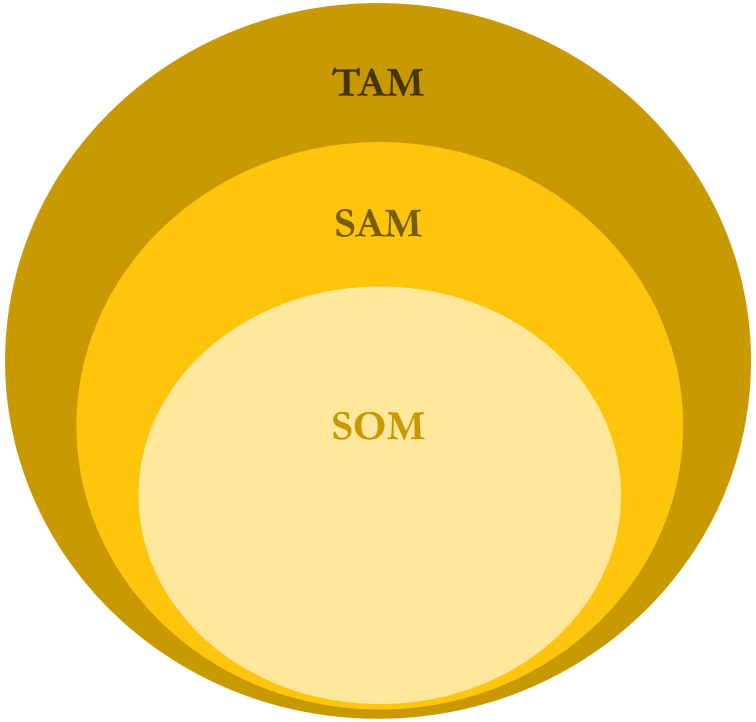
- TAM represents entire potential market demand for a specific product or service
- It helps businesses assess maximum market opportunity available.

### Serviceable Addressable Market

- SAM is a subset of TAM and represents the portion of the market that a company can target and serve
- It accounts for factors such as geographical limitations, regulatory constraints, and customer segments.

### Serviceable Obtainable Market

- SOM is an even smaller subset of SAM and represents the portion of the market that a company can capture or obtain.
- It considers factors like competition, marketing effectiveness, and market penetration.




### Total Addressable Market

**To calculate TAM, you typically use a top-down approach, which involves estimating the total market size at a high level.**

***How big is the cumulative market?***

### Serviceable Addressable Market

**SAM = (TAM) x (Market Penetration Percentage)**

***How big is the market that can be reached right now?***

### Serviceable Obtainable Market

**SOM = (SAM) x (Market Share Percentage)**

***What is the market that can be reached with current resources?***

# PESTEL



**PESTEL Analysis can be done to identify the macro/external forces surrounding the organisation**

***Political:***
Extent to which governments and its policies affect an organisation and the industry it is a part of, such as:
- Fiscal policies
- Taxation policies
- Trade policies
- Corruption
- Labour laws

***Economic:***
Factors affecting the economy of the country directly, hence affecting the organisation directly, such as:
- Unemployment/employment rates
- Interest rates
- FX rates

***Social:***
Factors affecting the social environment and any emerging trends, such as:
- Population demographics
- Education levels
- Cultural trends
- Lifestyle changes
- Changes in attitudes

| **P Political** | **E Economic** | **S Social** |
|---|---|---|
| **T Technological** | **E Environmental** | **L Legal** |

***Technological:***
Considers rate of technological improvements/advancements that affect a market/industry, such as:
- Digital/mobile technology
- Automation
- AI/ML (GenAI)
- R&D advancements
- Awareness of technology

***Environmental:***
Consists of factors which influence the surrounding environment on the ecological front, such as:
- CSR Initiatives (i.e. sustainability)
- Climate change, carbon footprint
- Recycling, waste disposal, reusing

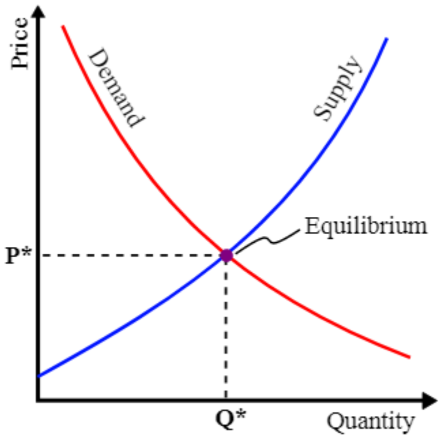
***Legal:***
Considers the legal factors of the environment in which organisation operates, such as:
- Health and safety standards
- Anti-trust laws
- Employment laws
- Copyright and patent laws
- Consumer protection laws

Note: Legal factors are different from political. Legal factors are to be complied with.

***Best suited for market entry cases for macro analysis***

# Basics of Economics

## Supply-Demand




## Price Elasticity

$$e = -\frac{dQ/Q}{dp/P}$$

**Price elasticity** measures the responsiveness of the quantity demanded or supplied of a good to a change in its price.
Elasticity can be described as **elastic**—or very responsive, **unit elastic**, or **inelastic**—not very responsive.

## Price Discrimination

### First Degree

With first-degree discrimination, the company charges the maximum possible price for each unit consumed.

### Second Degree

Second-degree discrimination involves discounts for products or services bought in bulk.

### Third Degree

Third-degree discrimination reflects different prices for different consumer groups

## Market Characteristics

### 4 Types of Market Structure

- Perfect Competition
- Monopolistic Competition
- Oligopoly
- Monopoly

Most Competitive ↔ Less Competitive

# Basics of Accounting



## Important Line Items

- **Revenue/ Topline:** Income generated from business activities
- **Cost of Goods Sold (COGS):** Costs directly attributable to the production of goods/execution of services.
- It includes:
    - Direct Labour
    - Direct raw material
    - Expenses for repair
    - Shipping charges
    - Cost of equipment &
    - Production utilities
- **Selling, general & administrative expenses (SG&A ):**
- Major non-production line items, often expressed as % of revenue
- **Overhead:** Non-labour expenses incurred
- **Maintenance:** Cost of bringing back assets to its working condition
- **Depreciation & Amortization:** Reduction of asset value with use
- **Profits/Bottomline:** Revenue – Cost
    - **Gross Profit:** Gross profit refers to a company's profits after subtracting the costs of producing and distributing its products.
    - **Net Profit:** indicates a company's profit after all its expenses have been deducted from revenues.

**XYZ Shoe company Income Statement (₹ (in lakhs))**

| **Revenue:** | **20X1** | **20X2** | **20X3** |
|---|---|---|---|
| **Women's Shoes** | | | |
| High Heels | 1000 | 750 | 500 |
| Boots | 500 | 550 | 600 |
| Sandals | 60 | 66 | 72 |
| **Men's Shoes** | | | |
| Dress | 1100 | 1100 | 1100 |
| Casual | 500 | 550 | 605 |
| **Total Revenue** | **3160** | **3016** | **2877** |
| *YoY Growth %* | | *-4.56%* | *-4.61%* |
| **Cost of Goods Sold (Variable / Direct Expenses)** | | | |
| Materials | 1200 | 1140 | 1090 |
| Labor | 320 | 304 | 290 |
| Shipping | 80 | 76 | 73 |
| Total COGS | 1600 | 1520 | 1453 |
| **Gross Profit** | **1560** | **1496** | **1424** |
| *Gross Margin %* | *49.37%* | *49.60%* | *49.50%* |
| **Fixed Costs (Indirect Expenses)** | | | |
| SG&A | 500 | 500 | 500 |
| D&A | 300 | 330 | 360 |
| Overhead | 100 | 100 | 100 |
| Maintenance | 50 | 50 | 50 |
| Total Fixed Costs | 950 | 980 | 1010 |
| **Total Profit** | **610** | **516** | **414** |
| *Margin %* | *19.30%* | *17.11%* | *14.39%* |

# Basics of Accounting



## Components of a Balance Sheet

A balance sheet is a financial statement that reports a company's assets, liabilities & shareholder equity.

### Assets

**Current Assets**

These are short-term assets because they are generally convertible to cash within a firm's fiscal year

**Non-Current Assets**

These are a company's long-term investments that have a useful life of more than one year.

### Liabilities

**Current Liabilities**

Portion of long-term debt due in <12 months
Accounts payable

**Non-Current Liabilities**

Long-term debts
Deferred tax liabilities

### Shareholder's Equity

Money attributable to the owners of a business or its shareholders.

### Accounting Equation

**Assets = Liabilities + Shareholder's equity**

| Balance Sheet as on 31st December 20XX | | | |
|---|---|---|---|
| **Assets** | | **Liabilities** | |
| **Current assets:** | | **Current liabilities:** | |
| Cash | 105 | Accounts payable | 20 |
| Accounts receivable | 20 | | |
| Inventory | 25 | **Non-current liabilities:** | |
| **Total current assets** | **150** | | |
| | | **Shareholders' equity** | |
| **Non-current assets:** | | Common shares | 300 |
| Plant and equipment | 200 | Retained earnings | |
| **Total non-current assets** | **200** | Revenues | 120 |
| | | Cost of sales | (75) |
| | | Expenses | (15) |
| | | | 30 |
| **Total assets** | **350** | **Total liabilities and shareholders' equity** | **350** |

# Basics of Finance



## Important Ratios to Remember

| | | |
|---|---|---|
| **Quick Ratio** | (Current Assets – Inventory) / Current Liabilities | This shows you how easily a business's short-term debts will be covered by its existing liquid assets, or cash. If the quick ratio is greater than one, the business is in a good financial position. |
| **Debt to Equity Ratio** | Total Liabilities / Shareholder's Equity | This looks at whether a business is borrowing more than it can reasonably pay back using equity as a metric i.e how risky is the equity of the company |
| **Working Capital Ratio** | Current Assets / Current Liabilities | This looks at how well a company can meets its operating liabilities.. The higher the working capital ratio, the easier it will be for a business to pay off its liabilities using its current assets. |
| **P/E Ratio** | Share Price/ Earnings per share | It measures the amount an investor would pay for each dollar earned. This gives you a quick idea if a stock is under or overvalued |
| **Earnings per Share** | Net Income / Outstanding shares | This measures the amount of a company's net income that is theoretically available for payment to the holders of its common stock. |
| **Return on Equity Ratio** | (Earnings – Dividends) / Shareholders Equity | ROE is a gauge of a corporation's profitability and how efficiently it generates those profits. The higher the ROE, the better a company is at converting its equity financing into profits. |
| **Profit Margin** | Profit/ Revenue | This shows you how efficiently a company is managing its overall costs, or how well it converts revenue into profit. |

# Basics of Finance

**Time Value of Money**

The time value of money (TVM) is the concept that a sum of money is worth more now than the same sum will be at a future date due to its earnings potential in the interim. It is also referred to as the *present discounted value.*

**Annuity**

An annuity is an equal and annual series of payments made over a predetermined time period.

**Perpetuity**

Perpetuity is a type of annuity that lasts forever, into perpetuity. The stream of cash flows continues for an infinite amount of time.

**Capital Budgeting**

Capital budgeting is a method of estimating the financial viability of a capital investment over the life of the investment.

**NPV**

The Net Present Value (NPV) method involves discounting a stream of future cash flows back to present value. The cash flows can be either positive (cash received) or negative (cash paid).

**Payback Period**

It represents the amount of time required for the cash flows generated by the investment to repay the cost of the original investment.

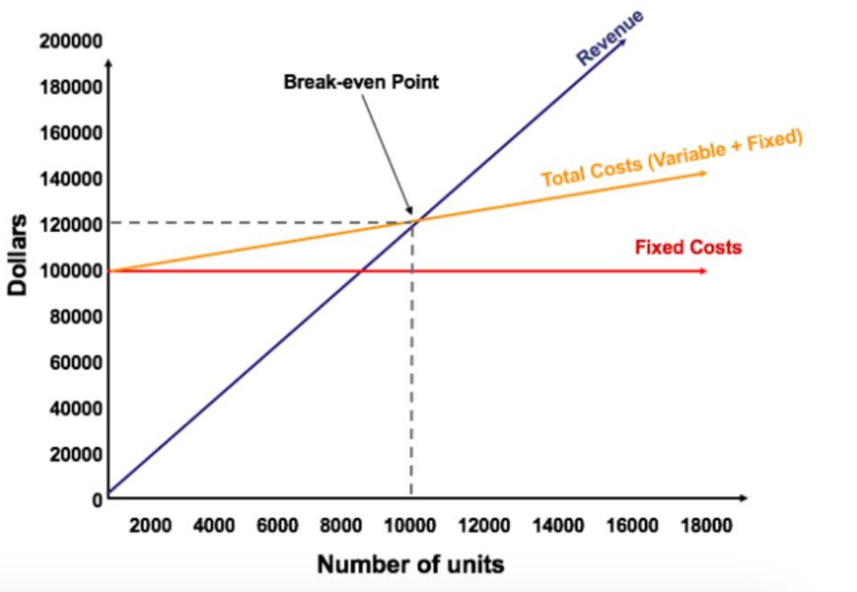
**IRR**

The Internal Rate of Return is the rate of return from the capital investment or the discount rate for which NPV = 0

# Basics of Finance



## Break Even Analysis




| | Units | Total (₹) | ₹ Per unit |
|---|---|---|---|
| Sales | 20000.00 | 1200000.00 | 60.00 |
| Less: Variable Costs | | -900000.00 | -45.00 |
| Contribution Margin | | 300000.00 | 15.00 |
| Less: Fixed Costs | | -240000.00 | |
| Net Income | | 60000.00 | |
| Contribution Margin % of Sales | | 25% | |
| Break Even point | | 16000.00 | |

Break-even analysis refers to the point at which total costs and total revenue are equal. A break-even point analysis is used to determine the number of units or revenue needed to cover total costs (fixed and variable costs).

**Break Even Point : Fixed Costs/ ( Sales Price/ Unit – Variable Cost/Unit)**

**Other Important Terms you should know :**

**Contribution Margin (CM):** It represents the incremental money generated for each product/unit sold after deducting the variable portion of the firm's costs.

**CM : Sales – Variable Cost**

**Operating Leverage:** Operating leverage measures the degree to which a firm or project can increase operating income by increasing revenue. The formula can reveal how well a company is using its fixed-cost items, such as its warehouse and machinery, and equipment, to generate profits.

**Degree of operating leverage:**
**% Change in Operating Profits/ % Change in sales**

# Part C – Basic of Guesstimates and Case Solving

Main Index

# MECE Segmentation

**MECE = Mutually Exclusive Collectively Exhaustive**

**Mutually Exclusive**

Contents of the segments does not overlap.

**Collectively Exhaustive**

Together, the statements answer the question or fully describe the overall idea.

Using MECE segmentation is extremely effective in structuring one's analysis, in a case interview, guesstimate or otherwise.

## How to be MECE?

There are 5 tools one can use to be MECE in their cases:

| | |
|---|---|
| 1. Algebraic Structure | Break down problem into equations.<br>• Ex: Revenue = No. of customers x Avg ticket price of each customer x Product mix. |
| 2. Process Structure | Break down problem into the stages of a process<br>• Ex: Value chain, customer journey, billing process, purchase process in e-Commerce |
| 3. Segmentation Structure | Break down problem into divisions of a particular segment<br>• Ex: Income (High, Mid, Low income), Distribution channels (Retail, D2C) |
| 4. Conceptual Frameworks | Break down problem by using established frameworks<br>• Ex: 4P (Product, Price, Place, Promotion), 3C (Customer, Company, Competitor) |
| 5. Opposite Words | Break down problem into inherently opposing words<br>• Ex: Internal vs. External, Supply vs. Demand, Revenue vs. Cost |

***The MECE principle suggests that to understand any large problem, you need to understand your options by sorting them into categories. Doing so will help you avoid dependencies between different branches of the tree and thus sub-problems can be properly isolated.***

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# MECE Segmentation



## Example 1: Unstructured grocery list: apples, milk, bananas, spinach, carrots, grapes, butter, okra, eggs becomes:

**Groceries**

- **Dairy**
  - Milk
  - Butter
  - Egg
- **Fruits**
  - Apple
  - Grapes
  - Banana
- **Vegetables**
  - Spinach
  - Carrots
  - Okra

## Example 2: Profit Structure

**Profits**

- **Revenues**

  Can be further segmented based on:
  - Geography (Regional/Country Wise)
  - Customer Segments (Income/B2B/B2C)
  - Revenue Streams (Ads/Distribution)
  - Distribution Channel (Online/Retail)
- **Costs**

  Can be further segmented based on:
  - Fixed Costs/Variable Costs
  - Costs across the Value Chain

## Example 3: Customer Segmentation

**Customer Clients**

- **Individuals/ Households (B2C)**
  - Low Income
  - Medium
  - High
- **Institutions/ Organizations**
  - Public Sector
  - Private Sector

## Example 4: Increasing Sales

**Increase Sales**

- **Increase Sales per Customer**
  - **Increase Price**
  - **Increase Quantity**
    - Inc. # Visits
    - Inc. Quantity per consumption
- **Increase # Customer**
  - New Segments in the same market
  - New Markets (Market Development)

# Pareto Principle (80/20 Principle)



- As per the 80/20 Rule (aka Pareto Principle) a small number of causes (the "vital" or "critical" few) drive the vast majority of the results, with roughly 20% of the causes driving 80% of the results.
- It is a ubiquitous phenomenon with examples across multiple industries:

Manufacturer ~20% of the product lines generate ~80% of scrap

Sales organisation ~20% of the product categories account for ~80% of sales

Service facility ~20% of tickets take up ~80% of time

- The primary implication of this concept is that you can realize a lot of impact by investing your effort in addressing a relatively small number of issues and hence, prioritizing of issues is important.
- The key takeaway from this principle in the context of interviews is that while constructing an issue tree or making recommendations (using the pyramid principle) one must prioritize the bigger issues by stating them first.

# Introduction to Guesstimates



**What is evaluated through Guesstimates?**

- Ability to think on your feet
- Approach & Structure
- Quantitative Skills

**What is necessary to solve a good Guesstimate?**

- Logical Thinking
- Communication & Presentation

***Guesstimates: Short, number–intensive estimation Cases***
***Ideal Time Limit: 15-20 minutes***

**Top Down and Bottom Up Approach**

**Supply Side and Demand Side Approach**

Main Index

# Guesstimates Do's & Don'ts

## Do's

- Take about a minute to gather your thoughts and decide approach
- Use tree diagrams, normal diagrams, anything that explains your thoughts clearly in a visual way
- Relate your assumptions to facts, experiences and sellable logic
- Keep talking as you write, engage the interviewer

## Ideal Flow

- **Confirm Objective**
- **Think logically and come up with possible set of approaches**
- **Explain the best approach & confirm if you should go ahead with it**
- **State your assumptions first hand**
- **Lay down structure neatly on paper and solve it step by step**
- **Make logical assumptions and always confirm them with Interviewer**
- **Keep communicating & asking the interviewer for buy-ins**
- **Calculate your answer. Be ready for a conversation around error estimate, other approaches**
- **If possible, reconfirm & triangulate your answer with a ballpark estimate from another approach**

## Don'ts

- Ask too many clarifying questions
- Questions about approach
- Start solving without discussing the approach
- Start with a population set every time
- Be text heavy on your sheet
- Unreadable writing
- Guessing the numbers
- Solving without explaining what you are doing

# Top Down & Bottom Up Approach



## Top down approach

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

Identify relevant conditions/filters and segments

**Identify a Starting Universe**

**Segment A** | **Segment B**

**Segment A1** | **Segment A2** | **Segment A3** | **Segment A2** | **Segment A3**

**Guesstimate = A1 + A2 + B1 + B2 +B3**

- Segments:
- Demographics (age, sex, income)
- Psychographics(attitudes, behaviors, values)
- Geography (city/country, urban vs. rural)
- And many more depending on the case!

## Bottom up approach

- Start from the bottom—some low-level statistic, such as Revenue per store, which does not change across your universe and build your way up to the answer.

**Identify the smallest replicable block**

**Estimate for a single identified block**

**Scale up!**

- Bottom up approach is much more subjective than top down approach.
- Especially replicable blocks depend on the case in hand, it can be one single store, one family to a single person. Be careful while picking your block and while scaling up.
- Bottom up approach though gives accurate results provided you scale up properly.

# Guesstimate Cheat Sheet



## Total Population of India ~143 Cr

| | | |
|---|---|---|
| **Gender Split Women/Men:** 48:52 | **Urban to Rural** 35:65 | **Average Household Size** 4-5 people |
| **Birth Rate** 1.69% **Death Rate** 0.74% | **Population Density** 480/km^2 | **Avg. Life Expectancy** 70.4 |

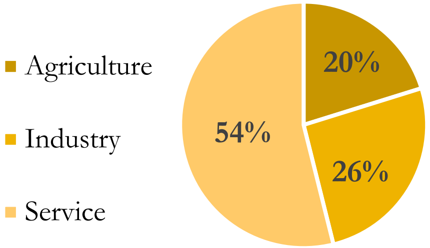
## Age-wise Distribution of Population

| Age Bracket | Percentage |
|---|---|
| 0-14 Years | 26% |
| 15-24 Years | 18% |
| 25-34 Years | 17% |
| 35-44 Years | 14% |
| 45-54 Years | 10% |
| 55+ Years | 15% |

## Largest cities (by Population)

| Cities | Pop. (Mn) | Cities | Pop. (Mn) |
|---|---|---|---|
| Delhi | 32.94 | Chennai | 11.78 |
| Mumbai | 21.3 | Hyderabad | 10.8 |
| Kolkata | 15.33 | Ahmedabad | 8.65 |
| Bangalore | 13.61 | Surat | 8.06 |

## GDP Distribution




**Total GDP (~3.4 Trillion USD)**

## Geographical Distribution

| | |
|---|---|
| **Length of India** | 3200 kms (North to South) |
| **Breadth of India** | 3000 kms (West to East) |
| **Number of States** | 28 |
| **Number of UTs** | 8 |
| **Area of Delhi** | 1500 square kms |
| **Population of Delhi** | 3.3 Cr |
| **Area of Mumbai** | 600 square kms |
| **Population of Mumbai** | 2.2 Cr |

## Internet Connectivity Distribution

**Internet Penetration**
50%

**Smart Phone Penetration**
71%

## Religion split

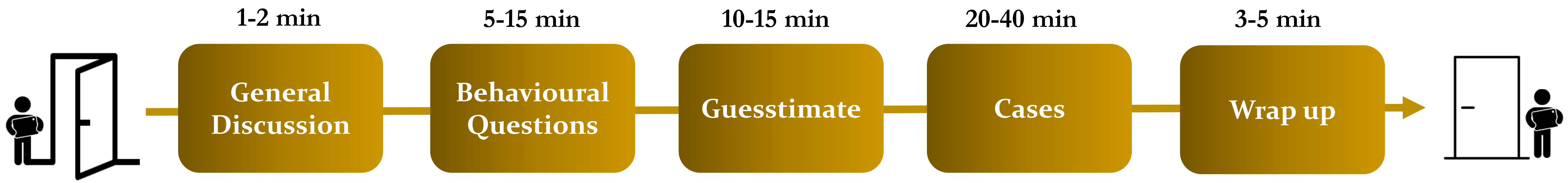
| Religion | Hindu | Islam | Christianity | Others |
|---|---|---|---|---|
| **Population** | 80% | 13% | 2.3% | 4.7% |

## Income wise distribution of population

| Income Segment | Percentage |
|---|---|
| Lower Income | 10% |
| Lower Middle Income | 38% |
| Middle Income | 40% |
| Upper Middle income | 10% |
| Upper Income | 2% |

# Case Interview Process

**Flow of a Consulting Interview**




**Case Interview:**

- Cases form the crux of a consulting interview.
- There could be multiple case rounds with different partners.
- They are trying to test you for your:
  - Analytical ability
  - Quantitative skills
  - Structured problem solving and insight generation
  - Communication and presence
  - Impact and Effectiveness

# Interviewer Expectations



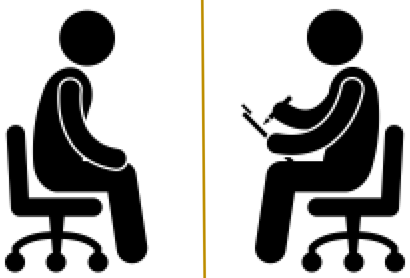
**It's not about being right. It's about being right in a *client friendly* way.**
**How you are *right* matters a lot.**

***Things which are not client friendly:***

- Jumping to conclusions
- Scattered ideas, shooting arrows in the dark
- Can't be justified by data/facts
- Logically correct but practically unfeasible
- Being rude
- Poor communication

# P2P Case Practice

## Peer to Peer Case Practice



- Why?
- Interview simulation
- Get used to speaking
- Instant Feedback
- Two-way learning

## For Interviewer

- Understand the case properly
- Provide information at right time after right questions
- Be open to different approaches
- Guide the interview in such a way that there is relevant and fruitful discussion
- Feedback and self-learning

## For Interviewee

- Understand the Question
- Clarify Objectives
- Set Context to Case
- Define a framework
- Analyze, identify, discuss
- Solutions/Suggestions
- Discuss improvements

# Approaching a Case

1. Repeat the question and clarify the objectives
2. Think and understand what more you need to know
3. Set context to the case by asking questions. Be very careful about what you are asking and why.
4. Take time to think and lay down a structure for analysis
5. Involve interviewer in your analysis. Ask relevant question to process down your structure.
6. Make good and relevant suggestions which are specific to the case. Always have a rationale ready for Why?
7. Summarize the case properly. Be brief yet effective.

# Case Interview Do's & Don'ts

## Do's

- Listen and Interact with the Interviewer.
- Develop your own framework to structure the problem.
- Focus on high impact issues.
- Explore variety of options with creative thinking.
- Demonstrate Business Judgement.
- Make quick and accurate calculations.
- Make a good conclusion to your analysis.

## Don'ts

- Incorrect interpretation of case objectives.
- Jumping straight to conclusions.
- Not taking time to think, answering in hurry.
- Panicking if the answer is not apparent.
- Vehemently defending your analysis/suggestions.
- Internalizing the thought process.
- Sticking to artificial framework.

# Part D – Basic Frameworks

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# Profitability Framework

## Understand the question and clarify the Objectives

A profitability case explores the rationale and reasons behind the decline in profits for a company. The case can hence be explored via looking into Revenue and Costs separately or exploring both the aspects to find the root cause of decline.

**Set context**

Ask about company? Product/customer mix? Revenue streams? Quantum of decline? Timeline of decline? Industry-wide vs company specific?

**Profits**

- **Revenue**
  - **No. of customers**
    - **If industry-wide**
      - Regulatory
      - Competitors
      - New entry
      - Substitute/
      - Complement
    - **If company-specific**
      - **Demand**
        - **Internal** — Customer journey
        - **External**
          - Porter's 5 Forces
          - PESTEL
      - **Supply**
        - **Internal** — Value chain
        - **External**
          - Porter's 5 Forces
          - PESTEL
  - **Revenue/customer**
    - **# of transactions**
    - **Avg ticket size/txn**
    - Explore price elasticity
- **Cost**
  - **Fixed & Variable Costs**
  - **OR**
  - **Value Chain**
    - R&D
    - Procurement of raw material
    - Manufacturing & packaging
    - Warehousing
    - Distribution
    - Sales & Marketing
    - After sales service

# Market Entry Framework



## Understand the question and clarify the Objectives

A market entry case is a relatively open-ended case where in you need to understand the rationale behind entering a new market; and if that rationale can be profitably achieved or not. If the decision of entry is made, how should it be implemented.

**Set context**: Know about company? What Business? Entry where? Which Product? Why enter? Target/objective? Decided to enter?

## Should they Enter?

### Product
- Features (USP)
- Pricing
- Competitive benchmarking
- Product Life Cycle

### Market Attractiveness
- TG by STP
- Market Size
- Market share & growth rate

### Financial Feasibility
- Financing options
- Revenue & Costs i.e. Profits
- Opportunity costs
- Break-even Point/Timeline

### Operational Capabilities
- Self-manufacturing i.e. Value-chain analysis
- Off-shore manufacturing
- Import/Export

### Risks Associated
- Govt. Regulations
- Patents/IP
- PESTEL
- Porter's 5 Forces

## If Yes How?

### Entry Options
- Start on own
- Acquire
- Joint Venture

### Operational Decisions
- Raw Materials, Workforce
- Manufacturing
- Value Chain Analysis

### Sales & Marketing
- Distr Channels
- Promotion
- Pricing

### Growth Plan
- How to scale up
- Product/Geography expansion

### Conclusion
Summarize the solution

# Growth Strategy



## Understand the Question and Clarify the Objectives

Growth Strategy related cases are comparatively easier to analyze because avenues for growth are unlimited. You need to understand the current state of business and then come up with practically feasible growth opportunities. Each opportunity needs to be assessed for potential impact vs financial and practical feasibility.

**Set context**

What Business? Geographies/Location? Current Performance? Products? Target Customer? Competitive Benchmarking? Growth Targets? Capabilities? Bottlenecks?

## Growth Strategies

### Organic

**Revenue (Existing Market)**

- **Old Product/Service**
  - New & extensive Marketing initiatives & distribution channels
  - Pricing strategy
  - Customer satisfaction
- **New Product/Service**
  - Strategic positioning
  - Targeted marketing
  - Customer satisfaction (better experiences)

**Revenue (New Market)**

- **Old Product/Service**
  - Explore geog/demographic expansion
  - Localized marketing/distribution strategy
- **New Product/Service**
  - **Related Diversification**
    - Similar product line
  - **Unrelated Diversification**
    - New product line

### Inorganic

- **Joint Ventures**
- **M&A**
  - Backward, forward, horizontal, vertical integration

**Summary**

Proposed growth path, Potential growth prospects, Threats & Challenges

# Pricing Strategy



## Understand the Question and Clarify the Objectives

Pricing decisions should be taken to maximize the revenue potential by understanding product competitiveness in the market. Understanding competitive products, possible substitutes, price elasticity, cost structures is essential to take a good pricing decision.

**Set context**

Product/Service characteristics? Product use? Capital Investments? Competitors? Substitutes?

## Pricing Factors

**Product**

- Radical vs Incremental change
- Uses/ Characteristics
- Advantages/Disadvantages

**Costing**

- R&D cost
- Manufacturing Cost
- Other costs

**Competitors**

- Competitive products
- Product differentiation
- Price benchmarking

**Substitutes**

- Available substitute
- Substitute use triggers
- Future substitutes

**Customer**

- Who is buying
- Their characteristics
- Perceived Value

## Pricing Options

**Competitive Pricing**

- Competitors' price
- +/- Premium/Discount

**Cost Based Pricing**

- Cost of production + Margin
- Break-even Analysis

**Value Based Pricing**

- Customer's willingness to pay
- Perceived value of product
- Can take a proxy to consider value

# Go To Market Strategy/New Product Launch



## Understand the Question and Clarify the Objectives

Provide a blueprint for launching a product in a market, positioning it to achieve competitive advantage. You would typically look at defining the 4Ps after deciding on the target segment. Touching upon all relevant aspects of the problem is much more important that the correct answer. The idea is to identify one/a few issue(s) examining the trade-offs.

**Set Context**

Objectives, Capabilities, Competition (How many, who all, Market Share, Growth Rate), Customers (Growth Rate, Potential Segments), Products (Existing Products, Substitutes).

### Segmentation

**Whom to Sell?**

Use only relevant bases from the following:
- Geographic
- Demographic
- Psychographic
- Behavioural

### Product Development

**What to Sell?**

- Features
- Packaging
- Use-cases
- Size (SKU)
- Product Name
- Differentiation
- Pricing

### Distribution Strategy

**Where to Sell?**

- Distribution Channel
- Distribution Model
- WC Turnover
- Margins
- Sales Force T&D

### Communication Strategy

**What to Say?**

- Positioning
- Communication Strategy
  - Advertising
  - Personal Selling
  - Sales Promotion
  - Direct Mktg
  - Public Relations

### Idea

GTM strategies are supposed to be integrated in nature and thus the processes strongly follow from each other.

### Be Selective

The idea is to not do everything, rather to focus on one issue and nail it. E.g. Too many sales channels can lead to channel conflict, Too much communication is expensive.

# Merger & Acquisitions



## Understand the Question and Clarify the Objectives

M&A cases are focused on decisions regarding a potential merger or acquisition opportunity. You need to understand the synergies involved, do cost vs benefit analysis & due diligence, and recommend whether to take the opportunity or not.

**Set context**

Objective? Company business? Company geography, value chain, customer? Current portfolio of company? Current Performance? Target Company (Geog., value chain, target market)? Past M&A history in similar space ? Industry Trend ?

### 1. Hard Fit (Financial Fit)

**Deal Price**

- Is the deal at a fair price?
- Valuation (Calculate NPV)
- Financially feasible? Can we afford?
- Transaction Type (Merger, acquisition)
- Post M&A costs (Future costs)

**Synergies**

- Revenue-based synergies (Portfolio/market expansion, pricing power)
- Cost-based synergies (involves value chain)
- Integration of cost/saving
- Competition/Survival

### 2. Soft Fit (Non-Financial Fit)

**Acquirer Fit**

- Cultural, strategic, organizational fit
- Fit of companies: Mission, Vision, Values

**External Fit**

- Macro-economic risks
- Exploring PESTEL/Porter's Five Forces

### 3. Due Diligence

**Checks and Confirmations**

- Strategic Options
- Commercial (Market related)
- Operational (Target related)
- Financial (Target's data, Valuation)
- Legal (Regulatory norms)

### 4. Implementation

- How can the merger or acquisition be effectively implemented.
- Issues related to cultural integration and operational aspects and targeted benefits

### 5. Exit Strategies

**How, When, why to exit?**

- How long to Hold on?
- Strategic Options?
- Very important in Private Equity

# When Nothing Works (Cheat Sheet)

Sometimes, it may be the case that none of the standard case frameworks can be applied to the business situation at hand. There are certain other approaches you can explore to solve the case in that case.

**Set context**

Go through the entire Value Chain or Process Undergone (For Process Flow Cases). Drill down into each stage or step to look for inefficiencies, issues or bottlenecks.

**Value Chain**

Demand Planning & Forecasting → Procurement of Raw Materials → Inbound Logistics → Manufacturing → Storage and Warehousing → Outbound Logistics → Sales and Marketing/ Distribution → After-Sales Services

| | |
|---|---|
| Demand Planning & Forecasting | Volatility? Analytics & Forecasting? |
| Procurement of Raw Materials | Price? Wastage? Suppliers? Contracts? Discounts? Substitutes? |
| Inbound Logistics | Transportation Costs? Modes? Network Optimization? Efficiency? |
| Manufacturing | Direct Costs? Machines? Tech? Overheads? Benchmarking? Outsourcing? |
| Storage and Warehousing | Capacity Constraints? SKUs? Technology? Inventory? |
| Outbound Logistics | Transportation Costs? Modes? Network Optimization? Efficiency? |
| Sales and Marketing/ Distribution | Channels? Share & Penetration? Marketing Strategy? B2B? B2C? |
| After-Sales Services | Quality? Variety? Cost? Benchmarking? Accessibility? Frequency? |

**Process Flow / Customer Journey**

Chart out the entire process journey. Sample Use Cases –
1) Ecommerce Ordering Dissatisfaction
2) Toll Plaza inefficiencies
3) Getting late to office/home

**Example: E-Commerce Discovery and Ordering Process Map**

Search → Landing Page → Evaluation → Ordering → Delivery → Unboxing → Usage & After Sales

| | |
|---|---|
| Search | SEO? Ads? Social Media? Emails? |
| Landing Page | Navigation? Products/page Description? Options? |
| Evaluation | Product Page? Reviews? Use? Graphics? Bundling? |
| Ordering | Cart options? Wishlist? Payment Modes? |
| Delivery | Sellers? Shipping Dates? Experience? |
| Unboxing | Condition of Package? Breakage? |
| Usage & After Sales | Customer Care? Refund/ Exchange/ Return? |

**Look for Bottlenecks**

- A bottleneck is any area along the production line where work can get backed up for one reason or another.
- Performing a bottleneck analysis can help to identify the cause of a bottleneck, and lead to potential solutions to get a smooth, continuous, even work-flow.

**Example: Teeth Check-up and Cleaning Process**

Take X-Ray (2mins/unit) → Develop X-Ray (4mins/unit) → Cleaning (24mins/unit) and X-Ray Exam (5mins/unit) → Dentist (8mins/unit)

# 5 Senses Framework – Auxiliary Tool



## To be used alongside another framework

Sometimes, it may be the case that none of the standard case frameworks can be applied to the business situation at hand. The **5 senses framework** comes into play generally when we are dealing with a **service-based industry** and when the case demands the exploration of the **decline in the customer satisfaction.**
Ex: decline in footfall, bad customer feedback, drop in NPS, decline in market share.

## Identify customer friction points in accordance with the various stimuli along the customer journey

### The Sense of Vision

**What is the customer seeing?**

- Unhygienic conditions
- Vapid posters
- Lighting at the store
- View from windows
- Televisions/displays

### The Sense of Hearing

**What is the customer hearing?**

- Music
- Announcements
- Construction
- Arguments/fights
- Interactions with staff

### The Sense of Smell

**What is the customer smelling?**

- Foul smell
- Infestations
- Sanitation
- Fragrance
- Scent

### The Sense of Taste

**What is the customer tasting? Customer preferences (taste)?**

- Product
- Food
- Refreshments
- Preferences / proclivity

### The Sense of Touch

**What is the customer touching/feeling?**

- Feel of the products
- Infrastructure
- Temperature / AC
- Ambience
- Furniture

This is an **auxiliary framework** and needs to be used as a part of the case to explore the various friction points that the customer might come across in their **customer journey.** The idea being that one needs to put themselves in the shoes of the customer and identify friction points

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# Additional Approaches

## VRIO Framework

Used to determine whether a resource can provide sustained competitive advantage to the company

| Resource | If No | If Yes |
|---|---|---|
| **V** – Valuable | Competitive Disadvantage | Yes → R |
| **R** – Rare | Competitive Parity | Yes → I |
| **I** – Inimitable | Short-Term Competitive Disadvantage | Yes → O |
| **O** – Organized | Under-utilized Competitive Disadvantage | Yes → Sustained Competitive Advantage |

## AMO Framework

Employee productivity and effectiveness; to assess salesforce personnel

| Ability | Motivation | Opportunity |
|---|---|---|
| Hiring<br>Training<br>Learning<br>Skill Development | Incentive structure<br>Performance evaluation<br>& metrics | Career planning<br>Fair appraisal<br>Recognition<br>Empowerment |

## Tips & Tricks

1. **Use equations** for increase/decrease parameters. Subsequently, focus on each parameter and discuss it further.

**Examples:**
- Migration Rate = Birth Rate – Death Rate
- Cash Balance = Cash in – Cash out

**2. Decision Making Problems,** following can be considered:

**Examples:**
- Stakeholder cost-benefit analysis
- Decision trees
- Pay-off matric

**3. Implementation Problems:** Outline the value chain and then get buy-in on focus areas

**Various ways** of approaching what to do with a resource: Use it, Sell It, Give it away

**4. Problem Solution**:

**Examples:**
- Investigate 'why' problem exists
- Give solutions to solve problem
- Explore further opportunities

# Part E – Sector Overview

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# Industry Analysis: Table of Contents



| Legend for Industry Dynamics (Porter's 5 Forces) | |
|---|---|
| **TONE** | Threat of New Entrants |
| **BPOS** | Bargaining Power of Suppliers |
| **BPOB** | Bargaining Power of Buyers |
| **TOS** | Threat of Substitutes |
| **CR** | Competitive Rivalry |
| **Colour Code (POV of industry player)** | |
| **Red** | Unfavourable |
| **Orange** | Moderately Favourable |
| **Green** | Favourable |

# Understanding Automotive Industry

The Consulting Club

## Industry Overview

### Market Size

USD 100B (2021)
USD 160B (2027)

### CAGR

8.1% (2021-27)

### Market Share of Major Players

| MARUTI SUZUKI | HYUNDAI | TATA MOTORS |
|---|---|---|
| USD 35B | USD 35.12B | USD 27.1B |
| ~46% | ~14.6% | ~14% |

### Industry Dynamics

TONE: Low, more investment required
BPOS: Low, large no. of suppliers
BPOB: High, large number of options
TOS: Moderate, More public mobility
CR: High, Lot of competition

### KPIs

- Inventory Turnover
- Utilization Rate
- Average Production Downtime
- Production efficiency
- Recall Rates
- Electric Vehicle Adoption Rate

### Key Terms

- Crossover SUV
- Component Localization
- OEM (Original Equipment Manufacturer)
- BS-VI (Bharat Stage VI)
- BSBD (Built,Sourced,Developed)

## Value Chain

### R&D and Inbound Log

- Design of new models with new features
- Procurement of raw materials & components
- Prototyping components
- Warehouse handling

### Manufacturing & Assembly

- Production – casting, forming, welding and machining components
- Final assembly of products
- Quality testing and adherence to standards

### Outbound Log & Distribution

- Warehousing and transportation of finished vehicles
- Management of dealership network and shipping

### Marketing & Sales

- Advertising and promotional activities
- Customer engagement, test drives and managing inventory
- Retail stores, dealerships

### After-Sales Service

- Vehicle servicing, maintenance, warranty and repair
- Sales of accessories and replacements
- Service center support

### Revenue Drivers

Vehicle sales (~60-70%)
Spare parts/after-sales (~10-15%)
Exports (~15-20%)

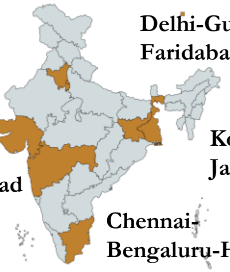
### Cost Drivers

Cost of raw materials (~47%)
Labor cost (~21%)
R&D & Gen Exp (~13%)
Logistics, Depr & Other (~19%)

### Growth Drivers

- Growth of EV industry: 168% increase in sales from 2020-21
- Rising investments
- Changing consumer behaviour – shared mobility of vehicles (Carpooling)
- Digitization of sales of cars
- Strong export growth

### Production Clusters




### Challenges

- Stricter environmental regulation/standards
- Rising fuel prices affect demand; more EVs
- Competitive pricing
- Rising input costs (raw material, R&D)
- Supply chain dependency –
- Trade policies and import restrictions

### Industry Trends

- FAME scheme: FAME-II: USD $97.7.M for over 7000 charging stations
- 100% FDI allowed by GOI
- EV market expected to grow at CAGR of 49% between 2022-2030
- 2-wheelers have 76% of market, passenger cars for 17.4%
- Exports; growth of 36% between 2021-22)

# Understanding Airline Industry

The Consulting Club

## Industry Overview

### Market Size

USD 10.89 B (2023)
USD 12.55 B (2028)

### CAGR

2.9% (2023-28)

### Market Share of Major Players

| IndiGo | AIR INDIA | Vistara | AirAsia |
|---|---|---|---|
| ~6% | 9.4% | 9% | ~8% |

### Industry Dynamics

**TONE:** Low, more investment required
**BPOS:** High, ltd no., fuel price fluctuations
**BPOB:** High, Lower switching costs
**TOS:** Moderate, other modes of travel
**CR:** High, lot of competition, price sensitivity is high

### KPIs

- Load Factor
- On-time Performance (OTP)
- Available Seat Kilometer (ASK)
- Cost per Available Seat Kilometer (CASK)
- Revenue per Available Seat Kilometer (RASK)

### Key Terms

- Aircraft Turnaround Time
- Hub and Spoke Model
- Tarmac Delay
- Code Share
- Global Distribution System (GDS)

## Value Chain

### Inbound Logistics

- Aircraft Procurement (Buy or Lease or Design)
- Fuel Procurement
- Route Selection
- Yield Management
- Flight & Crew Scheduling
- Facilities Planning

### Operations

- Ticket counter & gate operations
- Gate operations
- Aircraft operations
- On-board service
- Ticket operations
- Baggage Handling

### Outbound Logistics

- Baggage & cargo handling
- Flight connections
- Airport facilities and services
- Rental car & hotel reservation systems

### Marketing & Sales

- E-tickets
- Promotions
- Advertising
- Travel Agent Program
- Group Sales
- Loyalty and Points Programs

### After-Sales Service

- Customer Service and Support
- Complaint Resolution
- Lost Baggage Service
- Feedback service
- Real-time problem identification

### Revenue Drivers

Passenger Revenue (~70%)
Ancillary Revenue (~15%)
Cargo Revenue (~5%)

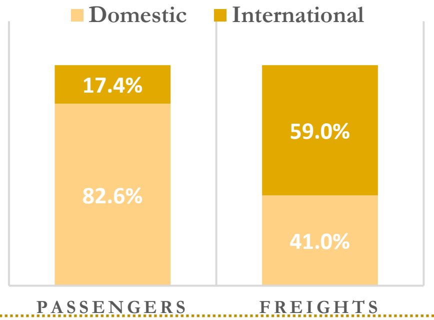
### Cost Drivers

Fuel Costs (~30%)
Labour Costs (~25%)
Maintenance Costs (~15%)
Leasing Costs (~15%)

### Growth Drivers

- Rising middle class and higher disposable income
- Low-cost carrier(LCC) boom
- Govt initiatives like PLI, UDAN, Krishi UDAN 2.0
- Infrastructure Development
- Greater FDIs and PPPs
- Better MRO facilities

### Sector Composition




### Challenges

- High Operating Costs esp. ATF cost
- Infrastructural Constraints
- High Competition; pressure on price
- High Taxation
- Crew shortages
- Fuel Price volatility
- Sustainability and environmental concerns

### Industry Trends

- Sustainable Aviation
- Digital transformation; using technology for data-driven decision making.
- Contactless travel with biometric identification, touchless check-in
- Shifts in travel habits, increase in workcations
- Innovations to improve passenger comfort

# Understanding Banking Industry



## Industry Overview

### Market Size

**Public Assets: $1,553.57B**
**Private Assets - $901.3B**

**Loans - ~$1.67T (FY23) (18.1% growth rate)**

**Deposits - ~$2.2T (FY23) (10.2% growth rate)**

### Market Share of Major Players

| HDFC BANK | ICICI | kotak Kotak Mahindra Bank |
|---|---|---|
| INR 12.4 Tr | INR 6.8 Tr | INR 3.6 Tr |
| ~34% | ~26% | ~16% |

### Industry Dynamics

**TOS, TONE:** High, market dominated by public players, substitutes such as NBFCs, and insurances gaining traction

**BPOB, BPOS:** Moderate, market dependent, low switching costs

**CR:** High, lot of competition

### KPIs

- Current-Savings Account Ratio (CASA)
- Loan-Deposit Ratio
- Net Interest Income
- Deposit Growth Rate
- Capital Ratio
- Net Interest Margin
- Non-Performing Assets (NPA) Ratio
- Net Promoter Score (NPS)

### Key Terms

- CIBIL Score
- Role of RBI / SEBI
- Repo Rate
- Non-Performing Assets
- DBU (Digital Banking Units)
- Capital / Money Market
- Green Banking

## Value Chain

### Product Development

- Development of products and digital banking services
- Savings accounts, loans, credit cards, investment options

### Cust Acquisition & Sales

- Advertising/promoting to customer (cold calls, emails for current users)
- Customer acquisition (account opening, documentation)

### Product Offerings

- Funding products – deposits, securities
- Investing products – credit, securities
- Services – Account/asset management, issuance

### Processing & Transactions

- Loan application processing, verification, credit application
- Day-to-day transactions (deposits, withdrawals, settlements, trading)

### Cust Service & Risk Mgmt

- Maintaining customer relationship, dispute resolution, if any
- Evaluation of borrowers' creditworthiness, stability for granting loans

### Revenue Drivers

Interest, Loans/Advances (~60-70%)
Charges/commissions (~15-20%)
Investments (~5-10%)

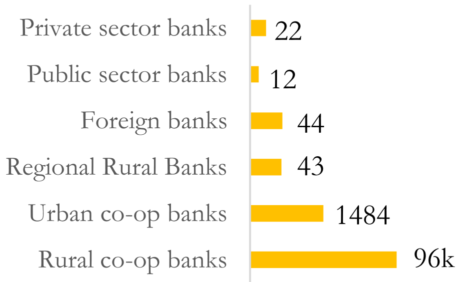
### Cost Drivers

Advertising & sales expenses
Labour charges (salaries)
Interest expense & loan recovery

### Growth Drivers

- Increasing demand, rising disposable income
- Digital banking services and technology adoption
- GOI focus is on the industry – schemes such as Jan Dhan Yojana, Digital Rupee
- Focus on better customer experience (Chatbots)

### Number of Banks




### Challenges

- High NPAs and bad loans not paid back
- Cybersecurity and data privacy
- Customer retention due to major competition
- Macroeconomic volatility – the economy keeps changing hence affecting lending/borrowing rates

### Industry Trends

- Neo-banking: FinTech industry - world's 3rd largest (USD 150B by 2025)
- More M&A activity (USD 171B - 2022)
- Budget 2023 – national financial info registry, streamlining of KYC, central bank digital currency (Digital Rupee)
- Digital transactions grew 90% (FY19-21)
- Agri finance - Kisan Credit Card loans

# Understanding Cement Industry

The Consulting Club

## Industry Overview

### Market Size
~263 Mn ton (2021)
~404 Mn ton (2029)

### CAGR
~5.5% (2021-29)

### Market Share of Major Players
ADITYA BIRLA UltraTech ~21 %
Shree Cement ~7.1 %
Ambuja Cement ~6%

### Industry Dynamics
**TONE:** Low, capital intensive, raw material access low
**BPOS:** Moderate, access to quarries, govt control
**BPOB:** Low, bulk purchase & shortages
**TOS:** Low, No similar product to cement
**CR:** High, Large scale players, switching cost less

### KPIs
- Lime saturation factor
- Silica modulus
- Alumina modulus
- Clinker factor
- Cement factor
- Heat Value

### Key Terms
- Raw Materials: Clay, Limestone, sand & aggregates
- Utilization areas: Factor of safety, Ordinary Portland cement (OPC), Portland pozzolana cement (PPC)

## Value Chain

### Raw Material Sourcing
- Long-term contracts and leases of quarries
- Mining operations (Coal, gypsum, flyash), sand and clay from sea shores
- Crushing and processing

### Clinker Production
- Powdered raw material heated in a kiln to produce clinker
- Further ground with gypsum or other additives to produce cement

### Manufacturing & Packaging
- Different types of cement is manufactured based on additives
- Process can be automated to achieve economies of scale

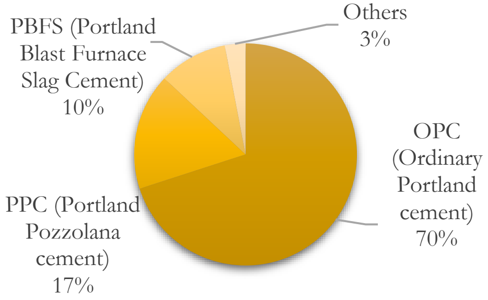
### Outbound Logistics
- Warehouse network with moisture-proof space
- Dealing with bulk orders
- Mix of rail, road freight
- T retailers, distributors, construction cos.

### Sales and Marketing
- Incentives based relationships with contractors
- Dealer-Distributor networks
- Economies of scale

### Revenue Drivers
Sale of cement (~80-90%)
Interest income (~10%)

### Cost Drivers
Logistics & storage (~30%)
Fuel & transport (~25%)
Raw materials (~20%)
Misc Expenses (~20%)

### Growth Drivers
- High quality/quantity of limestone deposits
- Urbanization
- Pvt Infrastructure projects
- Government spending on nation-wide infra development
- Rising per capita income

### Sector Composition



### Challenges
- Rising input costs
- Poor road infrastructure and delays at the ports have adversely affected timely delivery of cement
- The global demand for cement is sluggish due to geopolitical dynamics arising out of Russia-Ukraine war

### Industry Trends
- FDI inflows (cement and gypsum) - $5.49B in Apr 2000-Dec '22.
- PE/VC investments in real estate and infrastructure - growth of 27%
- Remote working; houses with ticket sizes below Rs. 40-50 lakh saw a boom
- 2nd largest producer; contributes 8% globally

# Understanding Defence Manuf Industry



## Industry Overview

### Market Size

USD 11.3B (2023)

### CAGR

~4-5% (2024-26)

### Market Share of Major Players

**Public Companies**

HAL — INR 1.28 Tr

Bharat Electronics — INR 963B

**Private Company**

TATA Advanced Systems

### Industry Dynamics

**TONE:** Low, due to regulations, capital
**BPOS:** Moderate, ltd options; adv tech area
**BPOB:** Low, limited alternatives
**TOS:** Low as limited options available
**CR**: Low as few players in market

### KPIs

- Defence Budget Allocation
- Defence Expenditure (as % of GDP)
- Defence R&D Spending
- Operational Readiness
- Defence Export & Imports
- Global Power Index (Firepower Score)

### Key Terms

- Positive Indigenisation List
- Innovations for Defence Excellence (iDEX)
- Defence Public Sector Undertakings (DPSUs)
- Ordnance Factories Board(OFB)
- DRDO

## Value Chain

### Research & Design

- Based on RFP, conceptual design, sub-assembly, new tech
- Research & collaboration between labs, institutions
- Testing & validation

### Manufacturing & Assembly

- Production of components (software, electronic, mechanical)
- Assembly of components to finished product under the safety standards

### Logistics/Transportation

- Sourcing of raw materials, components, and sub-systems
- Partnerships with domestic/international suppliers & vendors

### Testing & Sales

- Performance & stress testing to ensure functionality and safety
- Exporting, cross-country opportunities, training given for deployment

### After-Sales/Decommission

- Technical support, maintenance, repair, spare parts, upgrades
- Disassembly, recycling, and scrapping of equipment after life cycle

### Revenue Drivers

Supply to Indian forces (~60-70%)
Exports (~15-25%)
R&D & Tech Transfer (~10-20%)

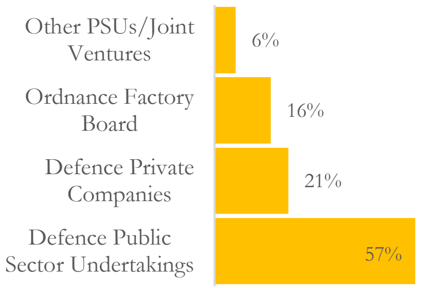
### Cost Drivers

Production/Manuf (~40-50%)
Skilled Labor (~20-30%)
R&D (~15-25%)

### Growth Drivers

- Growth of Indian defence exports (334%: last 5 years)
- FDI encouragement (74% allowance given for automatic route, 100% for govt route)
- Indigenisation of manufacturing (Aatmanirbhar Bharat)
- More investment in R&D
- Geo-political tension

### Sector Composition




### Challenges

- Long gestation periods for contracts, lack of continuity in orders
- Red tape: Bureaucratic obstacles
- Lack of technology transfer
- High cost of capital for investments in advanced manufacturing
- Lack of skilled workforce
- Improvements required in infrastructure

### Industry Trends

- Indigenous production: increased security, reducing imports, employment generation
- Budget 2023-24: 13% ($72.2B) allocated
- SRIJAN portal: Online portal; access to vendors to take up items for indigenization
- Defence corridors: In UP & Tamil Nadu
- 68 AI projects planned (2024), 40 completed (2022)
- GOI aims for exports of $5B by 2024-25

Sector Index | Main Index

# Understanding E-Commerce Industry



## Industry Overview

### Market Size

USD 76.5B (2022)
USD 246.1B (2028)

### CAGR

21.5%(2023-28)

### Market Share of Major Players

| amazon.in | Flipkart | Jio Mart |
|---|---|---|
| USD 1.43 Tr | USD 37.6B | USD 13.9B |
| Both ~60% | | ~30% |

### Industry Dynamics

**TONE**: Low, ease of setting up ops
**BPOS:** High, dependent on supplies
**BPOB:** High, low switching costs
**TOS:** High, easier and cheaper alternatives available
**CR**: High, intense price wars, promotion campaigns

### KPIs

- Conversion Rate
- Bounce Rate
- Customer Churn Rate
- Inventory Turnover Rate
- Customer Lifetime value
- Average Order Value
- Click-through Rate
- Traffic Monitoring

### Key Terms

- Omni-channel
- Hyperlocal
- B2B, B2C, D2C,m-commerce
- Search Engine Optimization
- Drop-shipping
- Cross-selling/Up-selling

## Value Chain

### Product Sourcing/Design

- E-commerce companies design and develop their own products or source from private label brands
- Manufacturing
- Warehousing

### Operations

- Packaging
- Inventory management / demand forecasting
- Order management
- Website/app development to place orders

### Outbound Logistics

- Payment processing
- Establishing partnerships with delivery companies
- Shipping and fulfillment activities
- Last mile delivery

### Marketing & Sales

- Multi-channel marketing
- Promotional activities
- SEO, online advertising
- Incurring customer acquisition costs
- Content creation

### After-Sales Service

- Processing customer feedback, returns and exchanges
- Analyzing data on customer preferences
- Quick support services

### Revenue Drivers

Subscription/Membership models
Delivery charges

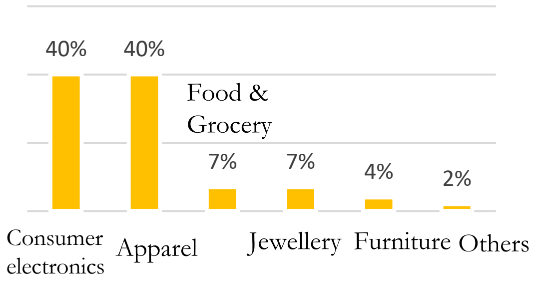
### Cost Drivers

Logistics & storage
Customer acquisition & marketing
Platform maintenance costs

### Growth Drivers

- Increase of digital payments/online transactions
- Increasing internet and data penetration
- Emerging technologies (AR/VR/Voice search) for customer experience
- Growth of MSME

### Sector Composition




### Challenges

- Supply chain disruptions
- In Tier-2/3 cities, there is still dependency on cash payments
- Cybersecurity and data breaches
- Counterfeiting
- Last mile delivery issues
- Increased competition
- Lack of trust

### Industry Trends

- Govt network (ONDC and e-Marketplace)
- More PE/VC investments ($15B in 2021)
- Social commerce has seen an increase
- Personalization and customization
- Subscription-based models, longer customer relationships amidst increasing competition and diversity of choice
- 100% FDI allowed for B2B e-commerce

# Understanding Ed-Tech Industry

The Consulting Club

## Industry Overview

### Market Size

$4.3B (FY22)
$10.4B (FY25)

### CAGR

~40% ( 2022-25)

### Market Share of Major Players

| BYJU'S | unacademy | ERUDITUS Executive Education | upGrad |
|---|---|---|---|
| $5.1B | $3.4B | $2.9B | $2.25B |

### Industry Dynamics

**TONE**: High, low capital requirement and no strict regulations
**BPOS**: High, less good quality trainers
**BPOB:** High, large number of options
**TOS:** Moderate, physical coaching
**CR**: High, a lot of new players

### KPIs

- Customer Acquisition Payback Period (CAP)
- New Demo Booking Rate
- Customer Lifetime value
- Course Completion rate
- Time-on-app

### Key Terms

- MOOC (Massive Open Online Course)
- Adaptive Learning
- Synchronous Learning
- Flipped classroom
- Gamification

## Value Chain

### R&D

- New educational methodologies
- Identifying gaps in existing solutions
- Designing pedagogy

### Software/Hardware Dev

- Learning Management Systems (LMS)
- Tablets optimized for learning
- Software platforms

### System Integrators

- Bringing together content delivery, and communication tools
- User-friendly and efficient experience

### Network Infrastructure

- Seamless access to content through servers, cloud services, and data centres
- Reliable, uninterrupted & fast access to resources

### Trainees & Trainers

- Learners or students use the platforms to acquire knowledge and skills.
- Educators, teachers, & facilitators deliver content, assess progress

### Revenue Drivers

Paid course subscriptions (50%)
Test preparation (~25%)
Corporate and B2B (~15%)

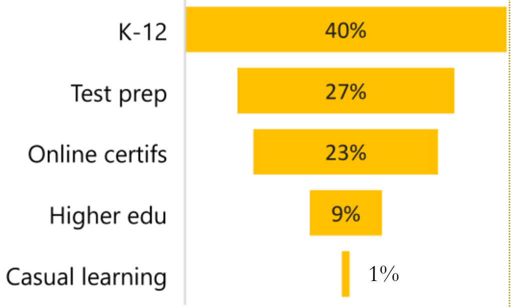
### Cost Drivers

Content creation (~25%)
Talent & HR (~20%)
Customer acquisition (~20%)

### Growth Drivers

- Penetration of Smart devices
- Young Employable Population
- Government's Digital Initiative To Promote E-learning
- Income inelasticity(0.93) implies inclination to spend on Ed
- Price advantage, enhanced experience

### Sector Composition




### Challenges

- Evolving regulations and policies
- Technological Obsolescence of EdTech solutions
- Economic downturns or changes in consumer spending habits
- Keeping users engaged in online learning environments difficult
- Digital divide is prevalent

### Industry Trends

- Edtech players are merging and partnering to achieve scale and efficiency
- Edtech leaders are focusing on supporting career progression
- Use of AR and gamification to make learning interactive
- 7/30 unicorns in India
- Partnerships with known Universities

# Understanding EV Industry

The Consulting Club

## Industry Overview

### Market Size

USD 5.61 Bn (2023)
USD 37.68 Bn (2028)

### CAGR

46.38% (2023-28)

### Market Share of Major Players

TATA MOTORS ~ 87% (Passenger Vehicles)
MG ~ 11%
HYUNDAI ~ 1.7%

### Industry Dynamics

**TONE:** High, R&D, manuf & setup costs
**BPOS:** High, dependent on batteries
**BPOB**: Moderate, growing interest
**TOS**: Low, ICE vehicles only alternatives which are not env friendly
**CR**: High, Competition increasing

### KPIs

- Total Cost of Ownership (TCO)
- Charging Infrastructure Growth
- Charging sessions between failure
- Charging Speed
- Carbon Emissions Reduction
- Battery Recycling Rate

### Key Terms

- Battery Swapping
- Battery as a service (BaaS)
- Charging Infrastructure: (L1, L2, L3)
- Plug-in Hybrid Electric Vehicle (PHEV)

## Value Chain

### R&D & Raw Material

- Batteries, advanced materials, better techniques, design.
- Raw material extraction - lithium, cobalt, nickel, aluminum, steel

### Components, Vehicle Assembly

- Lithium-ion batteries, electric motors, power control systems are manufactured
- Assembly plants – integrating all components

### Distribution & Logistics

- Component logistics
- Warehousing and distribution through dealerships, distribution centers, D2C for vehicles
- Payment processing

### Marketing & After-Sales

- Advertising, pricing strategies and promotional activities
- Repairs, replacements, sustainable battery recycling & disposal

### Charging Infrastructure

- Manufacturing & installation of charging stations
- Distribution and manufacturing of batteries

### Revenue Drivers

EV Sales (~60-70%)
Govt incentives (!20-30%)
Charging infrastructure (~10-20%)

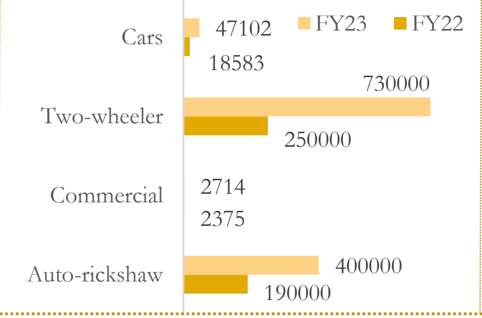
### Cost Drivers

Battery cost
Raw material sourcing
Research and development

### Growth Drivers

- Environmental Awareness
- Government Incentives
- Lower Operating Costs
- Advancing Battery Technology
- Energy Security
- Corporate Sustainability Initiatives

### Sector Composition




### Challenges

- High Initial Cost of battery & vehicle
- Limited Charging Infrastructure
- Range Anxiety: Limited driving range
- Limited Model Options: availability of electric vehicle models is limited
- No Universal charger: Every electric vehicle-making company has its own different charging port

### Industry Trends

- Faster Adoption and Manufacturing of Electric Vehicles (FAME) scheme II
- PLI schemes for manuf of components/EVs
- Global EV30@30 campaign; at least 30% new vehicle sales to be electric by 2030.
- Recent discovery; lithium iron phosphate battery (world's first 4C superfast charging)

# Understanding FMCG Industry



## Industry Overview

### Market Size

USD 56.8 Bn (2022)
USD 615.87 Bn (2027)

### CAGR

27.9% (2022-27)

### Market Share of Major Players

| Hindustan Unilever Limited | Nestlé | Britannia | Varun Beverages Ltd |
|---|---|---|---|
| INR 6 Tr | INR 2.14 Tr | INR 1.11 Tr | INR 1.07 Tr |

### Industry Dynamics

**TONE:** Low, difficult to set operations
**BPOS:** Low, small & fragmented suppliers
**BPOB:** High, low switching costs
**TOS:** High, several alternatives available
**CR:** High, intense competition

### KPIs

- Sales growth
- Market Share
- Customer Acquisition Cost
- Inventory turnover rate
- Customer retention rate
- SKU rationalization

### Key Terms

- Point of Sale (POS)
- Economic Order Quantity (EOQ)
- In-store activation
- Merchandising
- Planogram

## Value Chain

### Research & Development

- Research to come up with new products/ new category
- Develop existing products/category

### Procurement

- Sourcing of raw materials
- Quality testing
- Storage of raw materials

### Manufacturing

- Production
- Quality control & testing
- Packaging & storage

### Distribution

- FMCG Distribution Centers (Regional DC) -> Retail DC -> Retail Shop
- Invoicing
- Inventory Management

### Marketing & Sales

- Branding and advertising
- Merchandising
- Order Fulfillment
- Consumer purchase
- Post purchase services

### Revenue Drivers

Product & Pricing (~35%)
Branding & advertising (~30%)
Distribution (~20%)

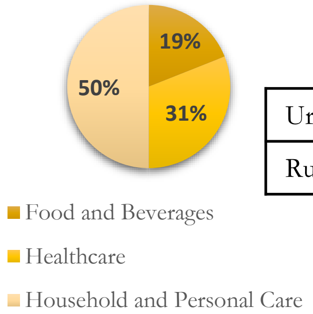
### Cost Drivers

Raw material costs (~40-50%)
Distribution & logistics costs(~25%)
Marketing expense(~20-30%)

### Growth Drivers

- Greater penetration in rural India
- E-commerce and digitization
- Direct Sale to customers
- Product innovation
- Govt initiatives like PLI,SETU scheme
- Urbanization

### Sector Composition




| | |
|---|---|
| Urban | 65% |
| Rural | 35% |

### Challenges

- Fierce competition
- Rising raw material costs
- Limited storage space; more products
- Supply chain disruptions
- Seasonality and demand variability
- Product shelf life and fragility
- Regulatory compliance and quality control

### Industry Trends

- E-commerce and digital engagement to connect with customers directly
- Personalization & customization
- Sustainable and eco-friendly products
- Consumer preference towards healthier and natural products
- Use of technology to stay ahead in the game

# Understanding Food Delivery Industry



## Industry Overview

### Market Size

USD 28.4 Bn (2022)
USD 118.2 Bn (2028)

### CAGR

27.8%(2023-28)

### Market Share of Major Players

zomato: USD 9.5 Bn ~ 55%

SWIGGY: USD 9.6 Bn ~45%

### Industry Dynamics

**TONE**: High, ease of setting up ops
**BPOS**: High, dependent on restaurants
**BPOB**: High, buyers seek value for money
**TOS**: High, alternatives such as home-cooking, dining out always available
**CR**: High, intensely competitive

### KPIs

- Average order time (AOT)
- Average delivery time (ADT)
- % On-time Delivery
- Customer retention rate
- Customer Satisfaction Rate
- Delivery Person Idle time

### Key Terms

- Food Aggregators
- Cloud Kitchens
- Contactless Delivery
- Hyperlocal Delivery
- Subscription/Marketplace Models

## Value Chain

### Onboarding Partners

- Restaurants and brands are onboarded onto the delivery application
- The menus are listed on the apps along with combo plans and delas

### Placing Orders

- Customers place orders through the delivery platform's website or app, selecting dishes and specifying delivery preferences.

### Delivery

- Restaurants can deliver the food via their own delivery network
- Outsourcing it to the food delivery app
- Remote delivery (drones)

### Marketing & Sales

- Ordering Platform, Delivery arrangements, Payment, CRM mgmt.
- Promotion campaigns delivery apps, bundling, cross-selling

### Other Services & Feedback

- Additional Services to improve performance, Complaints & Queries,
- Customer ratings
- Grocery services, add-on courier services

### Revenue Drivers

Commissions from restaurants (~80%)
Ads on delivery apps (~5-10%)
Delivery Fee charged (~10-15%)
Paid subscriptions/ loyalty programs

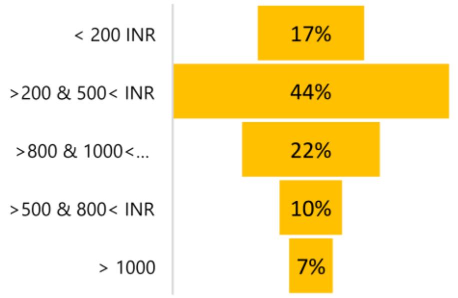
### Cost Drivers

Vehicle/delivery cost
Packaging cost
R&D for delivery platform

### Growth Drivers

- Disposable income
- Rising trend of ready-to-eat (RTE) / quick home delivery
- Nuclear families
- Internet/ Smartphone penetration
- Expansion to Tier 3/4

### Sector Composition




### Challenges

- Profitability and unit economics
- Quality Control and Food Safety maintenance
- High competition
- Delivery platforms depend on restaurant partners
- Managing online payments, handling issues related to payment gateways

### Industry Trends

- 43% of orders are clocking via D2C
- Indoor habits - restaurants consider adopting cloud kitchens
- Grocery delivery - reaching 2/3 of all food deliveries (2030)
- Healthy choices & personalized menus – driving nutrition
- ONDC: GOI's own app

# Understanding Healthcare Industry

The Consulting Club

## Industry Overview

### Market Size

**USD 367B (by 2022)**
**USD 638B (by 2025)**

### CAGR

**10.4%(2023-28)**

### Market Share of Major Players

**Private Hospitals**

| Apollo Hospitals | MAX Healthcare | Fortis |
|---|---|---|
| INR 740B | INR 524B | INR 255B |

### Industry Dynamics

**TONE:** Moderate, more capital required
**BPOS**: High, dependent on supplies
**BPOB**: High, consumers are hugely dependent on quality care
**TOS:** Low, limited temporary options
**CR**: Pvt centres are increasing

### KPIs

- Average Length of Stay
- Bed Occupancy Rate
- Patient Room/Bed Turnover Rate
- Staff-to-Patient Ratio
- Treatment Error Rate

### Key Terms

- PPP Model in healthcare
- PHC, OPD, Hospice
- NCD (Non-communicable diseases)
- Government initiatives (PMSSY, AB-PMJAY

## Value Chain

### Consultation

- Primary care physicians or hospitals as per accessibility
- Ambulatory services / TRIAGE for emergency/disaster care

### Diagnosis & Testing

- Diagnosis based on medical history, genetic testing, pathological testing, medical screening/imaging.
- Further testing (confirmation)

### Admission

- Ward allocated (General, OPD, Emergency) based on care required
- Homecare or hospice are also options on the basis of severity of diagnosis

### Treatment

- Medicines, equipment, doctors, nurses, medicines, procedure required
- 24x7 check on vitals and information sharing

### Post-Treatment

- Payment, insurance, follow-ups, medicine dosage cycle, full-time, part-time care, rehabilitation
- Palliative care – terminally ill

### Revenue Drivers

- Healthcare services
- Pharma industry
- Health insurance

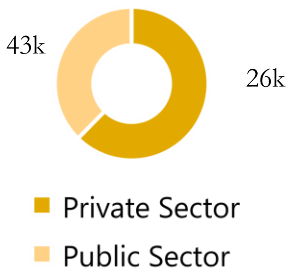
### Cost Drivers

- Infrastructure & equipment
- Workforce salaries
- Operational costs

### Growth Drivers

- Growing demand fueled by increased life expectancy and population
- Medical Value Travel (MVT) or medical tourism
- GOI's increase in public health expenditure
- Telemedicine

### Sector Composition




### Challenges

- Demand-supply gap: Lack of infrastructure/access in rural areas, ratio of beds to population (1.3/1000), ratio of physicians to people (0.65/1000)
- Public health preparedness
- Lack of data integration: All patient records not uniformly digitized

### Industry Trends

- Consumer wearables, devices (for 24x7 health monitoring)
- AI/ML; patient scheduling and processing
- Telemedicine/Remote health
- Investments in HealthTech startups
- Medical Value Travel (India ranks 7th globally)

# Understanding Hospitality Industry

Sector Index | Main Index

## Industry Overview

### Market Size

USD 23.5B (by 2023)
USD 29.61B (by 2028)

### CAGR

4.37% (2023-28)

### Market Share of Major Players

| IHCL | EIH Limited (A Member of the Oberoi Group) | Chalet Hotels |
|---|---|---|
| INR 560.6 Bn | INR 131.4 Bn | INR 97.4 Bn |
| ~ 21% | ~5% | ~4% |

### Industry Dynamics

**TONE**: High, more capex required
**BPOS**: Bulk purchases of supplies
**BPOB, TOS:** Variety of options
**CR**: High competition

### KPIs

- Occupancy Rate
- Average Daily Rate (ADR)
- Revenue Per Available Room (RevPAR)
- Customer Satisfaction Score(CSAT)

### Key Terms

- Global Distribution System(GDS)
- Turn Down Service
- Valet Parking
- Zoning Laws
- MICE

## Value Chain

### Inbound Logistics

- Contracts with suppliers
- Procurement of food, beverages & other supplies
- Storage and distribution within hotel's departments
- Inventory management

### Operations

- Staff Training
- Reservations
- Housekeeping services
- Food & beverage services
- Entertainment & recreational services
- Other additional services

### Outbound Logistics

- Distribution of goods to different hotel outlets
- Providing goods and services to the guests
- Fulfillment of on-demand services
- Transportation services

### Sales & Marketing

- Advertising & Promotions
- Digital Marketing
- Partnerships & collaborations
- Loyalty Programs for regular customers
- Customer Feedback

### Distribution

- Online booking platforms (~30-40%)
- Own Website (~20-30%)
- Direct bookings (Offline) (~20-30%)
- Other Channels

### Revenue Drivers

- Room Tariff (~60%)
- Food & Beverages (~25%)
- Events & conferences (~10%)

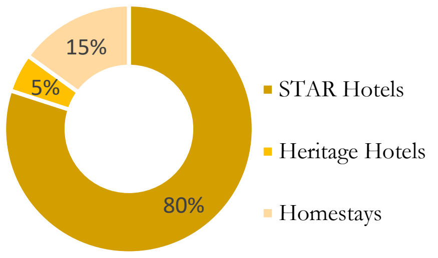
### Cost Drivers

- Labour Cost (~40%)
- F&B Cost(~30%)
- Maintenance Cost (~10%)

### Growth Drivers

- Rising disposable incomes
- Rise of online booking platforms
- Govt initiatives like e-Visa, UDAN, HRIDAY, Project Mausam
- Higher investments
- Rise in experiential travel

### Sector Composition




### Challenges

- Hiring & retention of quality staff
- Technological adaptation
- Changing consumer preferences
- Environmental considerations; reducing carbon footprint
- Meeting demand due to increase in travel and tourism

### Industry Trends

- The staycation trend is likely to be on a rise The wellness industry is booming
- Personalized guest experience using data and technology
- The use of AR/VR to provide immersive experiences
- Focus on sustainability by using eco-friendly products

# Understanding IT Industry



## Industry Overview

### Market Size

**$227B (FY22)**
**$350B (FY25)**

### CAGR

**8.3% (2023-28)**

### Market Cap. of Major Players

| TCS | Infosys | HCLTech | Wipro |
|---|---|---|---|
| $152B | $72.5B | $37B | $26B |

### Industry Dynamics

**TONE**: High, low setup cost
**BPOS:** Low, less differentiation & fragmented
**BPOB:** Low, minimal switching costs
**TOS:** High, rapid innovations possible
**CR**: High, competing projects & clients

### KPIs

- On-time Delivery
- Server downtime
- Number of critical bugs
- SLA Compliance
- Project Backlog
- Quality Audit Results

### Key Terms

- Agile methodology
- Digital Transformation
- Application Programming Interface (APIs)
- Software-as-a-service
- Wireframe, ERP, CRM

## Value Chain

### Strategy to Portfolio

- The technology projects and initiatives to pursue based on the organization's goals
- Create a portfolio of projects
- Strategic planning, project prioritization, budget allocation & resource allocation

### Requirement to Display

- Build what the business needs, when it needs
- Documenting functional and technical specifications
- Requirement analysis, design, prototyping, and user experience (UX) design

### Request to fulfill

- Implementation of the technology solution
- Catalog, fulfil & manage services usage
- Software development, system integration, testing, and deployment activities

### Detect to Correct

- Anticipate & resolve production issues
- Ongoing monitoring, maintenance
- Troubleshooting, debugging, updates, patches, and user support

### Revenue Drivers

App Dev & maintenance (40%)
IT Services & Consulting (30%)
System integration (~10%-20%)

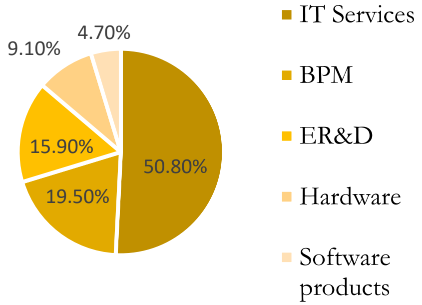
### Cost Drivers

Employee costs (~55%)
Infrastructure costs (~10%-15%)
Training & Development (10%)

### Growth Drivers

- Low cost of operation
- Strong growth in export demand
- Easy availability of technically skilled manpower
- Supportive government policies (PLI), SEZs
- Tax advantage, quality projects

### Sector Composition




### Challenges

- Upskilling the workforce continuously
- Handling sensitive data for international clients, such as for EU
- Clients are increasingly seeking holistic solutions rather than discrete services
- Dependence on a few markets

### Industry Trends

- India placed at 61st rank as per Network Readiness Index 2022
- Services around SMAC (Social, Mobile, Analytics, Cloud), IT consulting are fast-growing
- Immersive virtual experiences are becoming valuable enterprise tools for new business models, training, and collaboration

# Understanding Logistics Industry



## Industry Overview

### Market Size

USD 279B (2023)
USD 406B (2029)

### CAGR

~6.46% (2023-29)

### Market Cap. of Major Players

| CONCOR | BLUE DART | GATEWAY DISTRIPARKS | AEGIS |
|---|---|---|---|
| INR 413B | INR 173B | INR 139B | INR 125B |
| ~36% | ~15% | ~12% | ~11% |

### Industry Dynamics

**TONE**: Moderate, ease of setting up ops
**BPOS**: High, require transport services
**BPOB**: Low, fragmented customer base
**TOS**: Low, in-house logistics lacks efficiency and scale required
**CR**: High, intense competition

### KPIs

- Lead Time
- Turnover Time
- Warehousing Costs
- Inventory Turnover
- Fill Rate
- Backorder Rate
- Delivery Time
- Order Accuracy
- Shipping Time

### Key Terms

- Cabotage
- Freight Forwarding
- 3PL Adoption
- Cross-Docking
- Hub & Spoke Model
- Demurrage

## Value Chain

### Client Requirements

- Understanding the client's requirements and timelines
- Goods are received at distribution centers or picked up from client

### Planning & Packaging

- Efficient routes are mapped out and costs are optimized according to client's needs
- Packaging and labeling is done to prevent damage

### Warehousing & Storage

- Goods are placed in warehouses to be picked up for last mile delivery
- Package locations in warehouses are optimized according to routes

### Outbound Logistics

- Goods are transported via transportation modes such as road, rail, water, air
- Sourcing transportation partners, documentation

### Last Mile Delivery

- Delivery to customer's location, real-time updates, notifications
- Customer feedback and complaint management
- Value-added services

### Revenue Drivers

E-commerce/Last-mile (~30-40%)
Domestic sector support (~25-35%)
Trade within the country (~20-30%)

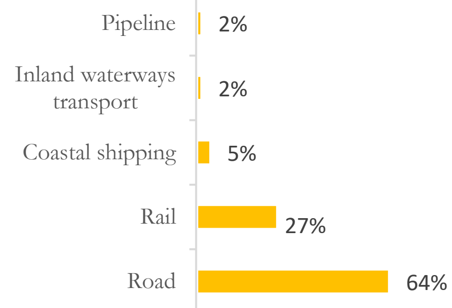
### Cost Drivers

Transportation costs (~40-50%)
Workforce costs (~20-30%)
Inventory costs (~15-25%)

### Growth Drivers

- E-commerce expansion
- Technology advancement (GPS Tracking, analytics, AI/ML)
- New B2B logistics businesses growing in the industry
- Manufacturing focus in India has increased demand for better warehouses/logistics

### Sector Composition




### Challenges

- Fragmented sector due to multiple intermediaries
- High costs related to transportation (fuel, toll charges)
- Last-mile challenges due to traffic, congestion
- Lack of connectivity between modes
- No standardization in process

### Industry Trends

- Gati Shakti Yojana – multi-modal connectivity, boosts last-mile
- Parivahan portal – Sarathi (licenses), Vahan (vehicle registrations)
- Usage of Blockchain, IoT, AI/ML & green logistics
- GST, Warehousing Act 2007, investments in logistics parks and free trade warehousing zones (FTWZs)

# Understanding Media & Entertainment Industry

## Industry Overview

### Market Size

USD 27.72 Bn (2023)
USD 40.36 Bn (2028)

### CAGR

7.8%(23-28)

### Market Cap. of Major Players

**Television**

Star: INR 264.8 B
SUN TV Network: INR 216.6 B

**SVOD**

Disney+ hotstar: ~41%
eros now: ~24%
prime video: ~9%

**Print**

Dainik Bhaskar Group: INR 44.39 B
HT Media: INR 5.45B

### Industry Dynamics

**TONE:** Low; high costs, big estd. players
**BPOS:** High for unique content producers
**BPOB:** Moderate-High, lower switching costs
**TOS:** High; content piracy & other channels
**CR:** High; lot of competition, low fixed costs, high price sensitivity

### KPIs

- Viewership ratings
- Monthly Active Users (MAU)
- Monthly recurring revenue
- Advertising & subscription revenue
- Content sales
- Video completion rate

### Key Terms

- Broadcast
- Ratings
- Prime Time
- Commercial Break
- Storyboard
- Sync Licensing
- In-app Purchases (IAPs)

## Value Chain

### Procurement

- Due Diligence
- Content Acquisition
- Licensing of copy righted material
- Content cataloging & tracking

### Production

- Content creation
- Aggregation of content
- Product/ad. Placement

### Product Packaging

- Editorial work
- Format conversion (for different devices)
- Packaging Design
- Promotional materials

### Technical Production

- Infrastructure
- Print (IMAX, different reel mechanisms)
- Encoding and Transmissibility

### Distribution

- Channel Selection & platform integration
- Content Delivery Networks (CDNs)
- Rights management
- Sale

### Revenue Drivers

- Advertisements
- Subscription & content sales
- Content licensing & distribution

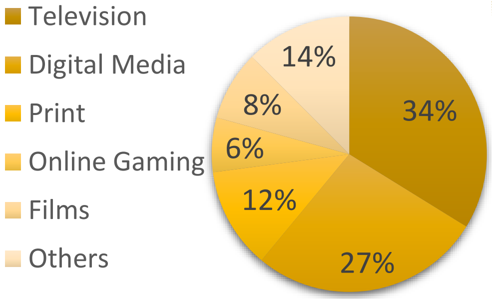
### Cost Drivers

- Content acquisition
- Content creation
- Production costs (operating costs)

### Growth Drivers

- Digital transformation with increasing internet penetration
- Rise of OTT & regional content
- Growth in gaming & animation
- Increasing buying power
- Govt. initiatives like National Broadband mission, FFO, increase in FDI limit

### Sector Composition




### Challenges

- Content Piracy and copyright issues
- Monetization challenges due to freely available content
- Licensing and compliance with laws/regulation issues
- Concerns related to data privacy
- Distribution related challenge leading to high costs

### Industry Trends

- Rise in # & hours spent on OTT platforms
- Localization of content
- Use of AR/VR & metaverse to provide immersive experience
- E-sports broadcasting and gaming on the rise
- Growing live streaming & user interaction

FMS [Sector Index](#) | [Main Index](#)

# Understanding NBFC Industry

The Consulting Club

## Industry Overview

### Market Size

Bank Funding – 13.1 L Cr (2023)

### CAGR

18.5% (2021-26)

### Market Cap. of Major Players

| Bajaj Finserv | Chola | Muthoot Finance |
|---|---|---|
| INR 4300B ~58% | INR 636.8B ~9% | INR 418B ~6% |

### Industry Dynamics

**TONE:** Low, highly fragmented
**BPOS:** High, funders have multiple options to park money
**BPOB:** Moderate, abundant options
**TOS:** Low, banks & money Lenders
**CR:** High, multiple NBFCs in India

### KPIs

- Net Interest Margin (NIM)
- Return on Equity (ROE)
- Earning Asset Yield
- Non Performing Asset (NPA)
- Capital Adequacy Ratio (CAR)

### Key Terms

- Asset Liability Management
- Capital Adequacy ratio
- Credit Risk
- Liquidity Risk
- Non-Performing Asset
- Risk Management

## Value Chain

### Marketing & Sales

- Multi-channel marketing: online advertising, social media, and direct mail.
- Marketing is done based on type of loan
- Evaluating client needs

### Underwriting/Risk Assessment

- Risk is assessed based on past financial history
- Loan is underwritten; determine interest rates, terms, amounts and evaluating credit scores

### Fund Procurement/Mgmt

- Underwriting completed then funds are raised, through bonds, banks
- NBFCs manage assets; collecting payments, investment portfolios

### Disbursement/Collection

- Verification, Signing Documents, Funding, Disbursement based on type
- Collection of interest payments, repayments

### Compliance

- Report to regulatory authorities such as RBI
- Engage in securitization; pooling loans, converting to tradable securities for fund raising

### Revenue Drivers

Interest Income (~60-70%)
Commission Income (~10-15%)
Investment Income (~5-10%)

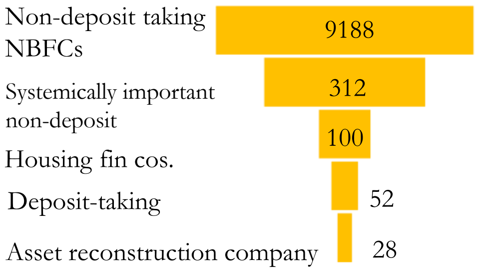
### Cost Drivers

Cost of funds/operations
Digital infrastructure
Increasing digitization

### Growth Drivers

- Digital transformation
- Diversification of loan portfolio (ex: gold loans for raising short-term finance)
- Allowing inclusion of a larger target segment
- Micro-financing options for farmers, machinery

### Sector Composition




### Challenges

- Compliance regulations; 621 compliances, 35 one-time approvals required for NBFC in a state
- Refinancing; not favourable as major sources are banks, cap. markets
- Tax deductions not permitted for non-performing assets (NPAs)
- Credit risk; lack of info on defaulters

### Industry Trends

- Collaboration with FinTech; leverage tech innovation and automation
- Growth of MSMes; credit penetration for NBFCs can increase
- Co-Lending with traditional banks
- Pradhan Mantri Jan Dhan Yojana (PMJDY), Mudra Yojana, and Stand-Up India; education for fin inclusion

# Understanding Oil & Gas Industry



## Industry Overview

### Market Size

36.24B $m^3$ (by 2023)
46.69B $m^3$ (by 2028)

### CAGR

5.20% (2023-28)

### Market Cap. of Major Players

| Reliance Industries Limited | ONGC | IndianOil |
|---|---|---|
| INR 16.68T | INR 2.16T | INR 1.32T |

### Industry Dynamics

**TONE**: Low, capex intensive
**BPOS**: High, dependent on raw material
**BPOB**: Low, most sectors are dependent
**TOS**: Moderate, alt. sources are available
**CR**: High, intense competition, govt

### KPIs

- Lease Operating Expenses
- Reserve Replacement Ratio
- Barrels of Oil Equivalent (BOE)
- Natural Gas Coefficient (CFE)
- Capital Project efficiency
- E&P output

### Key Terms

- OPEC
- Futures Contract
- Catalytic Cracking
- Distillation & Fractionation
- GOSP (Gas Oil Separation Plant)

## Value Chain

### Exploration

- Surveys to gauge potential
- Identification of appropriate site
- Field Development Planning

### Production

- Sanctioning of the project
- Infrastructure creation
- Strike Oil
- Extract and split oil, water and gas

### Transportation

- Crude is transported by tankers, pipelines, trucks and rail roads
- Natural Gas is shifted by pipelines and LPG tankers

### Storage

- Ground tanks is used for crude and finished oil products
- Underground spaces (reservoirs) is used for natural gas

### Refining & Marketing

- Transform crude into petroleum products
- 3 Stages: separation, conversion and treatment
- Marketed via B2C and B2B channels

### Revenue Drivers

Crude Oil (~75%)
Natural Gas (~20%);
Others (~5%)

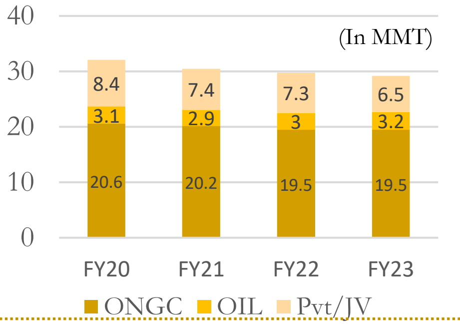
### Cost Drivers

Raw Material consumed
Transportation costs
Employee expense

### Growth Drivers

- Overall economic growth
- Rapid technological advancements
- Increased exploration of unconventional gas resources
- Increased usage of petrochemical products

### Sector Composition




### Challenges

- Renewable energy: cheaper, cleaner alternatives
- Maximize efficiency, reduce costs in production, extraction, and refining for economic and environmental benefits
- Climate change policies
- Limited availability of the fossil fuel reserves

### Industry Trends

- India aims to commercialize 50% of its SPR (strategic petroleum reserves) to raise funds
- 100% FDI permitted in upstream, private refining; public sector refining projects FDI limit raised to 49%
- GoI to invest ~INR 7.5T in oil and gas infrastructure over 5 years

Sector Index | Main Index

# Understanding Pharmaceutical Industry

## Industry Overview

### Market Size

USD 65 Bn (2024)
USD 130 Bn (2030)

### CAGR

10.7% (2023-28)

### Market Cap. of Major Players

| SUN PHARMA | Cipla | Dr.Reddy's |
|---|---|---|
| INR 2413B<br>31% | INR 830B<br>10.9% | INR 756B<br>9.9% |

### Industry Dynamics

**TONE:** Low, lot of regulations, R&D costs for innovative drugs
**BPOS:** High, reliance on suppliers
**BPOB:** Oligopsony, price control
**TOS:** Moderate, Ayurveda, Homeopathy
**CR**: High, int'l and domestic players

### KPIs

- R&D Expense Ratio
- Time-to-market
- Clinical trial performance
- No. of New Drugs Developed
- Patent Application & Approval

### Key Terms

- Active pharmaceutical ingredient(APIs)
- Biologics & Biosimilars
- Over the counter (OTC)
- Good Manufacturing Practices (GMP)
- Pharmacokinetics

## Value Chain

### R&D

- Exploration, research and study (GOI, Academic Institutes, Pvt labs)
- Disease biology, genetic disposition, formula
- Similar disease pathways

### Testing & Approval

- Pre-clinical testing, clinical trials in 3 phases
- Safety, usage and efficacy is approved based on trials
- Regulatory bodies (CDSCO, FDA) approve drug/patent

### Manufacturing

- API Synthesis
- Formulation development
- Manufacturing facilities for mass production
- Packing/labeling/batch production

### Distribution

- Channels such as wholesalers, distributors, pharma stores
- Online 24x7 retailers
- Hospital pharmacies
- Healthcare providers

### Marketing & After-Sales

- Promoting to healthcare providers/hospitals through sales reps and samples
- Promotional content/doctor referrals

### Revenue Drivers

Drug sales (~50-60%)
Exports (~20-30%)
Branded/OTC Drugs (~5-10%)

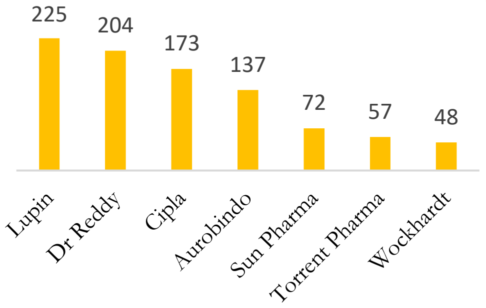
### Cost Drivers

Raw materials/R&D (~25-30%)
Manufacturing costs (~20-25%)
IP/Patent/Distr/Mkting (~10-20%)

### Growth Drivers

- Increased healthcare spend in India due to more insurance penetration
- Growing market for generic drugs
- Govt. initiatives like tax incentives for manufacturing APIs

### Sector Composition




### Challenges

- Regulatory risk: Heavily regulated
- R&D costs: High R&D costs reduce profitability
- Consumer behaviour changes
- Competition from Generic Drugs: Cheap & difficult to compete with
- Supply Chain Disruption
- Patent Expiration: drop in prices

### Industry Trends

- 100% FDI permitted by GoI (Greenfield)
- Exports are at $25.3B for FY23 (12th largest exporter)
- Union Budget 2023-24: Mission for eliminating sickle cell anemia by 2047
- Digitization of value chain
- Increase in M&A activity for diversification in emerging markets (Biosimilars, biologics)

# Understanding Power Industry

The Consulting Club

## Industry Overview

### Market Size

USD 1.34T (in 2021)
USD 1.53T (by 2026)

### CAGR

3.80% (2022-25)

### Market Cap. of Major Players

| adani Transmission | पावरग्रिड POWERGRID | एनटीपीसी NTPC |
|---|---|---|
| INR 2330B ~27% | INR 1568B ~18% | INR 1480B ~17% |

### Industry Dynamics

**TONE**: Low, capex investment, high red tape-ism, dominated by PSUs
**BPOS**: High, COAL India only supplier
**BPOB**: Low, limited distributors
**TOS**: Moderate, limited substitutes
**CR**: High, intense competition with alternate power sources

### KPIs

- Plant Load Factor (PLF)
- Capacity Utilization Rate
- Transmission & Distribution (T&D) Losses
- Outage Frequency and Duration
- Safety Incident Rate

### Key Terms

- Decentralized Energy Resources (DERs)
- Smart Grids
- Carbon Pricing & CCUS
- Green Hydrogen
- Small Modular Reactors (SMRs)

## Value Chain

### Resource Acquisition

- Resource Exploration and Assessment
- Procurement
- Extraction & Harvesting
- Field Development Planning

### Generation

- Licensing
- Infrastructure Setup
- Conversion to Electricity process
- Waste Management & Emissions Control

### Transmission

- Laying High Voltage lines and Sub-station setup
- Grid control centers and load dispatch centers
- Grid Stability and Security infrastructure

### Distribution

- Laying Low voltage lines & Distribution Stations
- Metering and Data Collection
- Distribution Management System (DMS)

### Service & Management

- Billing & Customer Service
- Maintenance and Infra Management
- Load and Grid Management

### Revenue Drivers

- Electricity outreach
- Dynamic Pricing (Smart Grids)

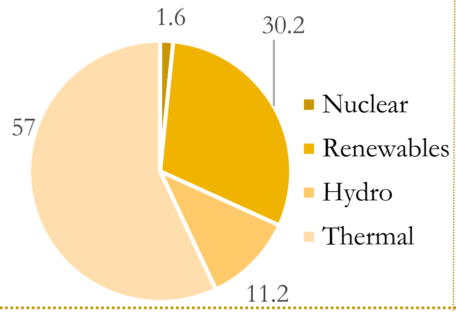
### Cost Drivers

- Licensing
- Infrastructure setup
- Raw Material & Manpower

### Growth Drivers

- Growing Population
- Rapid technological advancements
- Government electricity outreach policies
- Tax incentives & subsidies
- Advanced Energy storage solutions

### Sector Composition




### Challenges

- Maximize efficiency to minimize Carbon Pricing and Emissions Regulations
- Climate change policies
- Limited availability of the fossil fuel reserves
- Decentralized Energy Resources (DERs)

### Industry Trends

- Development of 'green city' in every Indian state, using renewable energy.
- India's installed renewable capacity (including hydro) stood at 172.54 GW, representing 41.4% of the overall.
- 100% FDI allowed in power sector for generation (except atomic power), transmission, distribution.

# Understanding Telecom Industry

The Consulting Club

## Industry Overview

| Market Size | Market Cap. of Major Players | Industry Dynamics | KPIs | Key Terms |
|---|---|---|---|---|
| USD 44 Bn (2023)<br>USD 69 Bn (2028)<br>**CAGR**<br>~9.4% (2023-28) | Jio ~38%<br>airtel ~32.5%<br>VI ~20.2% | TONE: Low, huge capex needed (R&D)<br>BPOS: Low, limited suppliers available<br>BPOB: High, size of buyers is high<br>TOS: Low, no direct substitute available<br>CR: High, intense competition | • Churn rate<br>• Disconnect<br>• Gross additions<br>• Net Promotor Score (NPS)<br>• Average Customer Satisfaction Score (CSAT) | • VoLTE, VoIP<br>• Data provisions<br>• XaaS<br>• White space spectrum<br>• Backhaul<br>• CSP<br>• DoS, DDos |

## Value Chain

### Telecom Infrastructure
- Acquiring new spectrums & frequency bandwidths
- Building/maintaining towers, base stations, fiber-optic cables, and data centers.

### R&D & Testing
- Development of tech such as IoT, 5G and AI-driven solutions
- New antenna and device testing
- Safety, quality testing

### Manufacturing
- Network layout based on new technology
- Creation of a scalable service enablement platform
- Field testing

### Distribution
- Warehouse network for sim cards, broadband
- In store, online delivery
- Expansion to new areas
- Services – data, voice, value-added services

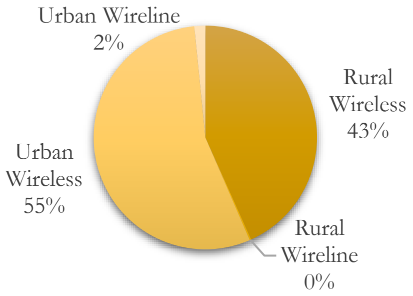
### Sales, Marketing & Support
- Brand development
- Advertising and promotions on large scale
- Service-centric operator for queries, complaints, feedback

## Revenue Drivers
- Data services (~50-60%)
- Voice services (~20-30%)
- VAS (~10-15%)

## Cost Drivers
- Spectrum cost
- Advertising
- Support network

## Growth Drivers
- 5G spectrums
- Satcom
- Increasing smartphone penetration
- Evolving consumption patterns
- Government Regulation and Polices

## Sector Composition




## Challenges
- Data privacy and security
- High price sensitivity
- Poor management of sustainability agenda
- Inability to accelerate efficiencies through digitization
- Adaptability to changing regulatory landscape

## Industry Trends
- Budget 2023-24; DoT allocated $11.92B
- FDI inflow at $39.02B (2022)
- Growing wireless subscriber base and broadband subscriptions
- Internet subscribers, connectivity increasing pan-India
- Atmanirbhar Bharat; indigenous 5G tech
- DoT planning roll-out of 6G

# Part F – Tech Insights

Main Index

# Tech Insights: Table of Contents

# Understanding AI/ML



## Market Size & CAGR

**India**
$7.8B (2025)
20.2% - CAGR

**CAGR**
20.2%

**Global**
$59.67B (2021)
$422.37B (2028)

**CAGR**
39.4%

## Product Types

Machine Learning
Natural Language Processing (NLP)
AI-driven Robots
Speech Recognition
Predictive Analytics
AI Chatbots & GenAI

## Growth Factors

Cloud Computing and Scalability
Open-Source Software and Libraries
New breed of chips
Data availability

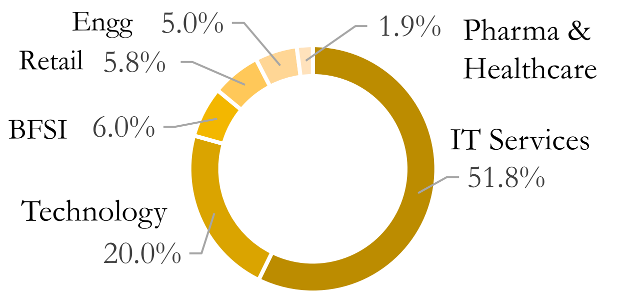
## Government Initiatives

- AI for ALL to promote adoption & use of AI technologies
- The National Programme on AI (NPAI) to foster innovation, inclusion and adoption for social impact.
- Drone Shakti to commercialize the use of drones in different industries.
- Government has set up centres of excellence in AI across the country to promote R&D.
- AI Startup ecosystem support & use of AI in governance to improve efficiency

## Key Terminologies

- LLM
- NFTs
- Industrial metaverse
- Digital Twin
- Edge AI
- GPT
- Hyper Automation

## AI Market Share by Industry (2021)




## Indian AI market segmentation

- IoT/Industry 4.0
- Cloud platforms
- Hardware and OEM
- Consumer software/SaaS
- Enterprise software/SaaS
- SI and IT integrators/consulting
- End-user enterprises

## Trends

- Natural Language Processing (NLP) to Minimize Language Barriers.
- Robot-assisted surgeries.
- Banks use AI and RPA to eliminate human errors.
- Monitoring social media using NLP.
- Deep learning techniques in autonomous cars.

## Generative AI

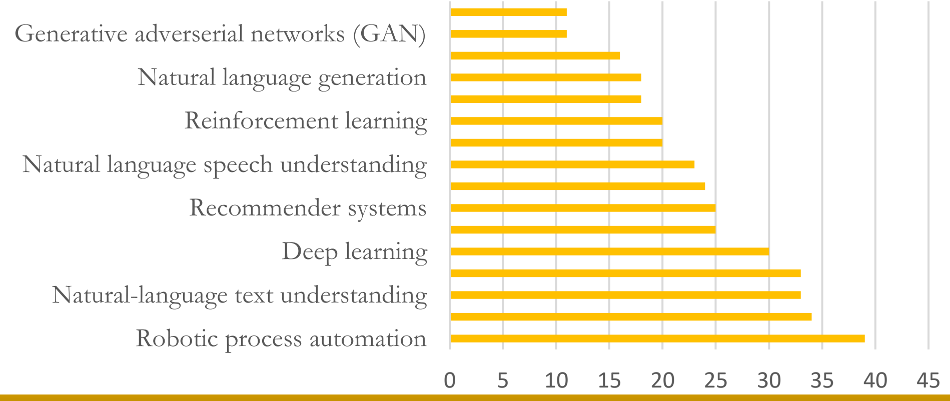
- Gen AI applications: ChatGPT, GitHub Copilot, Stable Diffusion, Claude, DALL-E,
- **ChatGPT** created by Open AI launched in Nov 2022 has **60 million visits** per day & has **173 million active users** per day.
- About **75 percent** of the value that generative AI use cases could deliver are across four areas:

1) Customer Operations: Improved issue resolution by 14% an hr and time spent in issue handling by 9%
2) Marketing & Sales : can increase productivity by 5-15%
3) Software engineering: speeds up developer work as a coding assistant.
4) R&D: reduces research and design time by improving simulation & time testing

## Use Cases

- Human-like NPCs to interact with the players in games.
- Network Investment optimization in Telecom.
- Automated data governance.
- Lead Scoring.
- Financial fraud monitoring.
- Precision farming

## AI Capability adaption rate in businesses (2022)



# Understanding Google

The Consulting Club
Faculty of Management Studies
University of Delhi

## Overview

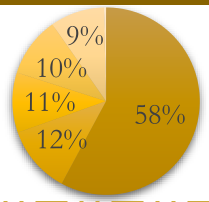
Market Cap - $1.65 Trillion
Revenues – $282.8 Bn (2022)
Net Income - ~$60 Bn (2022)
Google India's Revenue-$ 94 Bn
Processes 3.7 Bn search everyday

## Model Type

Follows hidden revenue business model, where users are kept out of the equation so they don't pay for the product or service offered.

## Revenue Stream

- Google Search & other
- Google Network Members
- YouTube ads
- Google Other
- Google Cloud




| Ads | Cloud | Hardware |
|---|---|---|
| Ad-words | G-Suite | Phones |
| Ad-Sense | Maps | Home Assistant |
| | Docs | Chromecast |

### Pricing Types

- **Cost Per Click –** Based on interests/clicks.
- **Cost per mile/views –** Based on impressions

- **Ad-words -** Helps advertisers display advertisements in the Google content network.
- Constitutes 80% of the ads revenue.
- **Ad-Sense -** Helps other website owners display advertisements on their own website.
- This time allows small businesses and blogs to generate ads revenue on their own.
- In return, Google gets one-third of the revenue generated.
- Constitutes 20% of ads revenue.

**Google Analytics:** Shows website owners track of visitors to their sites and how people use them. Costings for web search and android search varies but due to sheer volume of android devices, it is extremely profitable.

- # of android users worldwide – **3.6 billion monthly active users**
- **# Apps – 2.6 Million**

- **Mobile advertising** -main source
- Google pays Apple billions to be default search engine on iPhone
- **App Store –** A 35% commission of every purchase of App and even in-app purchases.
- In exchange offers the platform and cloud infrastructure for delivering notifications.
- **Media side of the Play Store** - Paid music, movies, books, and subscriptions on Google Apps like Play Music, Play Movies

Android has no licensing fees & it is beneficial because every phone user sign in with their unique account when setting up a phone. This helps in analyzing user data to improve the relevancy of the ads .

- Real-time mobile-based payments system. (UPI)
- Most downloaded fintech app globally in 2018.

- **Market Share in India – 34.8%**
- Revenue Potential – $2-4 billion
- About 80% of all online search volume, & revenue, come from commerce-related searches. Up till now, most of the information Google has on its users only helped it map their intent, not their spends. Payments bridges this gap.
- Payments unlocks potential in revenue by tapping merchants through Maps & advertising.
- UPI sees about 30% transactions being made to merchants.
- For online merchant transactions, Google Pay is the market leader (60% share).
- It has 33% share in offline merchant transactions. (1st PhonePe)

- **Ads** are the major source of revenue.
- 2 types of Ads

1. **Local search ads** are featured businesses which appear as top results when searched on Maps
2. **Promoted Pins:** Google Maps uses a 'pin' like symbol to indicate the location of a place. For e.g., McDonald's in US pays a fee to Google to have its signature 'M' logo to be embedded in each map.

- **Google Maps API** - Customized API is geared towards businesses that benefit from having a tailored version of the Maps in their online or mobile applications. E.g. Ola, Uber, Pokémon Go
- **Partnerships** – They partnered with cab-hailing companies and added the option of discovering available cabs and their pricing within the Google Maps App.

**Google Phones**

- Pixel 4 & 4a
- Accessories: Stand, Cases, Headphones, cables & Adaptors

**Chrome Cast**
Chromecast is a streaming media adapter that allows users to play online content such as videos and music on a digital television.

**Nest Hub**
Voice-control multiple compatible devices, all from a single dashboard.

**Google Home**
Smart speaker and voice Assistant. Play your music. Call your friends. Ask it questions.

# Understanding Global Cloud

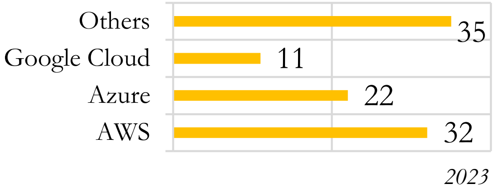
## Sector

On Demand Cloud IaaS (Infrastructure as a Service)
Services – 100+
Industry Size – $619+ Billion (2023), CAGR – 14.1% (2023-30), Players – 30+
Big Players - 5

## Product Types

Virtual Machine Service
Simple Storage System
RDBMS
Isolated Cloud Resources
VPNs

## Market Share & Major Players




* Others includes major players like Alibaba Cloud & IBM Cloud

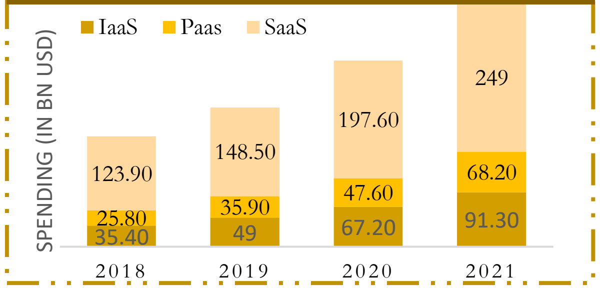
## Distribution

Divided into no. of global regions, each has multiple availability zones.
Allow users to set geographical limits on their services.

## Growth Factors

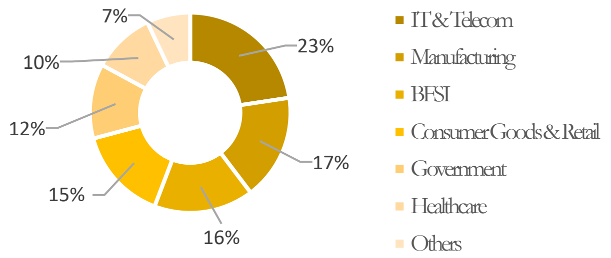
Marginality & Scalability
**Network Effect**
Demand for Remote Desktops
Start-up Ecosystem
Increased Data Consumption

## Global IT Service Revenue, by model




## Cloud Computing Market Share

Global Cloud Computing Market Share by Industry, 2020




## Fees

- "Pay-as-you go" model.
- Based on hardware/OS/networking features chosen.
- Pay for a single virtual computer, a dedicated physical computer, or clusters.
- The customer gets free "credits" in the beginning to set up their cloud computing structure on cloud platforms
- Once these credits are used up and the customer has needs more server capacities, he can flexibly use as much server capacity as he needs and is billed accordingly.

## Pricing Models

### On Demand

- You pay for compute capacity by the hour or the second depending on which instances you run.
- Yan increase or decrease your compute capacity depending on the demands of your application
- Only pay the specified per hourly rates for the instance you use.

### Savings Plan

- Savings Plans are a flexible pricing model that offer low prices in exchange for a commitment to a consistent amount of usage (measured in $/hour) for a 1 or 3 year term.

### Spot Instances

- Spot instances allow you to bid on spare computing capacity for up to 90% off the On-Demand price.

### Dedicated Hosts

- A Dedicated Host is a physical server dedicated for use.
- Reduce costs by bundling software licenses, including Windows Server, SQL Server.

### Reserved Spots

- For applications that have steady state or predictable usage.
- Annual & prepaid service

## Major Services over Cloud

- Compute
- Storage
- Data management
- Migration
- Networking & Content delivery
- Development tools & application services
- Management & monitoring
- Security, Identity, & Compliance
- Analytics
- Artificial intelligence & IoT
- Mobile development
- Notifications
- Business Productivity

## Advantages of Cloud

- **Trading Capex for variable Opex** : Minimize overhead for investment, maintenance, and management.
- **Economies of Scale**
- **Flexible Capacity & Agility:** As a company grows, Cloud provides resources to aid in expansion and as the business model allows for flexible usage,
- Guaranteed 24*7 services and support.
- **Security**: Ensure security with modern cloud security standards and diversifying the physical locations in which data is held.
- Global Reach & Scalability

# Part G – Behavioural Preparation

Main Index

# Primer to Behavioural Prep



**Consulting firms assess your ability to successfully work with teams and judge how well you understand their firm and yourself**

**Some questions to prepare for:**

**Tell me about yourself**

- Answer should give a bird's-eye view of your CV
- Answer should be succinct, short and cover major aspects of your career and interests

**Questions about you/your CV**

- Make sure you know your CV thoroughly and can converse about the talking points
- Make sure to mention any learnings, a situation where you took leadership and initiative in your answer

**Use Rule of Three for the following:**

**Why do you want to pursue a career in Consulting?**

- Answers should map your past career to your choice of consulting as a career
- Answers should include a professional/experience which shows your aforementioned quality

**Strengths & Weaknesses**

- Give content of the challenges you faced, what helped you overcome these challenges and your learnings obtained from them

**What makes you a good fit for consulting?**

- Talk about a quality that consulting careers require and how you exhibited that quality in your life
- Deep dive into what makes a consultant i.e. various aspects of a consulting career, ideal consultant.

**Why company 'X'?**

- Research in depth about the company and try to map their philosophy to yours
- Talk to people who have had an experience with company 'X'
- Make sure your answer is in line with regards to your personal beliefs

# Frequently Asked Questions



- Why did you pick your school?
- A time you were a team player
- What do you know about the job & the firm?
- What accomplishments have given you the greatest satisfaction?
- A time you showed leadership skills
- A time you took initiative
- Have you ever failed at anything?
- Tell me about a recent crisis you handled
- Tell me about the most interesting project you worked on
- Why should I hire you?
- Tell me more about your hobby/achievements
- What experience/skills do you feel are particularly transferable to our organisation?
- Tell me something about yourself which is not in the CV
- How has the process been so far for you?
- A common talking point with the interviewer
- How has your MBA been so far?

*You should know how to carry a conversation with the interviewer*

# Non-Verbal Communication



*The interviewer wants to see if you are someone they can let interact with the client and if they can spend hours working with you on a project.*

*Certain things including confidence, passion, curiosity and positivity need to be conveyed to the interviewer.*

*Non-verbal communication during a case interview plays a big role in doing so.*

## Do's

- Carry yourself in a calm and composed manner
- Be confident, sit straight and maintain eye contact
- Nod subtly when receiving information that you asked for
- Have a smile in the end no matter how the case went

## Don'ts

- Get intimidated by the case when a tricky one comes
- Panic and look tensed and confused
- Fiddle with the pen or any other object around
- Look here and there while speaking or thinking

## Developing the traits for Non- verbal Communication

- Consider case solving a fun experience to gain confidence. It helps to avoid shakiness and fumbling tone during the interview.
- Gain the technical knowledge about case solving by practicing a good number of cases with different people and ask for their feedback.
- Practice connect with people even without any purpose to learn the art of building rapport as it is required in driving the interview.
- Record yourself or practice in front of a mirror to analyze and work upon your non-verbal communication.

# Part H – Practice Guesstimates

[Main Index](#)

# Practice Guesstimates: Table of Contents

The Consulting Club

# Toll Plaza



## Estimate daily revenues of Delhi-Gurgaon toll plaza

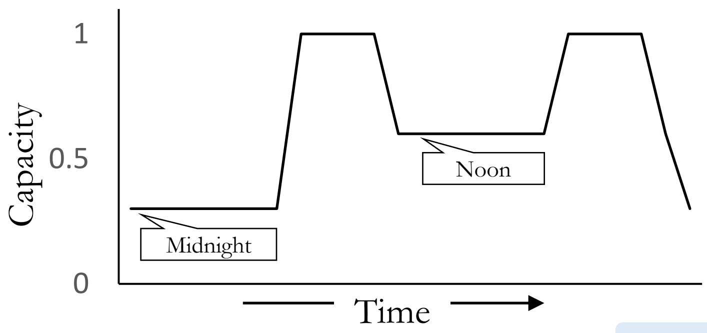
### Assumptions

- Toll plaza operates 24x7
- 2/3 wheelers do not have to pay toll fare
- Toll fare is the only revenue source
- Traffic across booths is uniform

### Methodology

- Daily revenue = (Daily revenue per toll booth) x (# toll booths)
- For one toll booth, the # vehicles crossing it will vary with time of the day (peak / non-peak hours)
- Average time for a car to pass the booth = 15 secs; Hence, 4 cars can cross the booth in a minute
- Therefore, capacity = max. vehicles that can cross a booth in an hour = 240 vehicles / hour

Traffic Distribution




'High traffic hours' include morning and evening office peak hours. 'Medium traffic hours' include afternoon and late night hours. 'Low traffic hours' include hours from ~11 PM to 7 AM.

**Revenue per toll booth**

We are treating the toll booth as a bottleneck to estimate traffic throughout the day

- # vehicle per booth
  - High traffic hours: 8 hours /day, Full capacity
  - Medium traffic hours: 8 hours /day, 60 % capacity
  - Low traffic hours: 8 hours /day, 30 % capacity
- Fare per vehicle
  - 4 wheelers: 70% of daily traffic, Fare – INR 30
  - > 4 wheelers (trucks): 30% of daily traffic, Fare – INR 70

Total # vehicles per booth = (8)x(240)x(1+0.6+0.3) ~ 3600

Weighted Fare = (0.7)x(30) + (0.3)x(70) = INR 42

**Daily revenue = (3600)x(42)x(20) ~ INR 30 lacs**

# TOI Revenues

## Estimate daily revenues of Times of India

### Assumptions

- Households order 1 copy of ToI each
- No online subscription model for ToI
- Print ads are priced only on area basis
- Digital ads are priced on CTR basis

### Methodology

- Revenue Streams = Revenue from newspaper circulation + Advertising Revenue
- Newspapers can be bought by individuals/households or organizations (libraries, offices, schools)
- Advertising Revenue Streams = Printed Ads on the paper + Ads on website/mobile apps
- Digital revenue is calculated based on the number of online users who click the advertisement

**Daily Revenue**
- Subscriptions
  - #Buyers
    - Households
    - Organizations
  - Price
- Advertisements
  - Print
    - Ad Area
    - Price per unit Area
  - Digital

We have assumed that the online ad revenue model is based on #clicks. It can also be based on #impressions or #conversions.

Newspaper penetration can be assumed based on literacy rate and income levels

Print Revenue
(#Pages)*(Area per page)*(% area for ads) *(Price per unit area)
= 25*(60*40)*25%*5000
= Rs. 75 million

#Household Buyers = (#Households)*(English Newspaper penetration)*(ToI's Mkt. Share)
#Households Buyers = 300 mil * (50%*20%)*25% = 7.5 million
#Organizational Buyers = 50% of Household buyers = 3.75 million
#Revenue = 7.5 + 3.75 = 11.25 * 5 = Rs. 56.25 million

**Digital Revenue**
**(#Users)*(Number of ads)*(Click Through Rate)*(Cost per click) =**
**25 mil *10*0.5%*10= Rs. 12.5 million**

**Total Revenue = 56.25 + 75 + 12.5 = Rs. 144 million**

# Smart Watches



## Estimate the market size of Smart Watches in India

### Assumptions

- Average price of Smart Watch is Rs. 10k (considering watches range from 3k-30k)
- Penetration in rural area will be much lower than in urban area
- Market exists only in middle & high income groups
- Income Spread is uniform in Rural & Urban

### Methodology

- Population of India = 130 Cr; Urban = 30%; Rural = 70%
- Age Group classification: 0-25 = 50%; 25-50= 30%; 50+= 20%
- Income Spread: BPL = 20%; Low Income= 40%; Middle Income= 30%; High Income= 10%
- In Urban India 1% of 0-25 will own one, 10% of 25-50 will own one and roughly 0.5% of 50+ will own one in the middle-income population while in the higher income population, the penetration would be roughly double. In Rural India, 0.5% will own one in age group 0-25, 1% will own one in 25-50 and 0.1% will own one in 50+

**Market Size of Smart Watches**

- **Rural**: 0.70*130cr = 91cr
- **Urban**: 0.30*130cr = 39cr

**Income Spread**

- Rural – Middle Income: 0.30*91cr = 27.3cr
- Rural – High Income: 0.10*91cr = 9.1cr
- Urban – Middle Income: 0.30*39cr = 11.7cr
- Urban – High Income: 0.10*39cr = 3.9cr

| | Age Spread | | Penetration |
|---|---|---|---|
| Rural Middle Income | 0-25 | 0.50*27.3cr = 13.65cr | 0.005*13.65cr = .0683cr |
| Rural Middle Income | 25-50 | 0.30*27.3cr = 8.19cr | 0.01*8.19cr = 0.0819cr |
| Rural Middle Income | 50+ | 0.20*27.3cr = 5.46cr | 0.001*5.46cr = 0.0055cr |
| Rural High Income | 0-25 | 0.50*9.1cr = 4.55cr | 0.005*4.55cr = 0.0228cr |
| Rural High Income | 25-50 | 0.30*9.1cr = 2.73cr | 0.01*2.73cr = 0.0273cr |
| Rural High Income | 50+ | 0.20*9.1cr = 1.82cr | 0.001*1.82cr = 0.0018cr |
| Urban Middle Income | 0-25 | 0.50*11.7cr = 5.85cr | 0.01*5.85cr = 0.0585cr |
| Urban Middle Income | 25-50 | 0.30*11.7cr = 3.51cr | 0.1*3.51cr = 0.351cr |
| Urban Middle Income | 50+ | 0.20*11.7cr = 2.34cr | 0.005*2.34cr = 0.0117cr |
| Urban High Income | 0-25 | 0.50*3.9cr = 2.95cr | 0.02*2.85cr = 0.057cr |
| Urban High Income | 25-50 | 0.30*3.9cr = 1.17cr | 0.2*1.17cr = 0.234cr |
| Urban High Income | 50+ | 0.20*3.9cr = 0.78cr | 0.01*0.78cr = 0.078cr |

**Market Size of smart watches = 0.998 cr * Rs 10000 = 9980 cr ~ 10,000cr**

# Smokers in India



## Estimate the number of Smokers in India

### Assumptions

- Smokers can be divided into 4 categories- Chain smoker, Regular smoker, smoking with alcohol and occasional smoker
- Cigarettes can be filtered and non-filtered
- Population having filtered cigarettes to be estimated
- Sex Ratio – 1:1

### Methodology

- Total smokers= Smokers in urban area + Smokers in rural area
- Urban and Rural areas to be divided into 3 classes each- High income , Middle income & low income
- Every class will have different proportion of male & female smoking cigarettes
- Probability of smoking will depend on the respective age group
- Low income group will not consume filtered cigarettes

**Total Population**

- Rural (60%)
  - High Income (15%)
  - Mid Income (35%) **(Non-filtered)**
  - Low Income (50%) **(Non-filtered)**
- Urban (40%)
  - High Income (30%)
  - Mid Income (50%)
  - Low Income (20%) **(Non-filtered)**

**Total Smokers= = 68.35mn**

**Rural High Income Group**

| | Male | | | Female | | |
|---|---|---|---|---|---|---|
| Age Group | % | Prob | Total | % | Prob | Total |
| 0-18 | 10% | - | - | 10% | - | - |
| 18-30 | 15% | 0.3 | 4.5% | 15% | 0.15 | 2.25% |
| 30-50 | 15% | 0.15 | 2.25 % | 15% | 0.05 | 0.75% |
| >50 | 10% | - | - | 10% | - | - |

**Urban High Income Group**

| | Male | | | Female | | |
|---|---|---|---|---|---|---|
| Age Group | % | Prob | Total | % | Prob | Total |
| 0-18 | 10% | 0.05 | 0.5% | 10% | - | - |
| 18-30 | 15% | 0.5 | 7.5% | 15% | 0.25 | 3.75% |
| 30-50 | 15% | 0.3 | 4.5% | 15% | 0.15 | 2.25% |
| >50 | 10% | 0.05 | 0.5% | 10% | - | - |

**Urban Mid Income Group**

| | Male | | | Female | | |
|---|---|---|---|---|---|---|
| Age Group | % | Prob | Total | % | Prob | Total |
| 0-18 | 10% | - | - | 10% | - | - |
| 18-30 | 15% | 0.3 | 4.5% | 15% | 0.15 | 2.25% |
| 30-50 | 15% | 0.2 | 3% | 15% | 0.05 | 0.75% |
| >50 | 10% | - | - | 10% | - | - |

# Cheese Burst Pizzas



## Estimate the number of cheese bursts pizzas sold by Dominos daily

### Assumptions

- Working hours from 11AM to 11 PM
- Peak hrs - 2-4PM & 7-10PM(occupancy rate-80%), Non Peak- 7 hrs(occupancy rate-50%)
- An outlet is able to serve in a 4 km radius on average.
- Services available- Dine in or Home Delivery
- 40% of Pizza orders are Cheese burst orders.
- 1 Order has approximately 1.5 pizzas.
- On avg. it takes 5min to receive & 15 to process = 20mins
- 3 orders can be processed in parallel.
- Delhi constitutes 10% of total metropolitan area
- No Dominos outlets in rural areas.

We'll divide country in 3 categories:
- Metropolitans(20%)
- Urban and Suburban areas(30%)
- Rural Areas(50%)

### Methodology

- Daily orders from one outlet= 0.4*3*[(Peak hrs/20mins)*0.8+(Non peak hrs/20)*0.5]+50% of calculated figure for online and home delivery orders]
- No. of Cheese bursts can be calculated for one city i.e. Delhi and then extrapolated to arrive at a national figure
- Area of Delhi= 1600 sq.km. and one outlet serves 4 km radius
- Therefore no. of outlets in Delhi= 1600/3.14*4*4= 32
- Consumption of pizzas in urban and suburban areas = 50% of that of metropolitan areas

**Number of Cheese Bursts per outlet**

Non Peak (7 hours)
- In Store Purchase: Orders = 3*(420/20)*0.5 = ~ 32
- Online & Home Delivery: Online orders= 0.5*32= 16

Peak (5 hours)
- In Store Purchase: Orders = 3*(300/20)*0.8= 36
- Online & Home Delivery: Online orders= 0.5*36= 18

Cheese bursts orders = 0.4*102 = ~ 41

Pizzas per orders = 41*1.5 = 61

All over Delhi = stores * per store= 32*61= 1952

**Since Delhi's area = 10% of total metropolitan area, no. of cheese bursts sold in metropolitans= 10* 1952 = 19520**

**Cheese bursts sold daily in urban and suburban areas= 0.5*(19520)*1.5 = 14640**

Total Cheese bursts sold daily = 34160

# Petrol Pumps



## Estimate the number of Petrol Pumps in Delhi (Approach 1)

### Assumptions

- High Traffic Zone = 30%; Medium Traffic Zone = 40%; Low Traffic Zone = 30%
- Distance between petrol pumps in:
- High traffic zone = 2km; Medium Traffic Zone = 3km; Low Traffic Zone = 4km

### Methodology

- Area of Delhi = 1600 sq. km
- Area served by 1 petrol pump in:
  - High traffic Zone = 2x2 sq. km = 4 sq. km
  - Medium traffic Zone = 3x3 sq. km = 9 sq. km
  - Low traffic Zone = 4x4 sq. km = 16 sq. km

**No. of petrol pumps in Delhi**

- High Traffic Zone
  - Area: 0.30*1600 = 480 sq km
  - # of petrol pumps: 480 sq km / 4 sq km = 120
- Medium Traffic Zone
  - Area: 0.40*1600 = 640 sq km
  - # of petrol pumps: 640 sq km / 9 sq km = 71
- Low Traffic Zone
  - Area: 0.30*1600 = 480 sq km
  - # of petrol pumps: 480 sq km / 16 sq km = 30

Total No. of petrol pumps = 120 + 71 + 30 = 221

# Petrol Pumps



## Estimate the number of Petrol Pumps in India (Approach 2)

### Assumptions

- Avg. distance travelled by user does not vary across vehicles and = 30 km/day
- Non-peak time hours of a petrol pump can be surmised in a single number = 50% in this case
- Pooling usage internalized in distance assumption

### Methodology

- We use a demand side approach for this
- Number of Petrol Pumps = Demand of Petrol / Petrol supplied by a pump (avg)
- Demand of Petrol = Distance travelled by a vehicle user (avg) * ( Number of bike users /Bike mileage + Number of Car users / Car mileage)
- Petrol Supplied by a pump = Overall Petrol Suppling Capacity * Weighted Average of Usage ratio

**Number of Petrol Pumps**

- **Demand of Petrol**
  - 2 wheeler: 25 crore users, 70 km/l mileage
  - 4 wheeler: 15 crore users, 10 km/l mileage
- **Petrol Pump usage ratio**
  - Peak Time: 4 hours, 100%
  - Non-Peak Time: 10 hours, 50%
- **Petrol Pump Capacity**
  - Avg time to fill 15 l petrol = 3 min
  - Avg booths = 4
  - Capacity = 15*4*(4*60/3 = 16800 l

**Empirical Assumptions**

Demand of Petrol = [Avg distance = 30 km] * [25cr/70 km/l + 15cr/10 km/l] = 55.7 crore litre

Petrol Supplied per pump = [Avg Usage Ratio = (1*4+0.5*10)/14 = 0.64]*[Capacity = 16,800 l] = 10,800 litre

**Number of Petrol Pumps = [Demand = 55.7 Cr ltr] / [Per Pump Supply = 10,800 ltr] = 51,587 = 51,500 (approx.)**

# Petrol Pumps



## Estimate the number of Petrol Pumps in India (Approach 3)

### Assumptions

- Petrol pump operated 12 hours a day
- Uniform petrol consumption by a car
- Arrival rate uniform across peak hours
- Arrival rate different across non peak hours
- Considering only 4 wheelers in the analysis
- Assuming average size of a household = 5 members.
- Total population of India = 1.25 Billion

### Methodology

- # of pumps in India = (# of cars in India) / (number of cars serviced by a petrol pump) * (frequency of visits to a petrol pump by a car)
- For a petrol pump , peak hours ( 7 am to 11 am ) and ( 4 pm to 8 pm) = 8 hours
- Car arrival rate in peak hours = 4 cars in 5 minutes
- Car arrival rate in non-peak hours = 4 cars in 10 minutes
- This implies total cars serviced daily = 8*(4/5)*60 + 4*(4/10)*60= 384+96= 480 cars serviced a day.
- Assuming an average car needs petrol twice in a month

- 50% households = 0 vehicles
- 30% households = 1 vehicle
- 20% households = 2 vehicles

→ 0.7 vehicles per household

# of cars in India

Total households in India = ( 1250/5) = 250 million × Average number of cars in each household

Total number of cars in India = 250*0.7 = 175 million private vehicles.

+ Assuming commercial vehicles form 20% of the total private vehicles = 35 million commercial vehicles

Total 210 million vehicles in India . Assuming each vehicle needs fuel twice in a month we get = (2/30)*210= 14 million vehicles using fuel daily

Number of petrol pumps = (# of cars visiting a petrol pump) / (# of cars serviced by a petrol pump

14million/480= 30000 petrol stations in India . Asuming each station has 4 pumps = **120000 pumps**

# TT Balls (Part 1)



## Estimate the number of TT balls used in a day in Delhi

### Assumptions

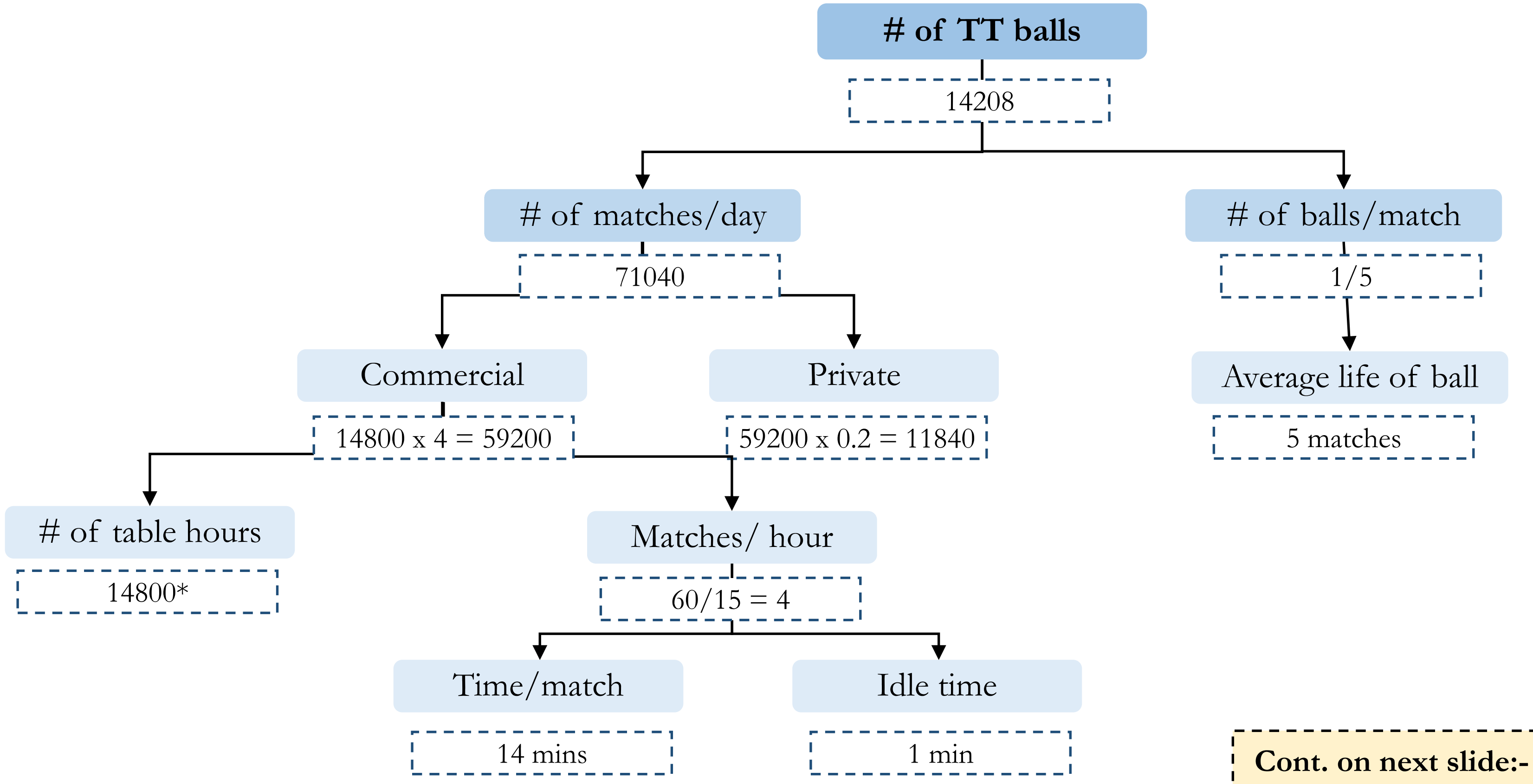
- Considering only matches in commercial spaces for calculation
- Using a factor of 20% for private spaces
- Considering all matches to be similar (for avg. life of a ball)

### Methodology

- Solved from demand side
- #Matches per hour = 1/(Time per match + Idle time)
- Time per match = 14 minutes (for simplicity; assuming 11-point match)
- Avg. Life of a ball = 5 matches

G1 – Guesstimate the number of TT balls used in a day in Delhi
G2 – Estimate the number of TT matches played everyday
G3 – Estimate the number of TT racquets used in a lifetime by an international player
& many more

**Basic Thoughts:-**
Approaches – Demand side and Supply Side (try both)
Be ready with enough information about the manufacturing aspects of the sport or make assumptions




*Refer to the next Slide for calculations

**Cont. on next slide:-**

FMS

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# TT Balls (Part 2)

The Consulting Club

## Estimate the number of TT balls used in a day in Delhi

**# of Table Hours Available**

14800

**Large Spaces**

100*60 = 6000

- **# of Spaces**: 200*1/2 = 100
  - **# Regions - 200**
  - **# of Spaces – 1/2**
- **Hours per Space**: 60
  - **# Tables - 5**
  - **# Hours Open - 12**

**Medium Spaces**

4800

- **# of Spaces**: 200*1 = 200
  - **# Regions - 200**
  - **# of Spaces – 1**
- **Hours per Space**: 24
  - **# Tables - 3**
  - **# Hours Open - 8**

**Small Spaces**

4000

- **# of Spaces**: 200*2 = 400
  - **# Regions - 200**
  - **# of Spaces – 2**
- **Hours per Space**: 10
  - **# Tables - 2**
  - **# Hours Open - 5**

**Methodology:-**

Need proxy for #regions – Use metro stations

Total metro stations = 200

# commercial spaces per region=>

For Large spaces = 1 space per 2 regions

For Medium spaces = 1 space per 1 region

For small spaces = 2 spaces per 1 regions

# Hours available per space =>

For Large spaces = 12 hours

For Medium spaces = 8 hours

For small spaces = 5 hours

(Assuming full capacity utilization)

**Methodology:-**

# Tables per space=>

For Large spaces = 5 tables

For Medium spaces = 3 tables

For small spaces = 2 tables

**Methodology:-**

Total number of table hours available = Hours available in :-

Large Spaces + Medium Spaces + Small Spaces

For any space:-

Hours available = Number of spaces * Hours per space

Number of spaces = (Number of regions * number of spaces per region)

Hours per space = (Number of tables * number of hours open)

**Total number of TT balls used in a day = 14800 * 4 * 1.2 * (1/5) = 14208 ~14200 TT Balls**

# White Shirts in Delhi

## Estimate the number of people wearing a white shirt (WS) in Delhi on any particular day.

### Assumptions

- Calculations are done for a working weekday i.e. assuming offices, schools and various institutions are open
- One person is wearing one shirt a day.
- No considering School going children and their shirts.
- Population of Delhi = 20 million

### Methodology

- Population segmentation has been done across various age groups.
- Calculation for each age group is done on the basis of observed/experienced characteristics.
- Various percentages are used based either on memorised or experienced statistics.

**Population (Age Segmentation)**

- 25-59: 30% = 8 million
  - Student 5% = 0.4 M
    - Non Professional Courses 95%
      - 10% wear WS. ~ 0.038 M
    - Professional Courses 5%
      - 30% wear WS ~ 0.006 M
  - Employed (Formal): 20%= 1.6 M
    - Males 60%
      - 40% wear WS. ~ 0.384 M
    - Female 40%
      - 20% wear WS ~ 0.128 M
  - Employed (Informal): 70%= 5.6 M
    - 20% wear white shirt
      - 1.12 million
  - Unemployed: 5% = 0.4 M
    - 10% wear white shirt
      - 0.04 million
- 60+ : 20% = 2 million
  - Females : 50% = 1M
    - Assuming don't wear WS: 0
  - Males : 50% = 1 M
    - Employed/Self Employed:20%= 0.2 M
      - 50% wear white shirts ~ 0.1 M
    - Retired: 80%= 0.8 M
      - 5% wear white shirts ~ 0.04 M

**Total number of people wearing white shirts in Delhi =5.76 million= 6 million (approximately)**

# Delhi Schools



## Estimate the number of Schools in Delhi

Total Number of Schools = School going children in Delhi / Avg. children in one school

### Part 1: Estimating no. of school going children in Delhi

We know that the population of Delhi is around 20 million. Since India is a young country, we can assume 50% is under 25. So population under 25 would be 10 million. Let's equally divide the population under 25 across every year, which would be equal to 400,000.

**Population**
- Age 0-3
- Kindergarten & Primary School (Class 1-5) - 2.8m
- Middle & Secondary School (Class 6-10) - 2.0m
- Senior Secondary School (Class 11-12) - 0.8m
- Age 18+ (out of school)

| % Going to School | | | |
|---|---|---|---|
| **Middle Class & Above (40%)** | 100% | 100% | 100% |
| **Lower Class (40%)** | 90% | 75% | 50% |
| **BPL (20%)** | 50% | 25% | 0% |

Total: (1.0 * 2.8 + 1.0 * 2.0 + 1.0 * 0.8) * 0.4 + (0.9 * 2.8 + 0.75 * 2.0 + 0.5 * 0.8) * 0.4 + (0.5 * 2.8 + 0.25 * 2.0 + 0) * 0.2 = 4.388

Hence estimated school going children = 4.388 million

### Part 2: Avg. children in one school

**Schools**
- Small schools (40%)
- Medium Schools (40%)
- Large Schools (20%)

| | Small | Medium | Large |
|---|---|---|---|
| **Class Size/Section** | 20/3 | 30/4 | 40/6 |
| **Standards** | Up till 10 | Up till 12 | Up till 12 |

Avg Student in one school = (20 * 3 * 10) * 0.4 + (30 * 4 *12) * 0.4 + (40 * 6 * 12) * 0.2

= 600 * 0.4 + 1440 * 0.4 + 2880 * 0.2

= 240 + 576 + 576 = 1392

**Total Number of Schools in Delhi = 43,88,000 / 1392 ~ 4,400,000 / 1400 = 3142 ~3150**

To triangulate this number, you can take a 5km sq. area, estimate the number of schools and extend it for the entire city

# Daily Departing Flights



## Estimate number of flights departing from Delhi Airport in a Day

### Assumptions

- Airport doesn't operate at max. utilisation
- Turnaround time –
  - Domestic flight – 1.5hr
  - International Flight – 3hrs
- Terminal at IGI –30 (Domestic), 40 (Intl.)
- Every terminal has 2 hangars

### Methodology

- Total departing flights (total out-bound flights) in a day = Total In-Bound Flights in a day = Total Flights Operating from an airport
- No of flights operating from one hangar = (24hrs/avg. turnaround time) [Turnaround time is the time a flight would stay in a hangar]
- No of flights operating from one terminal = 2 x (No of flights operating from one hangar)
- There is a possibility that a flight landing in Delhi, might not depart that day itself. But there would also be flight which depart on a day that did not land on that particular day. Hence it should have a balancing effect.

**Maximum Operating Flights**

- **Domestic Flights**
  - No. of domestic terminals: 30
  - No. of domestic flights operating from one terminal: 2 x (24/1.5) = 32
  - Max. Domestic Flights = 32 x 30 = 960
- **International Flights**
  - No. of international terminals: 40
  - No. of international flights operating from one terminal: 2 x (24/3) = 16
  - Max. Intl. Flights = 16 x 40 = 640

Utilisation rates have been considered to be different for different hours for domestic flights only. For international flights, uniform rusk of 50% has been assumed

To triangulate the number, we can use the alternate approach from the demand side, by figuring out how many people would be departing from Delhi on one day divided by the avg. number of people in one flight

**Hours of the day**

| | 6:00am – 9:00 am | 9:00am – 6:00 pm | 6:00pm – 9:00 pm | 9:00pm – 12:00 am | 12:00am – 6:00 am |
|---|---|---|---|---|---|
| Domestic Flight Rush | 100% | 60% | 100% | 60% | 20% |

Avg. Utilisation for Domestic Flights = (6 x 100 + 12 x 60 + 6 x 20) = 60%

**Total flight departures = Operating Domestic Flights + Operating Intl. Flights = (0.6 x 960) + (0.5 x 640) = 896 flights**

# Tractors in India (Part 1)



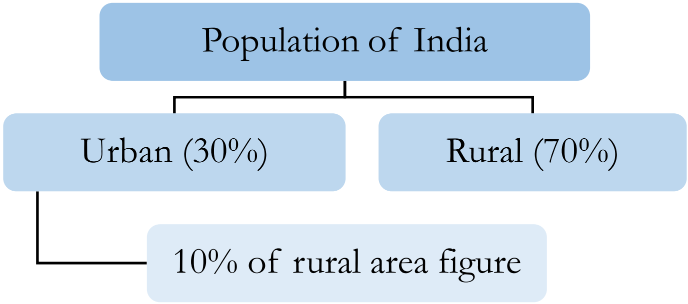
## Estimate the number of tractors in India

### Assumptions

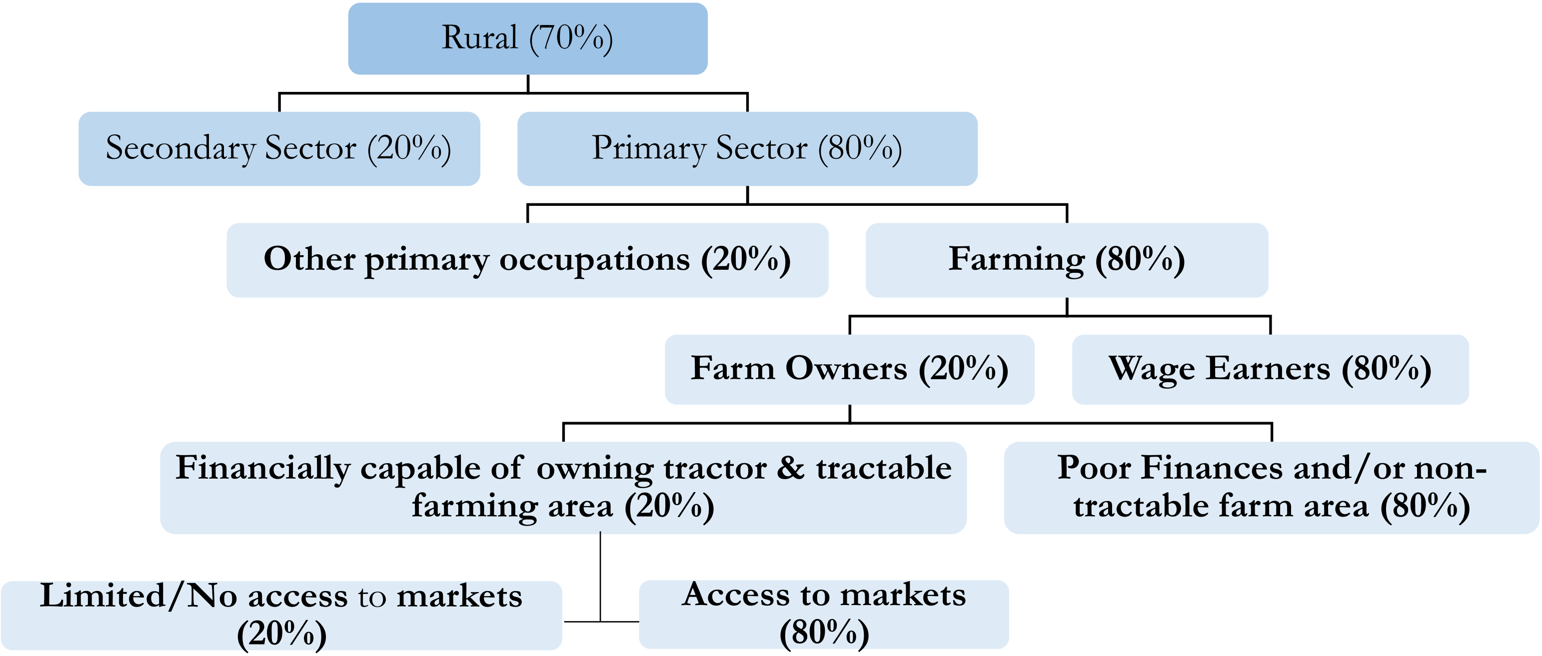
- Tractors are only being used for agricultural purposes in the primary sector
- There is uniform supply of tractors around the country
- All the tractors in consideration are functional and others have been disposed off effectively.
- Each farm-owner has only one tractor for her land/ one tractor per farming household

### Methodology

- The population of India = 130cr.; Rural= 70% & Urban= 30%; Avg. household size= 5
- Avg. life of tractor is 5 years (approx.)
- Methodology = [# of tractors in rural areas + # of tractors in urban areas (10% of figure from rural areas)] / (avg. life)
- Applying 80/20 rule to estimate figures that are not commonly known




To filter down to target population, See the need, accessibility, affordability, preference for tractors

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# Tractors in India (Part 2)

## Estimate the number of tractors in India

Limited/No access to markets (20%)

Access to markets (80%)

Willing to buy (80%)

Unwilling to buy (20%)

### Final Calculation

**Number of tractors** = [# of tractors in rural areas + # of tractors in urban areas (10% of figure from rural areas)] / (avg. life)

= [(# of tractors in rural area) * 1.1] / 5

= [(26 cr. *0.7*0.8*0.8*0.2*0.2*0.8*0.8 ) * 1.1] / 5

= **6.56 lac.**

Area of India = 32.9 lac sq. km
= 32.9 cr. hectares

Arable land ~ 50%
Tractable area ~ 40% of arable area

Average usage of tractor ~ 5 hectares daily
Average 3 weeks of harvest per season

### Triangulation & Sanity Check (Area based approach)

**Alternate Approach**

**Number of tractors** = [Area of India * %Arable land * %Tractable area]/[Tractor usage per day * days of harvest]

= $[32.9 * 10^7 * 0.5 * 0.4] / [5 * 21]$

= **6.27 lac.**

# EV Market Size



## Estimate the market size of EV in India

### Assumptions

- Considering market for only 4 wheeler passenger vehicles.
- Only available in tier 1 cities.
- Premium Car Segment – Price > Rs. 10,00,000.
- Average years a car is used by rich people – 5 years.
- Average years a car is used by middle class – 7 years.
- EV is currently in introduction stage in India, so not considering second hand EV.
- All families in rich sector own a car, 50% middle class families own a car.
- Demographic Divide: Uber Rich = 2%, Middle Class = 38%, Poor = 60%.

### Methodology

- Population of 5 major tier 1 cities in India – Approx. 90 million.
- Average household size – 4.5 member/family.
- Poor wont choose a costly EV.
- In middle class, 50% families will have a car. Among them, 80% will buy normal cars, and 20% premium cars.
- In elite class 100% population will have a car, all will be buying premium cars.
- Innovators/Environmentalist among rich - 10%, who will adopt to EV. Innovators/Environmentalist among middle class- 5%, who will adopt to EV.

**Income Spread and product lifecycle factor**

**Penetration Factors/Acceptability Factor**

**Tier 1 Cities**

Population – 90 million
#families ~ 20 million

**Poor**

Population = 60%
#families = 12 million
Car buyers = 0

**Middle Class**

Population = 38%
#families = 7.6 million
Car buyers ~ 50%
Lifecycle ~ 7 years

Normal Cars

#families ~ 440,000
Average Price = Rs. 6,00,000
Penetration - 5%

Premium Cars

#families ~ 110,000
Average Price = Rs. 22,00,000
Penetration – 5%

**Uber Rich**

Population = 2%
#families = 400,000
Car buyers ~ 100%
All Premium
Lifecycle ~ 5 years

Normal Cars

Premium Cars

#families ~ 80,000
Average Price = Rs. 22,00,000
Penetration – 10%

**Market Size of electric vehicles = # of normal EV*Avg. cost of non-premium EV + # of premium EV*avg. cost of premium EV**
**= 22,000*5,00,000 + 13,500*22,00,000 ~ Rs. 40 billion**

# Flat Screen Televisions



## Estimate the revenue of flat screen televisions sold in Australia in the past 12 months

### Assumptions

- Population: 25 million people
- Size of average household : 3 people
- Average life of TVs = 4 years
- Average number of TVs / household = 1

### Methodology

- No of households = Total Population/Average size of household
- No of TVs per household is considered by taking an average of all the households (Across all categories)
- Calculating the average price of 1 TV, assuming price under each category
- Here we are not considering reused TVs; only **fresh purchases**

**Revenues**

- **Price of 1 TV**
  - Premium
  - Medium
  - Low End
- **Total No. of TVs**
  - No. of Households
  - No. of TV/Household

| Share and Cost | Premium | Medium | Low End |
|---|---|---|---|
| | 20% of Total Cost = $1000 | 60% of Total Cost = $600 | 20% of Total Cost = $200 |

No. of Households: 25 million / 3 member/family ~ 8 million

No. of TV/Household: 1 TV per household/4 years

Average Price of 1 TV = (0.2*1000+0.6*600+0.2*200) = $600

Total no of TVs sold = 8 / 4= 2 million

**Total Revenues = Average Price of 1 TV * Total no of TVs sold = $1.2 Billion**

# Amazon India



## Guesstimate the number of daily orders of Amazon India

### Assumptions

- No of mobile users in India – 800 million.
- No. of internet users – 70% of mobile users.
- Urban Internet Users – 60%
- Rural Internet Users – 40%
- Users belong to Age group 10-55.
- Rural low income group's buying pattern is negligible.

### Methodology

- Population of India – 1.3 billion. No of mobile users – 800 million.
- Frequency of buying varies across age groups and income.
- Considering just the sales of Amazon India, not its grocery or any other chain.
- Amazon has around 35% market share in India e-commerce industry. Flipkart – 45%, rest others.
- Considering 50% of the population is aged below 25 and uniform distribution of population across ages.
- Considering life expectancy of 65 years.

**# of internet users – 560 million**

**Location Basis**

- **40% Rural**
  - **60%** Low Income
  - **30%** Medium Income
  - **10%** High Income
- **Urban 60%**
  - **40%** Low Income
  - **40%** Medium Income
  - **20%** High Income

| **Income Group** | **Rural – Medium Income** | | | **Rural – High Income** | | | **Urban – Low Income** | | | **Urban – Medium Income** | | | **Urban – High Income** | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Age** | 10-25 | 25-40 | 40-55 | 10-25 | 25-40 | 40-55 | 10-25 | 25-40 | 40-55 | 10-25 | 25-40 | 40-55 | 10-25 | 25-40 | 40-55 |
| **Orders/Yr** | 2 | 2 | 0 | 4 | 6 | 3 | 2 | 4 | 0 | 4 | 6 | 3 | 9 | 12 | 6 |
| **Total Orders/day** | 1.1L | 69K | 0 | 73K | 69K | 35K | 2.2L | 2.7L | 35K | 4.4L | 4.2L | 2L | 5L | 4.1L | 2L |

**Summing all order values gives the total orders delivered in a day around 30 lacs. Out of this around 35% belongs to Amazon, that would give a figure of around 10 lakh packages per day.**

# Daily revenue of Airport



## Estimate the daily revenue of an airport

### Assumptions

- 1. Considering only the most substantial revenue streams.
  2. Assuming that shops pay only a fixed rent.
  3. Number of flights per hour is a function of the kind of rush.
  4. Assume that the primary revenue source from advertisements are billboards.
  5. No. of Flights per hour is a function of the no. of airstrips.

### Methodology

- Advertisement Revenue= revenue from billboards & experience areas.
- Area of billboards * price/m2. Assuming Price/m2 is 200 for a day. Assuming 6 experience areas and 75k/day as charge.
- Airline charges: Fixed charges (domestic) : 50k, Fixed charges (international) : 100k.
- Average shop charges = 4000/day; parking charges = 100.
- No of airstrips – 3, Low rush – 1 flight per strip ; Medium – 2 flights per strip High – 4 flights per strip

**Revenues of an airport**

**Airlines**
- Fixed Fees
  - Domestic
  - International
  - **= # airlines* fees/airline**
  - = 10 * 50000 = 5 lacs
  - = 15*100000 = 15 lacs
- Per Landing revenues
  - Domestic
  - International

| Flights | Domestic | Int. |
|---|---|---|
| # flights | 297 | 99 |
| Flights/hr | 2500 | 7500 |
| Total | 7.425 | 7.425 |

| Rush Hour | Low | Medium | High |
|---|---|---|---|
| Hours | 6 | 6 | 12 |
| Flights/hr | 6 | 12 | 24 |
| Flights/day | **36** | **72** | **288** |

**Shops**
- # of shops x Rent/shop
- 250*4000 = **10 lacs**

**Parking**
- # of vehicles x Fees/vehicle
- # of people / people/vehicle (3)
- # of flights x people/flight
- **= 396*200/3*100 = 2.64 lacs (Assuming 10% vehicles are parked)**

**Advertisement**
- Area of billboards
- Experience Areas
  - Taking 6 experience areas
- Billboards

| Type | Small | Medium | Large |
|---|---|---|---|
| Number | 500 | 250 | 50 |
| Size (sq. ft) | 2*2 | 3*5 | 8*10 |
| Total | 2000 | 3750 | 4000 |
| =9750*200 = 19.5 lacs | | | |

**= 4.5 + 19.5 =24 lacs**

**Summing all values gives the total revenue as 20 + 14.85 + 2.64 + 24 = Rs. 61.5 lacs/day.**

# Automobile Tire Market



## What is the size of automobile tire market in India in 2020?

### Assumptions

- By size we mean the number of automobile tires
- Consider only 4 wheeler passenger vehicles
- Average household size is 6 for rural and 4 for urban
- Lower income segment don't own cars and Urban high incomes own 2 cars per family,
- Average life of 12 years for cars and 5 years for tires
- Each new car has 5 tires (4 operational + 1 spare)

### Methodology

- Total number of 4 wheelers = Number of cars owned by rural + urban households
- Urban and Rural areas to be divided into 3 classes each- High income , Middle income & low income
- Every class will have different proportion of families owning the car
- Total Number of 4-wheelers(N) owned can be divided in New (N/12) and Old (11N/12)
- New cars will have 5 new tires and old cars will have 5 old tires replaced over 5 years

**Total Population (1.4 bn)**

Rural (70%) → High Income (15%), Mid Income (35%), Low Income (50%)

Urban (30%) → High Income (30%), Mid Income (50%), Low Income (20%)

| #Households | =1.4*0.7*0.15/6 = 24mn | =1.4*0.7*0.35/6 = 57mn | =1.4*0.7*0.5/6 = 81mn | =1.4*0.3*0.3/4 = 31mn | =1.4*0.3*0.5/4 = 52mn | =1.4*0.3*0.5/4 = 52mn |
|---|---|---|---|---|---|---|
| Penetration of 4-wheelers | 80% | 10% | 0% | 95% | 60% | 0% |
| # 4-wheelers per household | 1 | 1 | 0 | 2 | 1 | 0 |

**Total #4-wheelers = 115 mn**

- New 4-wheelers ~ 10 mn → Number of tires per year = 10*5 = 50
- Old 4-wheelers ~ 105 mn → Number of tires per year = 105*5/5 = 105

**Total # Tires ~ 155mn**

# Wine Consumption



## Estimate the number of bottles of wine consumed in India in a week.

### Assumptions

- Rural, older and urban-lower income group people don't consume wine.
- Wine in India is consumed for both drinking and cooking purposes.
- Penetration of wine drinkers in India is 40% of the total alcohol drinkers.
- Wine consumed for cooking purposes would be 5% of the total wine consumed for drinking purpose.

### Methodology

- Demand side approach is used
- Number of bottles of wine consumed (drinking) = Number of glass of wine consumed per week/ Number of glasses in an average wine bottle
- Number of glass of wine consumer (per week) = Total wine drinkers * #glasses of wine consumed by an average drinker per week
- Number of bottles of wine consumed = Total bottles of wine consumed for drinking + cooking purposes

**Total Population (1.4 bn)**

**Rural (70%)**

Rural people won't drink wine

**Urban (30%)**

**Children (0-19 yrs) (20%)**

**Working Population (19-65 yrs) (70%)**

**Older population (65yrs+) (10%)**

**Lower Income (40%)**

**Middle Income (40%)**

70% drink alcohol

**High Income (20%)**

90% drink alcohol

| #People who drink alcohol (Urban area) | =1.4*0.3*0.7*(0.4*0.7+0.2*0.9) =13mn |
|---|---|
| % of wine drinkers in India | 40% |
| Total wine drinkers in India | 13mn * 0.4 = ~5mn |
| #Wine Glasses consumed by an average wine drinker | 2 glasses/week |
| #Glass of wine consumed per week in India | ~10mn |
| #Glasses in an average wine bottle | 8 glasses |

#Bottles of wine consumed for drinking purpose = 1.25mn

#Bottles of wine consumed for cooking purposes = 5%*1.25mn = ~0.05mn

**Total #Bottle of wine consumed in India in a week**
**~1.3mn**

# Bisleri Water Bottle (Part 1)

The Consulting Club

## Predict the user base of 1 litre Bisleri water bottle in Delhi

### Assumptions

- Yearly tourists will be our potential customer base and restaurants will be potential business that buys Bisleri Bottle
- Tourists and Restaurants are Direct Customers
- Foreign tourists are 1% of domestic tourists in Delhi
- High Income Indians prefer to travel internationally

### Methodology

- User Base = Tourists in a year + restaurants in Delhi
- Tourists that Delhi experience in a year = Domestic Tourists + Foreign Tourists
- Domestic Tourists in Delhi = # People who go on trip somewhere in India/# Tourists Spots
- Foreign Tourists = 20% of Domestic Tourists

| Income Group | % | Penetration | Total |
|---|---|---|---|
| **High** | 10% | 40% | 0.04 |
| **Medium** | 30% | 80% | 0.24 |
| **Low** | 60% | 10% | 0.06 |

**Tourists in Delhi in a year**

Domestic Tourists

Foreign Tourists

Total Tourists in India

# Tourist Spots

Age Group: 18-50 yrs (65% of 1.4bn)

15

Domestic Tourist = Total Tourist in India/ Tourists Spots
= (0.04+0.24+0.06)*0.65*1.4bn / 15
~ 20 million

Foreign Tourists = Domestic * 0.01
= 200K

**Percentage of tourists buying mineral water bottle = 50% of Domestic Tourists + 100% of Foreign Tourists**
**= 0.5*20 million + 200K**
**= 10.2 million**

**Percentage of tourists buying Bisleri = 50%**

**# Potential Customer base in a year = 5.1 million**

# Bisleri Water Bottle (Part 2)



## Predict the user base of 1 litre Bisleri water bottle in Delhi

### Assumptions

- 3,4,5 Star and Mall restaurants = 50% 1 & 2 star
- Bachelors prefer to order and dine out only during special occasion
- Working Hour of a restaurant = 8

### Methodology

- # Restaurants in Delhi = # People who dine out per day/Average daily capacity of a restaurant

| Category | % | Penetration | Frequency |
|---|---|---|---|
| **Office Goers Parties** | 30% | 50% | Once in 2 weeks |
| **Bachelors** | 30% | 50% | Once a week |
| **Family** | 20/4 | 50% | Once a month |

Population of Delhi = 20 million

**# Restaurants in Delhi**

- 1 & 2 Star
  - # People who dine out daily
    - Total = 0.3*0.5*20million/14 + 0.3*0.5*20 million/7 + 5million*0.5*4/30 ~ 980K
  - Avg. Daily Capacity
    - Seating capacity * occupancy rate * working hours = 40*0.4*8 = 96
  - Total # 1 & 2 star restaurant = 980k/96 = 10,200K
- 3, 4 & 5 Star & Mall restaurant
  - Total # 3,4, 5 star & Mall restaurant = 0.5*10.2K = 5.1K

**Total restaurants in Delhi = 15.3k**

**User base of Bisleri Water Bottle = Tourists + 50% of all restaurants = 5.1 million tourists & 7,650 restaurants**

# Sanitizer Demand



## Estimate the amount of sanitizers used in Delhi in a month

### Assumptions

- Only personal use sanitizers estimated.
- If a family uses sanitizers, the usage remains same across all income segments. (usage = 100ml/month/family
- Family size remains the same across all income segments (=4)
- Penetration of sanitizers is 0% in below poverty line section of economy as increases as income increases

### Methodology

- Amount of sanitizers used = Consumption/ family * number of families using sanitizers
- To estimate number of families using sanitizers, we start with the population of Delhi and divide it into income segments
- Number of families in each segment is calculated
- Based on observation, penetration in each segment is decided and then number of families using sanitizers in each segment is estimated
- Number of families is multiplied by average consumption to get the sanitizer demand in a month

**Population (19m)**

| | Below Poverty Line | Low Income | Mid Income | High Income |
|---|---|---|---|---|
| Proportion of population | 10% (1.9m) | 30% (5.7m) | 40% (7.6m) | 20% (3.8m) |
| No. of families (if size =4) | 0.47 m | 1.4 m | 1.9 m | 0.95 m |
| Penetration | 0% (0m) | 30% (0.42 m) | 60% (1.14 m) | ~100% (0.95 m) |

**2.51m**

Let avg monthly usage of household = 100ml

Monthly Demand = No. of households * avg monthly usage/ household

**Monthly Sanitizer Demand = 25.1m L/month**

# BCom(H) Admissions in DU

## Estimate the number of BCom (H) admissions in DU

### Assumptions

- Equal number of Tier 1, 2 & 3 colleges offering BCom
- 80 colleges under DU, 70% offers BCom
- Tier 1, 2 & 3 colleges reserves 80%, 60% and 40% of their BCom seats respectively for BCom (H) admissions
- Less number of seats will remain vacant in top tier colleges at the end of admission cycle

### Methodology

- DU colleges are to be divided into 3 categories – Tier 1, Tier 2 and Tier 3 colleges
- Total number of BCom (H) admissions = Number of students in Tier 1 + Tier 2 + Tier 3 colleges
- Number of admissions in a college = Total #seats * % seats reserved for specific course * {1-% seats that will remain vacant}
- There are two different courses offered under BCom – BCom (Honors) & BCom (Program)
- Top tier colleges will have more BCom (H) seats as compared to the other tier colleges

**Colleges offering BCom(H) (80*0.6)**

**Tier 1 (16)** | **Tier 2 (16)** | **Tier 3 (16)**

| #BCom Seats | =16*500 = 8000 | =16*500 = 8000 | =16*500 = 8000 |
|---|---|---|---|
| % of BCom (H) seats | 80% | 60% | 40% |
| % of vacant BCom (H) seats at the end of admission cycle | 5% | 15% | 20% |

**Total #BCom seats = 24000**

- **BCom (H) seats (Tier 1) ~ 6400** → **Number of students = 6400*0.95 = ~6080**
- **BCom (H) seats (Tier 2) ~4800** → **Number of students = 4800*0.85 = ~4080**
- **BCom (H) seats (Tier 3) ~3200** → **Number of students = 3200*0.8 = ~2560**

**Total #BCom (H) students ~ 12,720**

# Credit Cards Issued



## Estimate the number of credit cards issued in Delhi per annum

### Assumptions

- Population of Delhi : 20 million
- Size of average household : 4 people
- Average life of card = 3 years
- Average number of cards / household = 1
- High income and Middle income groups of Urban population and High income group of Rural population own credit cards

### Methodology

- No of households = Total Population/Average size of household
- No of cards per household is considered by taking an average of all the households (Across all categories)
- Considering that all households of high income group of rural population own a card would compensate for multiple cards in households of high income group of urban population.
- Considering only upper middle income group of urban population owning cards, we take 50% of the middle income segment for simplicity.

**Population of Delhi**

- **Urban (70%)**
  - High Income (25%)
  - Middle Income (55%)
  - Low Income (20%)
- **Rural (30%)**
  - High Income (15%)
  - Middle Income (30%)
  - Low Income (55%)

Population owning credit cards
= 20 million [ 0.70 ( 0.25 + 0.55 * 0.50 ) + 0.30 ( 0.15 ) ]
= 8.25 million

4 member/family
So, 8.25/4
=2.0625

1 card works for 3 years
So, 2.0625/3
=0.6875

**Total Credit cards issued in Delhi per annum = 687500**

# Revenue of Dream 11

## Assuming Dream11 is starting its business in India (2018), Estimate its total possible revenue in the first year

### Assumptions

- 70% of total revenue is generated by cricket
- No other competitor are present in the online fantasy gaming sector
- Focus is more on the urban market as it's the first year of business

### Methodology

- We start with calculating the revenue from cricket and will adjust for other sports in the end
- Filters for geography (urban & rural), gender, sports viewership, cricket viewership, digital payments and frequency of usage are utilized to arrive at the final numbers
- The calculated value for urban (cricket) is extrapolated to include all sports and demography

# population 400 M

Revenue from Urban: 80%

**Revenue of Dream11**
- **Cricket (70%)**
  - Urban (30%)
  - Rural (70%)
- **Other Sports(30%)**

Revenue from Rural: 20%

| Age | 18-25 (15%) | | 26-40 (20%) | | 40+ (%0%) | |
|---|---|---|---|---|---|---|
| | Male 30M | Female 30M | Male 40M | Female 40M | Male 100M | Female 100M |
| % watch sports | 60% 18M | 40% 12M | 50% 20M | 30% 12M | 40% 40M | 20% 20M |
| % watch cricket (70%) | 13M | 8M | 14M | 8M | 30M | 14M |
| % Use digital payments | 70% 9M | 70% 6M | 80% 11M | 80% 6M | 50% 15M | 50% 7M |
| % play fantasy sports | 20 % 2M | 15% 1M | 15% 1.5M | 10% 0.5M | 5% 0.8M | - |

# Dream11 players 6 M

Frequency

**Dream11 Players**
- **High (10%)**: 0.5M
- Medium (30%): 2M
- Low (60%): 3.5M

| **# bets placed** | **60/year** | **48/year** | **18/year** |
|---|---|---|---|
| Avg. value per bet | 500 | 250 | 100 |

Total Revenue from cricket (urban) = 4530 Cr

**Total Revenue accounting all demography and sports = <u>8090 Cr</u>**

# Revenue of Pickpocket

## Estimate the earnings of a pickpocket working in the market area of a metropolitan city

### Assumptions

- The pickpocket operates only in one market
- 70% of people visiting the market visit at least one shop
- Customer count per shop is considered constant for ease of calculation but could be segregated further.

### Methodology

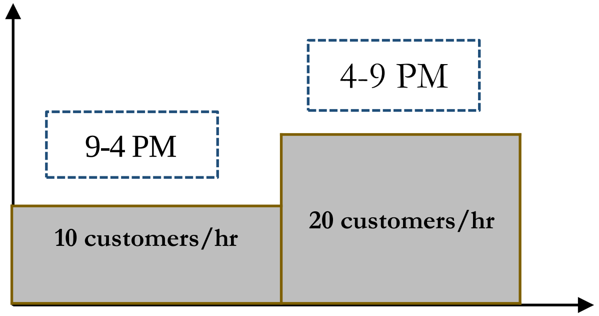
- We start with calculating the total number of people present in the market at any time based on shop timings and customer count.
- Further we segregate the customers based on the number of people who carry wallets and pickpockets success frequency.
- Finally an average wallet value is used to calculate the total revenue of the pickpocket.

People who visit shops 70%

**# people visit Kamla market**

**Visit shops** | **Passerby**

Average no of shops visited by one person = 3




**Total number of people = (No of shops)*(customers per shops)/(Avg. no of shops visited by one person)**

**#people in the market who visit shops = 150*200/3 = 10000**

**Accounting for 30% of people who are passerby = 10/7 * 10000 = 14000**

**# people visit Kamla market**

**# people carrying wallet (60%)** | **# people not carrying wallets (40%)**

Careless (30%) | Careful (70%)

# viable pickpocket targets = 2700

Average amount per wallet = 500

Revenue (day) = (# viable targets)*(% attempted (3%))*(% successful (10%))*(Avg. amount per wallet)

**Revenue = 2500**

# Number of Movie Screens



## Estimate the number of movie screens in Delhi

### Assumptions

- No of seats in a screen is 300
- Operational hours in a day = 15 hours
- 1 show during morning, afternoon, and evening
- 2 shows during night time
- Frequency of a movie buff is 4 and casual watchers is 1 movie per month

### Methodology

- We start by splitting the population into income groups
- Further we segregate the people into movie buffs and casual watchers
- We calculate the number of people watching movies on a single screen
- Using the total number of movie watchers in a month we can identify the number of movie screens required to cater to the demand.

**1 week**

- **Weekdays**
  - Day time shows: Occupancy = 60%, No of shows = 3
  - Night time shows: Occupancy = 60%, No of shows = 2
- **Weekends**
  - Morning & Afternoon: Occupancy = 60%, No of shows = 2
  - Evening & Night: Occupancy = 60%, No of shows = 3

Total audience catered by a screen = (Occupancy)*(No of shows)*(No of days)

**For a month one screen can cater to 32000 seats**

**Population of Delhi (2 cr)**

- **Low Income (25%)**
- **Middle Income (45%)**
  - Movie Buffs (10%)
  - Casual Watchers (25%)
- **High Income (30%)**
  - Movie Buffs (10%)
  - Casual Watchers (25%)

Total number of seats booked = (No of people either movie buff or casual watchers)*(Frequency)

Total no of seats booked (Middle income + High income) = (90L*10%*4 + 90L*25%*1) + (60L*10%*4+60L*25%*1) = 97.5L

**No of Screens = 97.5L/32000 = 300 screens**

# Petrol Consumption



## Estimate the quantity of petrol used per day (in litre ) for transportation in NCR

### Assumptions

- Diesel and CNG is used by public transport and commercial
- vehicle (busses, vans, and trucks)
- Average distance traveled by each vehicle (per day) = 20 km
- Mileage (in km/liter) : 2-Wheeler = 50, 4-Wheeler = 10

### Methodology

- Calculate the Number of households
- Calculate Vehicles per household.
- Calculate the consumption by each vehicle.
- Scale up the consumption to the entire population

### Average no. of vehicles possessed by households

| Vehicle | BPL | Low Income | Middle Income | High Income |
|---|---|---|---|---|
| 2 wheelers | 0 | 0.5 | 1 | 1.5 |
| 4 wheelers | 0 | 0 | 1 | 2 |

### Total number of vehicles

| Vehicle | BPL | Low Income | Middle Income | High Income |
|---|---|---|---|---|
| 2 wheelers | 0 | 15 lakh | 15 lakh | 4.5 lakh |
| 4 wheelers | 0 | 0 | 15 lakh | 6 lakh |

**Population of NCR (2cr)**

Average members per household = 5

**Total # of Households = 60L**

**BPL (20%) = 2L**

**Low Income (50%) = 30L**

**Middle Income (25%) = 15L**

**Upper Income (5%) = 3L**

| Vehicle | Distance Travelled (km) | Litres of Fuel Used (Distance/Mileage) |
|---|---|---|
| 2 wheelers | 20*(15,00,000 + 15,00,000+ 4,50,000) = 6,90,00,000 | 13,80,000 |
| 4 wheelers | 20*(15,00,000 + 6,00,000) = 4,00,00,000 | 40,00,000 |

**Total Fuel Used = 53,80,000 Litres**

Assuming the 20% consumption is of diesel, Petrol Used in NCR (by NCR People) is 0.8 * 53,80,000 = 43,04,000

Assuming 10% of the consumption is by non-residents of Delhi, the quantity of petrol used per day (in liter) for transportation in Delhi

= **1.1 * (43,04,000) ≈ 48,00,000 Litres**

# Swiggy Drivers



## Estimate the number of Swiggy drivers in Mumbai

### Assumptions

- Lower income strata not considered for analysis
- Market share of Swiggy = 45%
- 1 order is delivered by a driver in 30 minutes during peak hours ( from restaurant to delivery location )
- The order requirement during peak hours is double the normal hour

### Methodology

- No. of Swiggy drivers would be the number required to deliver orders during the peak hours
- Let no. of orders = Population x Smartphone penetration x Internet penetration x Market share of Swiggy x Frequency of orders

**Population of Mumbai 2 crore**

Income

| **Upper Income (10%)** | **Middle Income (40%)** | **Lower Income (50%)** |
|---|---|---|
| 20L | 80L | 1 crore |

| Income Segment | Smartphone Penetration | Internet Penetration | Online food delivery | Total |
|---|---|---|---|---|
| Upper Income | 100% | 100% | 70% | 14L |
| Middle Income | 80% | 80% | 40% | 20.4L ~20L |
| Lower Income | 40% | 10% | 1% | 4,000 |

Total # of people preferring online food delivery = 34L

Total No. of people using Swiggy for ordering food = 34L * 45% = 15.3L ~ **15L**

**Swiggy Users (15L)**

| **High Order Frequency (2%)** | **Medium Order Frequency (20%)** | **Low Order Frequency (78%)** |
|---|---|---|
| 0.3L | 3L | 11.7L |
| 10 orders per week | 5 orders per week | 1 order per week |

Total # of orders per week = (0.3x 10 + 3 x 5 + 11.7 x 1.5) = 35.55L

# of orders/ hr = 51/18*7 = 28.2K

Order during peak hours = ~56 K

# of drivers required to meet this demand = Peak orders/ Orders delivered by a driver in 1hr

**Total No. of Swiggy drivers = 28K**

# Delhi Metro Passengers



## Estimate the number of passengers in Delhi Metro per day for yellow line

### Assumptions

- Hours of operations of Delhi metro is from 5:30 AM to 11:30 PM
  Capacity per coach is 50 and no. of coaches is 6.
- If time interval between two trains is 2 min for one direction, for both directions, it would 1 min

### Methodology

- We will use a bottom up approach to find the number of passengers/coach and extrapolate it to find no. of passengers/day.
- No. of passengers per day = #. of passengers/hr * Hours of operations/ day
- No. of passengers per hour= # of metro trains/ hr * no. of coaches * capacity/coach* % occupancy

**No. of passengers**

- **Weekday**
- **Weekend**

| | Weekday: High occupancy hours (6hrs) | Weekday: Med occupancy hours(7hrs) | Weekday: Low occupancy hours(5hrs) | Weekend: High occupancy hours(3hrs) | Weekend: Med occupancy hours (7hrs) | Weekend: Low occupancy hours (8hrs) |
|---|---|---|---|---|---|---|
| Occupancy % | 150 % | 100 % | 40 % | 120 % | 90 % | 30 % |
| Frequency of trains / min | 1 | 2/3 | 1/2 | 1 | 2/3 | 1/2 |
| # of passengers | 60*50*6*1.5 =27K | 40*50*7*1 =14K | 30*50*5*0.4 =3K | 60*50*3*1.2 =10.8K | 40*50*7*0.9 =12.6K | 30*50*8*0.3 =3.6K |
| # of Passengers/day | = (44*5+27*2)/7 = 39.1K ~39K | | | | | |

**Total No. of Delhi Metro passengers per day in yellow line = 39K**

# Toothbrushes

The Consulting Club

## If a UFO sucked all the toothbrushes in India, how many would it have?

### Assumptions

- Toothbrush penetration-90% urban and 80% rural
- Replacement frequency- 2 months Urban; 4 Months Rural

### Methodology

- Total no of toothbrushes = No of toothbrushes in Households + No of toothbrushes in supply chain(retailers/distributors)
- No of toothbrushes in the supply chain can be assumed to be equal to 1 replacement cycle.
- Therefore just double the no of toothbrushes in households to account for the total number.

**Total No of toothbrushes**

**Urban**

#Population

Penetration

400 million

0.9

**Rural**

#Population

Penetration

900 million

0.8

**No of toothbrushes in households = 360+720=1.08 billion**
**Total Number of toothbrushes = 2.16 billion**

# Part I – Practice Cases

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# Practice Cases: Table of Contents

# Profitability

Case Index | Main Index

# Apple Orchard Farmer



**Your client is a farmer who owns an apple orchard. He has seen reduction in profit in the past year. Find reasons and recommend solutions.**

**Reiterating the problem statement, our client owns an apple orchard. He has seen reduction in profit in the past last year. I need to find reasons and recommend solutions.**

Yes, you are right. Please go ahead!

**I would like to know more about our client. Does our client manage only manufacturing or distribution as well? And where is our man**

The farmer is located in Northern India and owns 30 acres of land dedicated to apple production only.

**Okay! To understand the business better, I would like to know about competitors and their practices, and understand the chain from the farm to final customers.**

Although there are no new regulations in the industry, all farmers have been impacted and are having a tough time. I would like you to list out who the members of the chain in this business could be..

**That would be my pleasure, Ma'am. I think there would be a system of Distributors to take the produce to the retailers who finally sell it to customers. Or there can be wholesalers as well. But since apples expire after a short duration, I think they would be directly sold to the customers.**

That's right. There are no wholesalers and there are 2 distributors in the chain as well.

**Okay. Apart from direct consumption in raw form, are there any other usage of apple like juices?**

Yes, they are widely used in gifting, candies, sweets, jams and beverages.

**That seems to be a really important piece of information for the problem. I think since the company has observed reduction in profits, I would like to break the profit structure into Revenues and Costs. Do you want me to look at any particular component first?**

I think you can start with revenues as there hasn't been much changes on the cost side.

**Okay. Revenues can be expressed as Price/unit and total units. Have the prices changed in recent?**

No, the prices have been fairly constant for past 3-4 years.

**Has there been a major change in the supply demand equilibrium recently?**

As matter of fact, supply has remained same but the demand is decreasing due to unknown reasons.

**Let me analyse the demand from 4 angles: Awareness, Accessibility, Affordability, Acceptability. I would like to know if there have been any major changes in these factors.**

That's an impressive way to look at the demand. The farmer is not able to reach the market fluently.

**Oh that seems like there is a problem in the accessibility component of the demand. The major stakeholders here are the farmer, distributors, retailers and customers. How are the distributors and retailers performing compared to the previously set benchmark?**

There seems to be a falling response from retailers. Can you think of potential reasons for the same?

**Sure, Ma'am. I think there can a be wide array of reasons for potential fall in response. I would like to classify them into 2 buckets – Direct Industry and Processing Industry. The direct industry would include Modern Trade, Hotels, Export, Gifting while the processing industry, includes candies, jam & beverages. Are there any particular complains about any particular product line?**

Yeah, the apple based beverage industry has been hit because of the false rumours of alcohol present in the drink. The loyal customer base has decided to move away from the beverages as a result.

**Well, that's unfortunate. Have there been any steps taken to counter this situation?**

Since we couldn't identify the problem earlier, there were no plans in place. Can you suggest some?

**Since farmer is running the business on his own and the complete industry is fragmented so a common action is less feasible. We can definitely salvage to sustain. Hence we should try finding other places to sell apples. Maybe export more apples. Assuming apples are unsold, stock apple in cold storages for next year. A far reached solution could be having a detailed test done and publishing results in media.**

Those are really helpful suggestions. Thank you for your analysis.

# Apple Orchard Farmer

Profitability | Easy | Bain & Co.



**Your client is a farmer who owns an apple orchard. He has seen reduction in profit in the past year. Find reasons and recommend solutions.**

## Case Facts & Notes

- **Context -** Farmer in north India. Owns 30 acre of land for apple production only.
- **Industry Scenario** – All players in the industry impacted.
- **Change in Regulation –** None
- **Uses -** Gifting, Candies, Sweets, Jams, Beverages
- **Value Chain**

2 Distributors

Retailers

Customers

## Approach

- **Profits**
  - **Revenues** ⬇
    - **Price/Unit**
    - **Volume** ⬇
      - **Demand**
        - **Awareness**
        - **Accessibility**
        - **Affordability**
        - **Acceptability**
      - **Supply**
  - **Costs**

**Farmer** → **Distributors** → **Retailers** → **Customers**

- **Retailers**
  - **Direct industries**
    - Modern Trade
    - Hotels
    - Export
    - Gifting
  - **Processing Industry**
    - Candies
    - Jams
    - **Beverage**

**Apple based Beverage industry hit**

**Rumors of alcohol in drink have impacted demand of these beverages.**

## Recommendations

- Try finding other places to sell apple. Export more apple.
- Since apples are unsold, stock in cold storage for next year.

# Retail Chain



**A chain of retail stores recently increased the number of stores. However, with increase in the stores, the profitability has dropped.**

**I would like to clarify a few things before I start analyzing the case.**

Sure.

**Can you tell me the type of retail stores we are taking about? Where are they located? And the number of stores the chain has with a break-up of new vs old stores?**

It is general retail store which is operational round the clock just like the chain of 24Seven. All the stores are in Delhi with 35 stores out of which 5 are new and 30 are existing stores.

**I follow that the store is in the process of expansion. What are the products being offered by the old stores? Also, are the products offered in new stores same or different?**

The offerings of old and new stores are the same. The products offered are packaged foods, groceries and personal care

**Can you tell me about the target customer segment the stores aims to serve? The younger or older generation? I believe if its operational 24*7, it is targeted more towards younger generation**

Yes, the customers visiting the store are 20-30 years old.

**Okay. Have the profits gone down or profitability per store reduced? Also, is it just for new stores or are all the stores facing the same issue?**

Profits have gone down, and the problem is with all the stores.

**Are there any recent regulatory changes which would hinder operations of retail stores?**

No change.

**I would like to proceed with dividing profit in revenue and cost. Revenue can be further broken down into # of stores and revenue per store. Since the problem is across all the stores, I would not delve on old vs new stores separately. Cost can be broken down into # of stores and cost per store, which could be further broken into fixed and variable cost. Is the structure good to proceed or am I missing something? Also, would you like me to investigate revenue side or cost side first?**

The structure looks fine to me. Kindly investigate the revenue side.

**I can see number of stores have gone up; I believe revenue per store has reduced over time?**

Yes, the revenue per store has gone down.

**Revenue can be further broken down into Average ticket size and # of customers? Has there been a reduction in either of these or both?**

Average ticket size has remained same though the number of customers per store has reduced

**The reduction in number of customers could be due to our inability to supply the products or demand has reduced?**

There are no concerns on supply side, can you further investigate demand side of it?

**Demand can be impacted due to internal or external factors. Any change in internal policies of the store?**

No change.

**Any change in landscape? Industry has stagnated or change in competition landscape like entry of new player/new stores by current players or change in customer's perception of the stores?**

Industry is fairly growing at 5%. No changes in both competitive landscape and customer's perception. There is no major change in the total number of customers visiting the chain, but 80% of the sales take place between 6pm-2 am

**That is interesting. Total # of customers visiting the chain is same but # of customer per store has reduced which means the customers are getting divided into increased stores. Also, the timeline of 6PM- 2AM suggest that Stores essentially used for emergency buying post 6pm or for midnight cravings.**

That's correct

**Do you want to me explore the cost side of it?**

Not required as of now. Can you suggest ways to increase the revenue?

**Are we open to idea of changes which would require major expenses?**

No, the client doesn't want to incur major expenses

**So, the client can either increase the average ticket size or increase number of customers/store. To increase the average ticket size, We can introduce new product categories like stationery, fresh groceries; start home delivery in nearby areas for bigger orders; & add loyalty programs to regular shopper. To increase the # of customers, the client needs to work on marketing campaign & promote the chain as a day store similar to a kirana store to increase revenue during daytime & to increase revenue post daylight, highlight safety aspects & provide home deliveries.**

Sounds good to me. We shall move to the next rounds now. Thanks for your time.

# Retail Chain

Profitability | Easy | Bain & Co.



**A chain of retail stores recently increased the number of stores. However, with increase in the stores the profitability has dropped.**

## Case Facts & Notes

- **Company-**It is general retail store chain like 24Seven. All the stores are in Delhi with 35 stores out of which 5 are new and 30 are existing stores.
- **Products** - Packaged foods, groceries and personal care.
- **Customers –** 20-30 years old
- **Regulatory Changes** - None

## Approach

- Profit
  - Revenues
    - # of Stores ( )
    - Revenue Per Store ( )
      - Average Ticket Size
      - Revenue Per Customer
        - Demand ( )
          - **External**
            - New Entrant
            - Regulatory Challenges
            - Industry wide downturn
            - Customer perception
            - Accessibility
        - Supply
          - **Internal**
            - Customer Service
            - Product quality & Variety
            - Interior
            - Customer service time
            - **Redistribution of customer**
  - Costs

## Recommendations

- **To increase the average ticket size**, we can
  - Introduce new product categories like stationery, fresh groceries.
  - Start home delivery in nearby areas for bigger orders.
  - Add loyalty programs to regular shopper.
- **To increase the number of customers**, we can
  - Work on marketing campaign
  - Promote the chain as a day store similar to a kirana store to increase revenue during daytime
  - To increase revenue post daylight, highlight safety aspects & provide home deliveries.

# Automobile Company Sales



**You client is an automobile company experiencing lower sales recently. Figure out the problem & suggest ways to increases sales in the next 3 months**

**So, just to clarify, I would re-iterate the problem statement. Our client is an automobile company facing declining sales recently & they want us to find out the problem & suggest ways to increase sales in next 3 months.**

Yes, absolutely right. Go ahead!

**Before delving deeper into the Case, I would like to ask a few clarifying questions. Is that fine?**

Sure, go ahead!

**Does the client operate only in India & are there any other operations run by the client?**

So, the client only manufactures personal cars. It is based out of India & serves Indian market.

**Also, since when is the client facing this problem?**

Since last 3 months.

**Thank you sir! Do we have any information regarding what kind of different products our client manufactures?**

Yes! So, the client manufactures only a single product, i.e., Single model of a Single type of car.

**One last question. Do we know about the presence of the client in its value chain? I mean in which all segments of the automobile value segment the client operates?**

Good question! So you can consider that the client operates all across a general automobile value chain from manufacturing till after sales services.

**Sure sir, thank you! Just provide me a couple of minutes to gather my thoughts and analyse the problem.**

Sure!

**Sir, since this is a case of declining sales, it will have two components: Quantity sold & Price/Unit. Do we have any information regarding which of these have changed, i.e., either increased, decreased or remained constant in last 3 months?**

Sure! So, the quantity sold has gone down in last 3 months & the Price/ Unit has remained unchanged.

**Since the quantity sold has declined, it can be due to either a supply side issue or a demand side issue. What is the case with our client?**

Yes, good observation. You can consider it a demand side issue.

**Thank you sir! So, the demand side issue can be further segmented into 2 segments of Marketing & Customer pull. Do we know on which of these two fronts our client has not been performing well in last 3 months?**

Yes! Consider it to be related to Customer pull issue.

**So, we can divide Customer pull issue into four issue of Product visibility, Product likability, Affordability & feasibility. So, doe know which of these four factors related our client's product is affecting the client's customer segment?**

That is quite insightful. Yes, the issue is related with the product feasibility.

**Since the automobile sector is highly regulated, is there any regulatory issue that our client is facing due to which the product feasibility is impacted?**

Yes, the Government has announced to introduce BS VI regulations soon encouraging people to stop buying for now and wait till later when the company will give heavy discounts. Do you have any recommendations?

**Yes Sir! Since we have a target to increase sales in next 3 months, I can come up with following two recommendations. First, Client shall focus on exporting its product & second, it shall focus on making sales through billing earlier and receiving money later. This will result to increase in sales**

Good job! Looks good to me. Hope to see you in the next round.

# Automobile Company Sales

Revenues | Easy | Bain & Co.

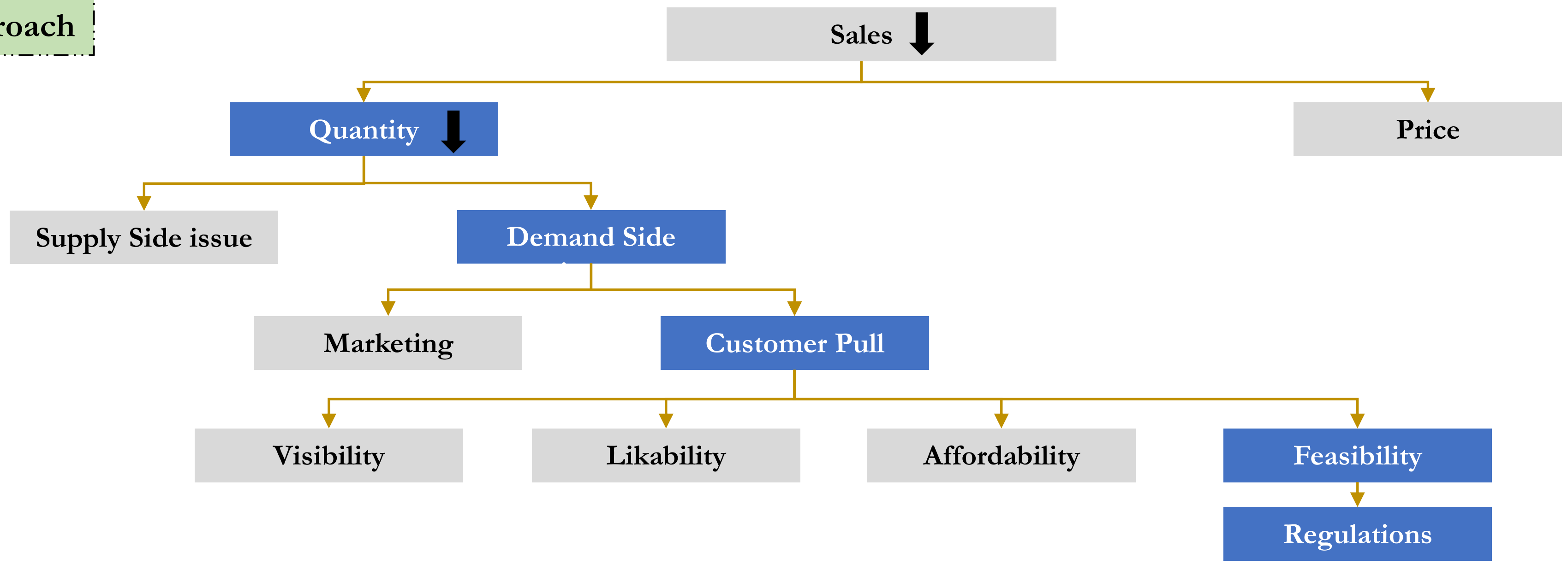
The Consulting Club

**You client is an automobile company experiencing lower sales recently. Figure out the problem & suggest ways to increases sales in the next 3 months**

## Case Facts & Notes

- **Client-**
  - Manufactures Personal Cars
  - Based out of India, serves India
- **Product-**
  - Single Product, i.e., Single Model of a Single Car
- **Period-** Since last 3 months
- **Value Chain-**
  - Present across the general automobile value chain

## Approach




Government has announced to introduce BS IV regulations soon encouraging people to stop buying for now and wait till later when the company will give heavy discounts.

## Analysis

- The company can improve sales by focusing on the 4Ps
  - Product: Modifying the product to conform to BS IV norms
  - Price: Introducing discounts right now on non BS IV compliant models
  - Promotion: No change
  - Place: Reaching more dealerships, if possible
- Also current strategy is not able to make the product reach the people in time.
- Problem is stock is present but it is difficult to make the stock reach people in short amount of time.

## Recommendations

- Focus on exporting the Products
- Making sales through billing earlier and receiving money later. This will result to increase in sales.

# Automobile Dealership



**Your client is an owner of automobile dealership in Delhi NCR and is experiencing flat sales. Find reasons and give recommendations.**

**So, our client is an owner of automobile dealership in Delhi NCR who is experiencing flat sales and I need to find reasons for the same and give recommendations to solve the problem?**

Yes

**Sir I would like to ask a few clarifying questions.**

Sure, go ahead!

**What does the client's business look like, what kind of services are provided by the client and where is the dealership located and what is the size of dealership?**

Apart from selling cars in the showrooms the client provides post sales car servicing and the client has 10 sales showrooms and 4 service showrooms spread across Delhi NCR.

**What is the product mix of the client?**

The sell Skoda and Audi cars, both Volkswagen brands and they deal in the premium segment of car market

**How long the client has been facing this problem and how is the competitive landscape, is it a industry wide problem, has there been changes in government regulations/laws?**

The client has been facing this problem since the past two years and it's not an industry wide problem, there has not been any change in the government regulations/laws.

**Is our client the only distributor of these cars in the city or are there other dealers as well, and how are these brands performing in the market, if there are other dealers for these brands as well are they facing the same problem?**

There are other dealers as well in Delhi NCR, the brands themselves are strong and performing well and other dealers are not facing the same problem.

**Thank you! Just provide me a couple of minute of gather my thoughts and analyse the problem.**

**Is this a supply side problem or a demand side problem, as in is our client not being able to serve customers because of constraints or there are not enough customers in the first place?**

It's a demand side problem, number of customers of the client has not been growing

**Since we already know that the demand for these particular brands is high and other distributors are doing well, the problem has to be internal. So should I look into these factors?**

Yes

**Well, the different factors that can effect the customer experience in a premium car dealership can include things like the location, aesthetics, operational hours of the showroom, sales personnel skills, quality of post sales services. Do we have a measure of these things for our client?**

The client has a customer feedback program and customer feedback has dropped and post sales service quality has dropped according to the feedback.

**Scores on surveys taken at the dealership have dropped and post sales service quality has dropped. This could be due to multiple reasons, like Quality of salespeople has dropped or they have not been trained properly or process of providing service has become obsolete or has been altered wrongly**

Yes, these are the reasons the quality of post sales services has dropped, can you suggest ways to improve this?

**To increase the quality of after sales service the client can retrain sales and service staff, the client can link bonuses/ incentives to dealership survey scores for all employees of dealership, so that they have a stake in the overall performance of the dealership. The client can review the current practices for after sales services and compare them with historical trends, if they are not up to the industry standards the client should improve that as well**

Yes, these recommendations sound good.

# Automobile Dealership

Revenues | Easy | BCG

The Consulting Club

**Your client is an owner of automobile dealership in Delhi NCR and is experiencing flat sales. Find reasons and give recommendations.**

## Case Facts & Notes

- 10 Sales Showrooms and 4 Service Showrooms
- Sells cars of Volkswagen, Skoda and Audi (premium)
- Sales flat across the board from 2 years
- Not an industry wide problem and no change in fuel prices.
- No Regulatory Changes have taken place
- Identify Reasons/causes and give recommendations

## Approach

**Factors that contribute towards Sales**

**Internal factors (specific/micro)**

- **Customer Feedback**
  - Surveys( paper forms/ at the showroom)*
  - Tele-calling ( 7-14 days after sale)
  - Questionnaires through mobile/email
  - Post sales maintenance support (car service)
  - Online Reviews: Justdial, Sulekha.
- **Sales Personnel Skills**
- **Aesthetics**
- **Location**
- **Hours of Operations**
- **Employee Compensation**

**External Factors ( Macro)**

- **Demand of Cars**
- **Competitions** — Doing things differently: payment options, margins, skills
- **Customers** — Target group, buying patterns

**Root Causes**

**1st Level:**
Customer Feedback has dropped

→ **2nd Level:**
Scores on surveys taken at the dealership have dropped.
Post sales service quality has dropped

→ **Possible Reasons**
Quality of sales people has dropped/ have not been trained properly
Change in process of providing service has become obsolete/ has been altered wrongly

## Recommendations

- Retraining of sales and service staff
- Linking bonuses/ incentives to dealership survey scores for all employees of dealership
- Review of service process and quality with comparison to history and current trends

# Kids' TV Channel



**Our client is a Kids' TV Channel that is facing a dip in revenues and advertisers are moving out of contracts. Help them fix their problems.**

**Okay, so just before we begin, I'd like to confirm my understanding. Our client is a Kids TV Channel that has declining revenues & advertisers are moving out of contacts. We've been hired to solve this issue? Right?**

Yes, that's right.

**Okay, then in that case I would like to ask a few clarifying questions.**

Sure, go ahead!

**Where is the Channel based out of and viewed? Since when are they facing these issues?**

The channel is based in the US and it's an add-on channel that doesn't come with the regular package. This issue of declining revenues has been prevailing since the past couple of years.

**Thank you sir! Regarding the problem – Are our competitors also facing the same issue?**

Not really. Some of our competitors are doing fine while some have also faced a hit like us.

**Okay, then in that case I think we should see what are the different revenue streams for our channel that have taken a hit and then view what are the competitors are doing differently in terms of those revenue streams. Is that fine?**

Yes, that seems to be a fair approach. Go ahead.

**Thank you! Then first, I'd lay out the different revenue streams I believe the channel has and then we could look into the specifics?**

Sure

**Okay, so according to me, I can currently think of four different areas from where the channel could earn money. Please correct me if I'm wrong. I think there is advertising revenue for sure also a fee must be charged from the channel's end to package and air the content based on the no. of subscribers and timing of the show. Lastly I think there must be some indirect sources too like merchandising and more.**

Yes, that's absolutely right! You can divide fee you mentioned regarding subscribers and time into two. One is a regular TV Show fee that has to be given to a channel for choosing a particular slot, while the other is a distributor fee charged per subscriber.

**Okay, thank you. In the past few years has any one of these streams specifically taken a hit?**

Yes, distributor fee has reduced.

**I can think of two reasons for that to happen. Either our subscribers have declined in number or we've reduced our distribution fee per subscriber.**

Yes, you're right. Our subscriber-base has declined.

**Okay, so I will try and enlist the reasons for this. These can be internal or external. By internal, I mean it can be that our content quality has reduced or we're having too many ads causing viewers to shift while by external, probably our competitors have launched a new show or service or customer preferences are changing.**

Internally, nothing has changed. But you're right about the competitors doing things differently. They've launched an On Demand Video Service

**That explains a lot. It could be the case that subscribers must have shifted to this new service. Not only this, the general shift of preferences is also towards internet based entertainment. If we could also launch such a service, our revenues might regain momentum. We could also compensate lost revenue by focussing on other things like merchandising, altering the show mix and increasing advertisements on different areas of the screen.**

Yes, that's absolutely right. These sound like good suggestions. Could you calculate what monetary benefit we might gain on launching this new service?

**Sure, sir. If I consider one show with 9 seasons and 22 episodes per season which is the general case, we can multiply that to the average viewers per episode and per subscriber fee to get total benefit. Is that sufficient or I should get into the specifics?**

That sounds good, it should suffice. Thank you!

# Kids' TV Channel



**Our client is a Kids TV Channel that is facing a dip in revenues and advertisers are moving out of contracts. Help them fix their problems.**

## Case Facts & Notes

- Kids TV Channel based in US
- Facing these problems for past couple of years
- Add-on channel (not a part of regular channel package)

Channel Roles:

- Content Creation
- Content Packaging
- Content Distribution

## Approach

- Revenues
  - Advertising
  - Distributor fees
    - # of subscribers
    - Distribution fees per subscriber
  - Merchandising
  - TV show fees
- # of subscribers
  - Internal factors (company specific)
    - Related to content
      - Relevance
      - Quality
    - Not related to content
      - Advertisements
  - External factors (industry specific)
    - Direct (related to other competitors)
    - Indirect (PESTLE)

One of the direct competitor has started an on-demand video service which has captured some of our client's viewership onto its own channel (root cause).

There is a general trend of shift of preferences of today's kids towards other sources of entertainment like Xbox, internet-based entertainment sources like Netflix, YouTube.

## Recommendations

1. To tackle the root problem, we can launch a on-demand video service on our channel
2. We can also circumvent the root problem by compensating the lost revenue from other sources of revenues. Suggestions for this could be
   a. Focus on merchandising revenues
   b. Changing show mix by introducing popular shows at prime time
   c. Introducing advertisements in screen headers and footers

**Benefit of Introducing an on-demand video channel:**
**Total benefit = (Price charged) × (Average viewership per episode) × (No. of episodes/Season)* (No of Seasons)**
**.**
**Price charged: $4 per subscriber** **Average viewership: 10000 per episode**
**No. of episode in one season: 22** **No. of seasons: 9**

**Total benefit: $7.92 million.**

# Apparel Company



**Your client is an apparel company in the Middle-East, and has a trade mindset. Following the oil crisis they want to reduce the prices of their goods and want to reduce their costs to be able to do the same. Suggest how they should go about it.**

**So our client is an apparel company operating in the middle east and wants us to come up with a strategy to reduce their costs? What exactly is implied by trade mindset?**

Yes, so our client procures finished goods from manufacturing hubs and then supplies it to retail stores in the middle east, primarily UAE and Saudi Arabia.

**Okay, so they provide their specific requirements to manufacturers and then sell the same to their clients, which are other stores? If that is the case I'd like to know about the types of product and from where they procure**

That's right. They sell cotton apparel and source from manufacturing hubs in China, India, Bangladesh

**Thank you. Before I analyse the operations of our client, I'd like to understand their motivation behind reducing prices and why they want to reduce costs to achieve it? I'd also like to know if there is any specific timeline across which they want to reduce costs.**

Demand in these countries has gone down due to the crisis and the client feels reducing prices would work in their favor. They do not want to substantially reduce their profit margins and hence would like to reduce costs. They would prefer quick reductions, but are open to both short and long term solutions.

**So, I'm trying to think of the entire value chain for the company and the various cost heads. What I've come up with now is that the company first procures the clothes from manufacturers i.e. inbound logistics, then it is brought to the country of sale, where the products will be stored, post which there is distribution, followed by retailing. The client would also incur marketing & admin costs. Should I go ahead with analysing the associated costs in each head, if it can be lowered and how?**

Okay, that seems like a fair approach. Lets only analyse till the distribution, as our client is only limited to that. Lets assume that the marketing and administrative costs are optimised.

**I'll begin with the costs related to procurement, which I think would be dependent on 3 factors – raw material used, design complexity and manufacturer chosen. The design complexity would affect the labour requirements and the machine requirements, whereas the manufacturer would affect the margin they take over their costs, the operational efficiency of the manufacturing plants, labour cost, rent which would be specific to the location.**

How can you reduce costs for these?

**Our client can reduce their costs drastically if they change their raw material, which from my understanding would make up a large portion of the costs. If they have been using higher quality of cotton, shifting to a lower gsm fabric would be effective. This is also likely to not have that great an effect on the demand, as the oil crisis would also change the consumer preferences, who would now be willing to purchase clothes of lower quality than before. They can reduce the design complexities of their orders, which would reduce the labour requirements. Further the company can look to procure from manufacturers which charge lower margins or in locations with lower associated costs, even if it affects the final quality as due to changing preferences, customers would now be satisfied with lower quality apparel as well.**

These seem like good suggestions, especially factoring in how each would effect the end consumers of our products. You were also right about raw material, it is actually 60% of the procurement cost to our client. Is there any other way that you can think of to reduce costs?

**Yes we can also look at the inbound logistics costs. Assuming that the quantity we procure does not change, this cost will depend on distance of shipment and mode of shipment (to determine price). One solution to reduce this would be to procure from locations within or near the Middle East. This will not only reduce the transportation costs, but also the storage costs as lesser inventory would need to be maintained owing to reduced lead times. However these countries will have higher raw material cost (India, Bangladesh have cheapest cotton), so the trade off between decreased logistics cost and increased raw material costs would have to be evaluated.**

Lets assume the decrease in logistics cost is higher than increase in raw materials cost. Can you now give your final recommendations to the client?

**In the short term the client should look to shift lower quality and hence lower cost raw material. In the long term they should begin procurement from manufacturing hubs in the Middle East or develop capabilities do so if their finances allow. This would reduce both transportation and warehouse costs.**

# Apparel Company

Cost Reduction | Easy | Kearney

The Consulting Club

**Your client is an apparel company in the Middle-East, and has a trade mindset. Following the oil crisis they want to reduce the prices of their goods and want to reduce their costs to be able to do the same. Suggest how they should go about it.**

## Case Facts & Notes

- Wants to decrease cost in light of recent oil crisis (to decrease price to customers and drive sales)
- Sells cotton apparel to large scale retailers in UAE and Saudi Arabia
- Procures final products from manufacturing hubs in India, China, Bangladesh
- Not involved in manufacturing (gives design to factories and then picks up final products) and retailing

## Approach

Procurement → Inbound Logistics → Warehousing → Distribution → Marketing & Admin Costs

**Procurement**

- **Raw Material Costs**
  - Raw Material makes up 60% of the procurement cost. Shifting to lower GSM cotton would drastically bring down costs
- **Manufacturing Unit Costs**
  - **Labor** / **Machining**
    - Shift to lower complexity designs
    - Will decrease labor costs and usage of complex machinery/ machining processes
  - **Rent** / **Utilities**
    - Client can try to negotiate rent terms
    - Can not change utility costs (electricity, fuel) as it would be fixed for a location
    - Procure from a manufacturing unit with lower utility and rent costs
  - **Manufacturers' Margin**
    - Negotiate with existing manufacturers to reduce their profit margin.

**Inbound Logistics**

- **Distance**
  - Explore options of procuring from manufacturing hubs in nearby countries
  - Will reduce the transportation cost and warehousing cost (lesser inventory to be maintained due to lower lead times)
  - Reduction in transportation cost would have to be higher than increase in raw material costs (India, Bangladesh have cheapest cotton)
- **Cost per km**
  - Cost per km is highest for air freight followed by ships and lowest for road transport.
  - Can shift to road transport when procuring from nearby countries

## Recommendations

**Short Term:**

- Shift to lower quality (GSM) fabric
- Use simple designs to reduce labour and machinery costs.

**Long Term:**

- Start Procuring from nearby locations
- Change mode of transportation to road transportation

# Quick Service Restaurant



**Your client is a quick service restaurant and is experiencing high manpower operating costs. Find reasons and give recommendations.**

**Sir, just to be on the same page, I will repeat what I understood from the question. So our client is a quick service restaurant and wants to reduce its manpower operating costs.**

Yes, go ahead!

**Sir I would like to ask a few clarifying questions.**

Sure, go ahead!

**What is a quick service restaurant? Geography? What does it serve? Standalone or a chain?**

Consider fast food chains. It's a pizza chain spread across India. They make and deliver pizzas.

**Thank you sir! Regarding the problem – Since when is the restaurant experiencing this problem? Is it concentrated in a particular geography? Are only we suffering or are competitors are also impacted?**

Well they have been experiencing this problem for the past 2-3 years. They are experiencing this problem pan India but its majorly concentrated to Metro and Tier-1 cities. As far as we know, the competitors are also impacted by it.

**Thank you sir! How is the competitive landscape and has there been a change in government regulations/laws regarding manpower that might be impacting the industry?**

No, there has been no change related to labour laws. The industry is fragmented with 2 big players and lot of small players. Plus each city have local chains and eateries that add to the competition. We have 30% market share in Tier-1 and Metro cities and 40% in Tier-2 cities, where we exist.

**Thank you sir! Regarding service, what all kind of service are we providing?**

Good question! The restaurant provide dine-in, drive-by and delivery service. Anything else you would like to know?

**No sir, thank you! Just provide me a couple of minute of gather my thoughts and analyse the problem.**

**Sir, considering a store, manpower costs can be divided into chefs/cooks, servers, managers, billing, delivery, maintenance & security. Is there a particular head you would like me to look into?**

Let's assume the problem is the store level only and I would like you to dive in delivery costs. What factors make delivery costs?

**Delivery costs would include wages, insurance, spillage, and probably vehicle maintenance. Are any of these heads changed?**

Are you sure vehicle maintenance will come in manpower costs? The company wages of employees have increased.

**Has the pay structure changed?**

Yes, it was earlier fixed pay model. Now its changed to fixed + variable kind of structure. Why do you think this happened?

**Maybe industry model has changed sir. Or competitors introduced new pay structure and to keep up the company had to change its pay structure too. Maybe due to entry of food aggregators.**

Yes, due to entry of food aggregators, the delivery employees were leaving the client for better pay. Thus they had to increase the pay. I want you to analyse the change in pay.

**Sure sit, fixed pay would be factor of no. of working days, working hours and hour rate. Variable pay would depend on number of deliveries. Do we have the data regarding this.**

Yes, a delivery employee on an average has 24 working days, has a 8 hour workday, and is paid ₹ 50 per hour. Apart from it, they are paid ₹ 5/delivery and can deliver 30 order per day. Also suggest ways to reduce costs. Earlier pay - ₹ 10000/month

**New costs: ₹ 13200. That's an increase of 32%. Regarding solutions: We can ooutsource delivery activity to Swiggy and Zomato after doing a cost benefit analysis. That might save on the delivery charges. We can also introduce a loyalty bonus to retain employees, or we can introduce/increase delivery charges to recover the costs.**

# Quick Service Restaurant

Cost Reduction | Easy | Kearney



**Your client is a quick service restaurant and is experiencing high manpower operating costs. Find reasons and give recommendations.**

## Case Facts & Notes

- It is a Quick Service
- Restaurant chain of Pizzas - Make & Deliver Pizza
- Experiencing problem since past 2-3 years
- Problem visible in 40% of the restaurants across chain. Pan India – Tier 1 cities
- No changes in government regulations.
- Impacting competitors too.

## Activities

- Dine-In
- Drive By
- Delivery

## Approach

**Manpower Costs**

- Chefs/Cooks
- Servers
- Managers
- Billing
- Delivery
  - Wages
    - Fixed Pay
      - # working days X Hour Rate X # of Hours
    - Variable Pay
      - Factor of # of deliveries
  - Insurance
  - Vehicle Maintenance
  - Spillage
- Maintenance
- Security

Pay structure have changed from only Fixed to **Fixed + Variable.**
**Earlier Fixed Pay – ₹ 10000**

**Pay Structure had changes due to entry of hyperlocal delivery players (Swiggy, Zomato), thus increasing delivery boys' demand.**

24 working days
₹ 50/hour
8 Hours Work Day

# of deliveries have increased over the years.

**Currently paying ₹ 5/delivery.**
**Can deliver 30 order per day.**

## Recommendations

- Outsourcing delivery activity to Swiggy and Zomato after doing a cost benefit analysis. That can save on the delivery charges.
- Introducing a loyalty bonus to retain employees.
- Start charging delivery charges for Pizza delivery to recover costs. Currently, they don't charge
- Increase prices of pizza by a little amount(1-2%) to cover for the increased costs. People won't mind paying Rs. 410 for a Rs.400 pizza.

**Fixed Pay Now – ₹ 9600**
**Variable Potential – ₹ 3600**
**Total pay = ₹ 13200**
**Increment of 32% per person.**

# Steel Manufacturer





**Your client is a Steel manufacturer observing declining profits from the past 2 years. They want you to figure out what is going wrong**

**So, just to be on the same page, I would re-iterate the problem statement. Our client is a Steel manufacturer facing declining profits from the last 2 years and wants us to figure out the problem.**

Yes, absolutely right. Go ahead!

**Before delving deeper into the Case, I would like to ask a few clarifying questions. Is that fine?**

Sure, go ahead!

**In which Geography does the client operate? Is there a single plant or multiple plants?**

So, our client operates in India with multiple plants in North, East & South-West.

**Also, does the client operate in Upstream, mid-stream or downstream segments of Steel manufacturing?**

That's a really nice question. So, our Client is involved in both Upstream & downstream manufacturing. In Upstream, it manufactures Hot Rolled Steel (HRS) Coils & in Downstream operations, it uses HRS Coils to manufacture further items.

**Thank you sir! Do we have any information regarding our Customer segments & their proportion in our business?**

Yes. So, we have 3 Customer segments: OEMs (Auto, Appliances), Trade ( Distributors, SMEs & Retailers) & Export with a proportion of 50%, 40% & 10% each respectively.

**Moreover, what is happening with our competitors & how is the Overall industry performing?**

Good question! We don't have data specific to any particular competitor, but the industry is experiencing a decline of around 10% as compared to 30% decline in profits for our client. Is there anything else you would want to ask at this stage?

**No sir, thank you! Just provide me a couple of minutes to gather my thoughts and analyse the problem.**

Sure!

**Sir, since the problem is regarding declining profits, it will involve Micro factors of Revenue & Costs for our Client & Also other Macro factors such as Political, Economic & Technological affecting the entire industry. I would first like to look into Macro factors which are affecting the entire industry as a whole & then narrow down to the Revenue & Cost factors for our client.**

Sure, Go ahead!

**Has there been any recent Political, economic or technological change impacting entire steel industry?**

Yes, indeed. There have been sanctions on Iran leading to higher fuel costs & reduced exports & due to cheaper manufacturing , China has flooded International markets with its steel, leading to further reduced demand. There has been no major economic change in last 2 years.

**I see. This has led to 10% decline in profits for the steel industry players. But since our client is facing more decline, there are some others factors affecting our client specifically.**

Yes, indeed.

**Since, Profits is Revenue minus Costs. Can you tell me which of these is increasing, decreasing or constant leading to overall declining Profits.**

So, Revenue is declining & Costs are increasing.

**Sure. I would like to delve first into cost side & like to look into the entire value chain of our client to see what are the factors leading to increasing costs. Give me a few seconds to make the value Chain.**

Yes, the value chain you have made is absolutely right. Due to decline in demand for our client, we started defaulting on our payments 1 year ago. We have 3-4 major Contractual suppliers. The payment has also changed from credit-based to advance-based leading to declining inputs, reputation & working capital.

**I thinks that's the specific problem for our client. Increasing fuel & financing costs have led to increased cost/ Unit production. Also, since the demand has dipped our client is not able to overcome increasing costs. Which has led to higher declining profits for them. Give me few seconds to come up with recommendations.**

Sure. Good job!

# Steel Manufacturer

Profitability | Moderate | BCG



**Your client is a Steel manufacturer observing declining profits from the past 2 years. They want you to figure out what is going wrong.**

## Case Facts & Notes

- **Company** - Operations in India. Plants in North, East, South-West
- **Product** - Hot rolled steel coils. Downstream uses HRS coils.
- **Customers**
  - OEMs. (Auto, appliances)
  - Trade (Distributors, SMEs, Retailers)
  - Export (Distributors)
- Market is experiencing a 10% decline in comparison to 30% decline to our company.

## Approach

Profits ⬇ 30%

- Micro Factors
  - Revenue ⬇
    - Volume
      - OEMs (50%)
      - Trade (40%)
      - Exports (10%)
    - Price
  - Costs ⬆
    - Fuel Costs ⬆
    - Financing Costs/ Interest Payments ⬆
    - Increasing per unit cost of prod. ⬆
- Macro Factors
  - Political
    - Trade Regulation
      - Sanctions on Iran
  - Economical
    - Regular global demand. Major supplies to: Asia Pacific, Middle East, Canada
  - Technological
    - China leading due to technological innovation.
    - Cheaper manufacturing. Dumping in international markets.

Company started defaulting 1 year ago
Lead to loss in confidence in the market
Working Capital depleted

## Recommendations

- Focus on customers with higher margins & lower advance requirements.
- Consider changing prices to remain profitable
- Govt. lobbying to curb steel dumping by China.

| Sourcing | Inbound Logistics | Production | Outbound Logistics | Customer Pull |
|---|---|---|---|---|
| • 3-4 Major suppliers<br>• Raw Materials: Coal, Iron Ore, Limestone<br>• Contractual Relationship<br>• Declining inputs<br>• Declining reputation among suppliers<br>• Moved from credit based to advance based payment system | • Smooth Flow<br>• Optimized<br>• Increasing fuel costs | • Capacity: 5.4 MT<br>• No bottlenecks<br>• Under-production<br>• Increasing per unit production costs<br>• Low capacity utilization | • Smooth Flow<br>• Optimized<br>• Increasing fuel costs | • Down to 3.2MT from 4.3MT<br>• Approx. 25% decline in demand<br>• Reputation on decline<br>• Credit payment (1 month cycle) |

Bigger players have their own mines

Lower production costs for competition due to economies of scale

Competitor Benchmarking

# Toy Manufacturer



**Your client is a toy manufacturer facing a decline in revenues. They want your help to identify the problem and recommend solutions.**

**Okay, I would like to reconfirm the problem statement before proceeding forward, our client is a toy manufacturer facing decline in revenue. We have to identify the reason and recommend solutions, is that correct?**

Yes, absolutely! Go ahead.

**Okay. My first question is do we know since when have they been facing this decline?**

Decline has been since past 6 months.

**I would like to understand a bit about our client now. Where are they based out of? Also, what does their value chain look like? Do they sell to the distributors/ other retail stores, or do they have their own stores?**

Our client is based out of Bangalore but they only sell through their own stores which is present across almost across all regions of the country.

**Understood, what kind of toys do they make and which age group are they targeting? Also, what's the price points of these toys. As far as my understanding goes, since it has its own stores, I believe the toys would be priced in the premium range. Is my understanding correct?**

They make all kinds of toys relevant for the age group 0-15 years. Answering your second question, yes, the toys sold by the client fall in the premium category.

**Okay, are there are major competitors in this category and are they also facing a similar decline in profitability or is the issue specific to our client?**

There are 2-3 competitors in this category but they aren't facing this issue. It's specific to our client.

**Alright, since you mentioned that there are stores present pan-India, are we facing the decline in some particular geographical location or is the issue widespread?**

The decline has been in particular store in Delhi.

**One last question before I begin the analysis, is sale of toys the only source of revenue? Or do we have some auxiliary services like food stalls or other stalls as well?**

You can consider sale of toys to be the only source of revenue.

**Okay! Since, there has been a decline in revenues, it could either be due to a decline in number of customers or revenue/customer or both.**

Yes, absolutely! The client has been witnessing a decline in both.

**Alright! For revenue/ customer, the decline could be due to decrease in avg. ticket size/purchase or the frequency of purchase from the customer. Do we have information on which of the two is the case, here?**

Okay, so our client has witnessed a decline in frequency of purchase/customer.

**Okay, before analyzing the reasons for the same, I would first like to explore fall in the number of customers part as well. Does this seem fine?**

Sure, go ahead.

**Thank you! The fall in number of customer could be due to either internal issues or external issues. Is there some specific aspect you want me to look at or should I explore both?**

Let's look at fall in number of customers due to internal issues.

**In order to identify the reason, I would like to explore the journey of a customer for buying a toy. So, I would like to break it into 3 parts – Pre Purchase, Purchase and Post Purchase. Pre Purchase phase would include need for purchase of toy, awareness of the toy store, accessibility of the store. Purchase phase would include the experience of the store and the affordability of the product and purchase and Post Purchase would include purchase analysis of the bought product. Do you want me to look at some specific part of this journey?**

This is a thorough outlay of the experience. So, let's look at store experience for now.

**Okay, this is primarily influenced by two things - Experience related to sales representative (helpful, courteous and polite) and experience of the toys and surroundings of the store which includes the look, feel, sound and smell of the toys and the surroundings. Have we been experiencing a problem with respect to any of these?**

You're quite close. The smell of the store is bad as a public toilet has opened next to the client's store. What would be your recommendations to the client to deal with this issue?

**Alright, so in the short term, we can use air fresheners to combat the bad odour. We should close the windows or any openings which could be leading to that bas odour. We should also contact the local municipality (NDMC) for regular cleaning. In the long term, we can build smell-proof walls or any other odour limiting barrier. We can also consider relocation to some other place.**

Alright, thank you. We can end the case.

# Toy Manufacturer

Profitability | Moderate

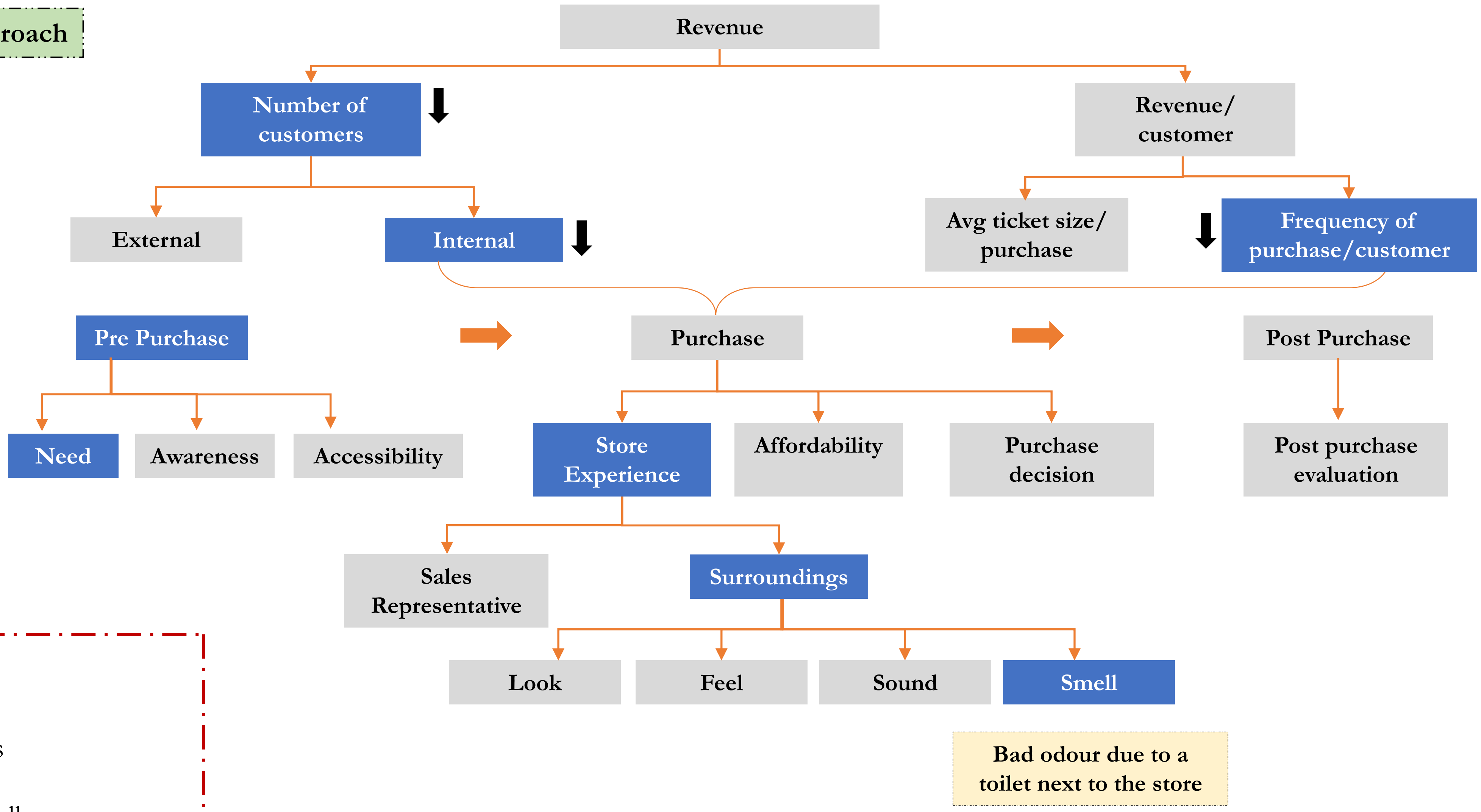
The Consulting Club

Your client is a toy manufacturer facing a decline in profitability. They want your help to identify the problem and recommend solutions.

## Case Facts & Notes

- **Duration –** Last 6 months
- **Operations** - Sales through own stores
- **Geography** – Pan-India
- **Company vs. Industry** – only an issue with company
- **Customers** – Premium segment
- **Product** – for age 0-15 years
- Decline in a store in Delhi

## Approach




## Recommendations

- **Short term :** Use room freshener
- Close windows and other openings
- Contact NDMC
- **Long term :** Build smell proof walls
- Relocate

# Pharmaceutical Analysis

Profitability | Moderate | Kearney

**Your client is a Pharma company with \$100 million cost of operation, distribution for which is Procurement cost - \$80 million and Overhead cost - \$20 million. The current profit margin is 5% over cost. The CEO has asked us to increase the absolute profit.**

**Before we begin, I'd like to confirm my understanding. Our client is a pharma company and wants to increase absolute profits. Is my understanding correct?**

Yes. First, I would like you to tell me what are the various options to increase profit?

**Sure. Since Profit is Revenue – Cost, we can either increase revenue, decrease cost or increase revenue and decrease cost simultaneously.**

Good, Let's say in the first scenario we explored the second option and were able to decrease the procurement cost by 10% while keeping the revenue constant. Now I want you to give me the increase in Revenue that will lead to same increase in profit as in the first scenario.

**From the question we can calculate the current absolute profit as 5% of \$100 million = \$5 million. After the procurement cost decreased by 10% i.e. \$8 million, there will be a net increase in Profit leading to the total absolute profit of (\$5 million) + (\$8 million) = \$13 million. Now for the second scenario we need to increase the revenue in a way that the final profit equals to \$13 million. Revenue is price per unit * number of unit sold. Hence we can either increase price or we can increase the number of units sold. Which option would you like me to explore.**

As you know price of drugs are regulated by government and other bodies it will be difficult for us to implement. Let us explore the second option.

**When we look into increasing the revenue by increasing units sold, our variable cost will also increase. Hence, in order to evaluate the same I would like to know the distribution of cost across variable and fixed costs.**

Variable cost is 75% and Fixed is 25% of total cost.

**Thank You Sir. I will take some time to write the equation. Now, our target profit = \$13 million which can also be written as New Revenue – New Cost. If we assume that increase in revenue is x%, there will be a x% increase in variable cost as well. Hence New Revenue = Old Revenue (1+x) = 105(1+x) and New Cost = Fixed Cost + Variable Cost(1+x) = 25 + 75(1+x). RHS = 105(1+x)-25-75(1+x) = 5 + 30x. LHS = Target Profit = \$13 million. Equating RHS = LHS we get x = 8/30 and hence new Revenue = \$133 million.**

Good. Now that you have explored both the option, I would like you to tell me which is the best option for the company to implement.

**I would suggest the company to go with decreasing the cost, since decreasing cost is something that company can control. On the other hand, increasing revenue depends upon market and various other conditions which are not in company's control.**

How will you suggest the company go with reducing the cost?

**A pharmaceutical company incurs different cost like R&D, manufacturing, distribution, sales promotion, administrative and external service cost. Since, I have had an experience of working on sales strategy for Pharma client; I would like to start with suggesting cost reduction in sales promotion. We can look into 1) retargeting the physicians reached to make sure we are reaching the physicians who have higher potential for writing our drugs 2) resizing the number of sales representative on field to ensure optimal expenditure 3) realigning the representatives to ensure maximum and more effective reach to the physicians.**

Good. I think we can wrap up the case here. Thank You.

# Pharmaceutical Analysis



**Your client is a Pharma company with $100 million cost of operation, distribution for which is Procurement cost - $80 million and Overhead cost - $20 million. The current profit margin is 5% over cost. The CEO has asked us to increase the absolute profit.**

## Case Facts & Notes

- **Context –** CEO of a Pharmaceutical company wants to analyze options for increasing profit
- **Cost**– Procurement Cost = $80 million and Overhead Cost = $72 million
- **1st scenario: Cost reduction–** 10% decrease in procurement cost
- **Final Target Profit –** ($5 + $8) million = $13 million
- **Revenue Increase –** x% increase in revenue leads to x% increase in variable cost
- **Fixed Cost** = $25 million
- **Variable Cost** = $75 million

## Approach

Old Profit = $5 million → New Profit = $13 million

Old Revenues = $105 million ↑
- Price/Unit
- Volume ↑

Old Costs = $100 million ↓
- Overhead Cost = $20 million
- Procurement Cost ↓ = $80 million (10% decrease) ↓ = $72 million

1st scenario – Cost decrease keeping Revenue Constant

2nd Scenario – Revenue Increase keeping Fixed Cost constant

Target Profit = New Revenue – New Cost
13 million = Old Revenue (1+x) – Fixed Cost – Variable Cost (1+x)
13 million = 105(1+x) – 25 – 75 (1+x)
13 million = (5 + 30x) million
x = 8/30
Hence, New Revenue = 105(1+8/30) = $133 million

## Recommendations

- The new revenue to reach target profit of $13 million is $133 million
- Cost reduction (in company's control) is a better alternative than increasing revenue (which depends on market)
- In order to reduce cost – reduce cost incurred in sales promotion - Retargeting, Resizing and Realignment

# Power Plant



**Your client is an Electricity Power plant that has been experiencing a dip in profit for the last 3 months. Find out the reason and provide solutions.**

**I would like to ask a few clarifying questions. What kind of electricity generation plant is it? Thermal, Solar, Hydro or any other kind. Where is the plant located? Is it facing this problem in multiple locations? Who are the customers? Is there any competition? If yes, are they also facing a decline?**

It is a coal gasification plant located in Pune. The direct customer is the government, which then distributes the electricity to all the customers of Pune.  There is no competition.

**Okay. I have two questions here. What is the difference between a thermal plant where coal is burnt and the heat is used to create steam which then rotates the turbine and a coal gasification plant? Is the company under any contract with the government for providing electricity and if so, have there been any changes in the contract in the last 3 months.**

In a coal gasification plant, the ashes or small sized coal is removed and the remaining coal is burnt slowly at a controlled temperature. The gas generated through this is used to rotate the turbine. The company is in a yearly fixed contract with the government. However, there haven't been any changes in the contract.

**Thank you for the information. When we talk about declining profits, we relate it to either increase in revenues, decrease in costs or both. May I know the status of the revenue and cost in the last 3 months?**

Revenue has remained the same but the Cost has increased.

**Okay, so I would like to branch out different types of costs and analyze the area where we have seen an increase in cost.**

Sure, go ahead.

**The different types of costs are Raw Material Cost which is coal in this case, Manufacturing cost or cost involved in producing electricity, Labor cost, Rent and Utilities cost and other miscellaneous costs which include administrative, selling and advertising expenses. Have we observed increase in any of these costs?**

Yes, the total raw material cost has increased.

**Okay, so if there is an increase in Raw material cost then it can be either due to increase in Price charged for coal, increase in quantity of coal bought or increase in any shipping cost incurred to bring in the coal to the plant.**

Yes, the plant has been buying extra coal for the last 3 months.

**That is interesting. I observe that there is no increase in revenue which means the amount of electricity the client is producing has remained same but the amount of coal coming in has increased. Am I correct in my assumption? If yes, may I know where is this extra coal being used?**

You are right. We were not able to produce the same amount of electricity with the initial amount of coal that was coming in. Hence, we have started buying more coal. Can you find out the reason behind this increased requirement of coal used in the plant?

**Sure. I could think of three possible reasons. 1. The quality of coal incoming has deteriorated which can probably be due to the increased humidity in Pune, 2. The electricity generation procedure has lost its efficiency because of malfunctioning of a machine or reduced capabilities of the labor employed or 3. There could be an increase in wastage of coal in any stage of electricity generation starting from procuring raw material to distributing the electricity. Let me know if there is any other reason that I should explore.**

The quality of the coal procured  and the efficiency of process is intact. However, we have observed wastage in the coal.

**Okay. So now, I would like to analyze the journey of coal. The stages that the coal goes through before finally getting converted into electricity are Procurement, Storage, Transportation from one station to other and Processing. May I know in which particular stage have we observed an increase in coal wastage?**

Please focus on the storage stage.

# Power Plant



**Your client is an Electricity Power plant that has been experiencing a dip in profit for the last 3 months. Find out the reason and provide solutions.**

**Alright. If there has been an increase in wastage of coal in the storage stage, I would like to know how do we store the coal, what is the process followed to put in and then retrieve the coal and if there has been any significant changes to the way the coal is stored as compared to how it was stored 3 months back.**

The coal is stacked one above the other in a warehouse. 3 months back the way the coal is taken out changed from LIFO to FIFO. Can you think of a problem arising due to this change?

**Since coal is not a perishable commodity, I don't think there will be any affect on the quality of coal even if it gets stored for extra time. Considering that the coal is stacked one above the other, changing the process of retrieving the coal from LIFO to FIFO can probably lead to breaking or crushing of coal at the lower end due to more unnecessary movement.**

Yes, you are right. Crushing of coal is leading to an increase in wastage of coal. Can you provide some solution for the same.

**Sure. I have 3 recommendations on how to reduce the wastage of coal - 1. If it is possible, let us change the procedure of retrieving coal back to LIFO, 2. We can change the way coal is stored like creating separate bunches of coal to avoid breakage of coal, 3. Optimize the amount of coal ordered every day, so that the amount of coal stored everyday decreases. I have one more recommendation which will help us increase the revenue.**

Sure, What do you have in mind?

**The ashes or small sized coal due to breaking or crushing can be sold to thermal power plants as their process of electric generation includes crushing of coal.**

Amazing! We can wrap up the case now. Thank you.

# Power Plant

Profitability | Moderate | BCG



**Your client is an Electricity Power plant that has been experiencing a dip in profit for the last 3 months. Find out the reason and provide solutions.**

## Case Facts & Notes

- **Company** –Power Plant in Pune
- **Customers –** Direct customer is government which distributes to the city of Pune. Fixed yearly contract.
- **Competition –** No competition. Monopoly
- **Procedure –** Coal Gasification plant burns ash-free, big lumps of coal in a gas fire at a controlled temperature.

## Approach

- **Profits** ⬇
  - **Revenue**
  - **Cost** ⬆
    - ⬆ **Raw Material**
      - **Price**
      - **Quantity** ⬆
        - As initial quantity was not enough to produce same amount of electricity
          - **Quality deteriorated**
          - **Efficiency of procedure decreased**
          - **Wastage of coal increased**
      - **Shipping**
    - **Manufacturing**
    - **Labor**
    - **Rent & Utility**
    - **Miscellaneous**
      - Selling
      - Administration
      - Advertisement

**Procurement**
- Buying the coal
- Unloading the coal
- Moving to storage
- No issues in this stage

**Storage**
- Coal stored in warehouses
- Coal is stacked up one above the other
- Process of retrieving the coal changed from LIFO to FIFO

Coal at the lower end of stack gets crushed and breaks. Hence more wastage

**Transfer**
- Moving the coal from one station to other
- Conveyor belts used to transfer the coal
- Smooth process, No issues here

**Processing**
- Remove ash content. Minus sized coal is removed
- Gasifier – Burn the coal at a low temperature in a controlled way to get the maximum gas to run turbine

## Recommendations

- Change the procedure of retrieving coal back to LIFO if the reason for change is not a constraint.
- Change the way coal is stored, like creating separate bunches of coal to avoid breakage of coal
- Optimize the amount of coal ordered every day, so that the amount of coal stored everyday decreases.
- Sell the broken or minus sized coal to other thermal plants

# Shopping Mall in South Delhi



## Your client operates a shopping mall in South Delhi. They want to increase their advertisement revenue

**So, just to be on the same page, I would re-iterate the problem statement. Our client operates a shopping mall in South Delhi & wants to increase their ad revenue.**

Yes, absolutely right. Go ahead!

**Before delving deeper into the case, I would like to ask a few clarifying questions. Is that fine?**

Sure, go ahead!

**How big or popular is this shopping mall & what is the proportion of ads in its revenue?**

So, it is one of the largest & most popular malls in all of Delhi & ads have currently 8% revenue share.

**Also, What are the various categories of Ads that our client indulges in & who are its clients for these ads?**

That's a good question. So, you can consider the ads categories to be firstly, Displays which are either billboards or standees & secondly, some events/exhibitions held in the mall. We have both internal as well as external clients. Internal clients are in-mall outlets. External clients include exhibitions held by car or other vehicle dealers & other events being held by some various firms & organizations. In mall-outlets are more frequents clients & events are least frequent.

**Thank you sir! One last question. How do we benchmark our ad revenues?**

So, we benchmark it with similar businesses, Past ad revenue numbers & also compare ad revenue between different ad categories.

**Ok Sir. Just provide me a couple of minute of gather my thoughts and analyse the problem.**

Sure!

**So, Ads revenue will depend upon 3 factors: Allotted space, average revenue/ unit space & % utilization. I would like to look into these factors one by one & suggest ways of increasing overall revenue using these. Is that fine with you?**

Sure! Go ahead.

**Allotted space can be divided into space optimization & new space. We consider gross revenue/space from existing spaces used for advertising & optimize use looking in visibility & footfall. We can optimize ad mix/year & charge more for spaces with high visibility & footfall. For new space, we look into internal (elevators, washroom) & external spaces (Parking lots, rooftops)**

This looks good. Go ahead!

**Ad revenue/unit space can be divided into new categories, new methods & pricing models. We can hold entertainment/ festival events. We can advertise on kiosks, uniforms, sign boards, foot-maps**

This looks interesting.

**In new methods we can include digital screens. Ads will be replaced easily & take less space. We can use customized kiosks to handle basic level exhibitions. This will take less space & increase revenue /space. We can look into pricing model too. It has 2 challenges: right price & convincing clients. We shall link prices to response of mall consumers to extract maximum revenue potential of ads.**

These are really good insights. What about the % utilization?

**Yes sir. So, % utilization can be further segmented into client management & maintenance of spaces. Under client management, we can start doing e-listing of spaces for external clients & use separate internal platform for internal clients. We can offer packaged offerings to our clients such as fully managed events/exhibitions. We also shall look into data with respect to client exposure.**

This looks good to me. On what factors do you think choice of ads for our client will depend?

**So the choice will depend upon various like medium of advertisement, associated cost, potential exposure to the customers, relevance of ad for the mall audience, middle agencies involved & ease of implementation.**

Good Job! Hope to see you in the next round.

# Shopping Mall in South Delhi

Revenues | Moderate | BCG

**Your client operates a shopping mall in South Delhi. They want to increase their advertisement revenue**

## Case Facts & Notes

- **Shopping Mall** – One of the largest & most popular in Delhi. Facilities, Customer base.
- **Current Status** – 8% revenue share for ads. Categories: Displays (Billboards /Standees). Events/Exhibitions.
- **Benchmarking with:** Competitors, Similar businesses, Past numbers, Between Categories
- **Clients:**
  - Mainly In-mall outlets
  - Car dealers in exhibition
  - Events: wide base, less frequent

## Approach

**Ad Revenue** = $\sum$ Categories **Allotted Space** $x$ **Average Revenue/ Unit Space** $x$ **% Utilization**

- **Allotted Space**
  - **Space Optimization**
    - Basis gross revenue/area
    - Optimum mix across year that takes into account latest revenue performance, seasons e.g. festivals
    - Space categorization: Basis visibility, Footfall.
  - **New Space**
    - **Inside**: Elevators, Washrooms, Escalators, Security check, Employee Uniforms. These are areas which are tricky to use but see high footfall too
    - **Outside**: Parking Lots, Road facing billboard spaces, Rooftops, External Walls. Parking lots are underutilized. Road facing billboards attract maximum revenue
- **Average Revenue/ Unit Space**
  - **New**
    - Entertainment/Festival Events (Sponsors to cover cost plus margin)
    - Kiosks
    - Uniforms/ Supplementary consumer goods e.g. bags/water glasses/ receipt slips.
    - Foot-maps, Signboards.
  - **New**
    - Digital screens to replace billboards
    - Kiosks customized to handle basic level exhibitions
  - **Pricing**
    - Two challenges: Understanding right Price & Convincing clients
    - Link pricing to consumer response to extract revenue to max potential.
- **% Utilization**
  - **Client Mgmt.**
    - E-listing of spaces: External clients
    - Internal Platform: In-house clients
    - Packaged offerings. e.g. fully managed events/exhibitions
    - Reporting impact: Data wrt. Client exposure. Ad/ forecasts for same
  - **Maintenance**
    - Reduce downtime between switching ads (e.g. digital instead of flex boards)
    - Keep spaces clean, decorated, accessible.

## Supplementary Aspects

### How clients choose between two Ad options

**Important Factors**

Nature of offering: Medium of advertising
Price: Cost associated with options
Reach: Potential exposure to consumers
Relevance: Between their business & mall audience
Middle Agencies: Have significant influence on their final choice
Ease of implementation: Critical when it comes to events

### Analytical Pricing Model for an Advertisement

Price = $f_{internal}$ (Location, Size, Medium, Internal cost, Time, Special Features) + $f_{external}$(Season, Mall popularity, Competition)

Function relating these parameters can be derived based on:

Existing data such as footfall. ( Better collection of data is essential)
Competitive Benchmarking with similar businesses e.g. Gaming Arcades
Understanding Elasticities basis operational experience

# Food Manufacturer Case



**Your client is a food product manufacturing corporation and has observed a decline in profits. Figure out the problem.**

**Sir, just to be on the same page, our client is a food manufacturing corporation and they are observing a decline in profits and I have to help in figuring out the problem.**

Yes, that's right.

**Can I ask a few clarifying questions regarding the case?**

Sure, go ahead!

**In which geography are we based? What markets do we serve?**

We are based out of India, and serve the entire country.

**What is our product? Are we just into manufacturing or other parts of the value chain too?**

We are a Biscuit manufacturing company and present across the entire value chain. Consider Parle.

**Thank you! And do we have multiple products? Or just a single type of biscuit.**

For this particular case, Consider we are a single product company. Take Parle-G as proxy.

**Thank you sir! And since when have we been facing this problem?**

Almost 6 months.

**Is it an industry-wide problem?**

Good question! It seems that the industry has been immune to this issue.

**Okay Sir! I would like to take a few moments to structure my thoughts before we move ahead. I will approach this problem by dividing profits into revenues and costs. What would you like me to approach first?**

Since there are no changes in revenues, I would like you to look into costs.

**Okay, then I will breakdown costs using value chain based approach.**

**So we break the value chain into raw material, transportation, manufacturing, packaging, warehousing, outbound logistics, sales and marketing. Would you like me to look into a particular head.**

I want you to look into Warehousing costs.

**Okay. Warehousing costs can be broken into rent, labour and food wastage costs. Since biscuit is product that comes with expiry, wastage costs might be a big risk.**

Yes, you are right! We are facing issues in food losses only.

**Okay, so losses in food can be due to pests or due our own system of inventory management. Are we facing some kind of pests related issues?**

No

**So the problem can be in our own management. Can you help me understand the logistics process of this company?**

Now that inventory management has been identified as the problem area, consider this. The warehouse used to have 2 doors (entry and exit door). The exit door no longer exists. How could this be a problem? Also suggest solution/s.

**Sure sir! Just give me a minute to think. It is possible that the goods are stored away from the entry door first and near the exit door in the end. During distribution, goods are collected from near the entry door first and away from the entry door last i.e. LIFO model of inventory management is in place. LIFO model will result in losses since biscuit is a perishable good and has a limited shelf life.**

Good! What will you recommend?

**There are 2 immediate solutions that I can think of. One is to shift to FIFO type of inventory management. Second would be open the previously closed door to facilitate FIFO.**

Okay! Thank you. You can leave now!

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# Food Manufacturer Case



**Your client is a food product manufacturing corporation and has observed decline in profits. Figure out the problem.**

## Case Facts & Notes

- **Company**–Biscuit manufacturing company
- **Geography-**Based out of India, serves India
- **Product-** Single product. Proxy-Parle G
- **Value Chain –** Present across the entire value chain
- **Duration of the Problem -**6 months
- Just Us

## Approach

**Profits**

**Costs**

Cost Breakdown using Value Chain based approach

**Revenues**

**No change**

**Raw Material** → **Transportation** → **Manufacturing** → **Packaging** → **Warehousing** → **Distribution** → **Sales**

Costs changes that can occur during Warehousing can be related to

**Rent**

**Food**

**Labour**

Losses related to expiry of product in warehouse since our product is a perishable good.

**Pests**

**Inventory Management**

Now that inventory management has been identified as the problem area, consider this. The warehouse used to have 2 doors (entry and exit door). The exit door no longer exists.

## Recommendations

**Shift to FIFO model of inventory management.**
**Open the closed date.**

- It is possible that the goods are stored away from the entry door first and near the entry door in the end.
- During distribution, goods are collected from near the entry door first and away from the entry door last i.e. LIFO model of inventory management is in place
- LIFO model will result in losses since biscuit is a perishable good and has a limited shelf life.

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# IT Services Client



## The client is an IT Services firm, interested in improving the bottom-line of the India Region, help them chart their way forward

**Thank you sir, so just to reiterate and confirm, our client is an IT Services firm and they want to improve their bottom-line in India.**

Yes, that's right

**Okay, so I had a few questions to clarify my thoughts.**

Sure, go ahead.

**Where are we located apart from India, and are there any benchmarks we have in mind compared to other locations or companies about increasing the bottom-line?**

In India, we're located in New Delhi, Apart from that, we're located in New York, US. There isn't any benchmark but we're not doing as well as New York on some parameters.

**Okay, thank you. So, I believe to improve bottom-line, we need to either increase our revenues or decrease our costs and spending? Is there any which you want me to focus on?**

There isn't much scope to increase revenue. Let's look at the cost side.

**Alright, so for an IT Services firm, if I think of costs, major would be infrastructural and administrative, software development costs, and the employee costs.**

Yes, that's right. You can explore more on each of these. We label them as SG&A and employee costs respectively.

**Okay, talking about SG&A, it would include I believe it would include hardware, software costs, and also all the Outsourcing costs while the employee costs would depend on the number of employees, their utilisation and wages. Should I discover if there is scope to improve any of these?**

Yes, that's true. SG&A does not have much scope to reduce costs while I would definitely want you to explore the employee related costs. The factors you've mentioned are fine.

**Okay, thank you. So in that case, I would want to ask if we have any information about how many employees we have and also about their utilisation rates to see if they are over or under staffed.**

Sure, so you can have a look at these data points for number of employees, utilisation rates and number of employees in both New Delhi and New York. (Provides datasheet)
Number of Employees: 1) New Delhi – 5000 Employees, 75% utilization, 2) New York – 10,000 Employees, 85% utilization
Avg Cost Per Employees: 1) New Delhi - $700 each, 2) New York - $800 each

**Thanks! So analysing this sheet, I can see that in New Delhi, utilisation levels are lower than New York and there seems to be a clear case of overstaffing.**

Yes, so what would you suggest to the firm in this case.

**I believe to increase worker utilisation rates should be the firm's first priority and as a benchmark we can keep the New York office numbers a first target.**

Alright, that sounds good, how do you aim to achieve those increased rates.

**That could be done in two ways, either we could take the hard decision of laying off people or we can try and get more projects for the firm, which I'm sure the company would anyway have been trying to do.**

Yes, that's right. If you were to layoff, how many would you need to?

**(Performs calculations) Given the data at hand, I think we would need to layoff a little less than 600 workers from the New Delhi office, saving on major costs and improving the bottom-line.**

Okay, that seems fair. Anything you would want to suggest the company before taking such a move?

**Well, these are decisions that might cause a hit on the brand image of the company so they should be done keeping in mind the employees' futures in terms of the negotiation or settlement that is made when they're asked to leave and also while being conscious of the negative press we might accumulate. If we can get over these two important considerations carefully, I think this would be in the right interest of the firm.**

Alright, that should be good to go!

# IT Services Client



**The client is an IT Services firm, interested in improving the bottom-line of the India Region, help them chart their way forward**

## Case Facts & Notes

- It is an IT Services Player present in India (New Delhi) and US (New York)
- Provide BPO Services and customized Software Development
- Clients are present across all sectors
- **Objective:** Improve Bottom-line as soon as possible

## Approach

**Bottomline Improvement**

- **Increase in Revenues**
- **Decrease in Major Costs**
  - **Employee Costs**
    - **Basic Facts:**
      **No of Employees:**
      - New Delhi – 5000 Employees, 75% utilization
      - New York – 10,000 Employees, 85% utilization

      **Avg Cost Per Employees:**
      - New Delhi - $700 each
      - New York - $800 each
    - **Average Cost per Employee**: As per industry standards
    - **No of Employees**: Problem not restricted to any one department
    - **Employee Utilization Factor**: Higher utilization would lead to lower employee cost per project
  - **Selling, General and Administrative Expenses**
    - Critical component as acquiring clients for both BPO and Software Development is the driver of topline
    - No Scope of Improvement

## Recommendations

Cost Savings
- Layoffs
- Increase in Projects

**There needs to be increase in employee utilization at New Delhi Office. For this, if layoffs are considered, total layoffs required would be 5000(1- (75%/85%) ) i.e. 588 employees, saving Rs 411,000 approx.**

**If projects increase, an increase in topline could lead to an increase in bottom-line too. But economics and impact of employee utilization should still be taken into consideration**

# Steel Manufacturer Costs



**Your client is the CEO of a Steel Manufacturing Company and he thinks that his transportation costs are very high. Help him understand if he is correct.**

**So, just to be on the same page, I would re-iterate the problem statement. Our client is CEO of a Steel manufacturing company and he thinks that his transportation costs are very high & we have to help him understand if he is correct.**

Yes, absolutely right. Go ahead!

**Before delving deeper into the Case, I would like to ask a few clarifying questions. Is that fine?**

Sure, go ahead!

**In which Geography does the client operate? Is there a single plant or multiple plants?**

So, our client operates across Delhi, Kolkata, Chennai, Mumbai & Pune. They have 2 plants.

**Also, does the client operate any other operation apart from that of Steel manufacturing?**

Yes, they operate in transportation & distribution segment apart from steel manufacturing.

**Thank you sir! Do we have any information regarding our Customer segments & their proportion in our business?**

Our client operates in B2B segment, but we don't have any customer segment wise data.

**Moreover, what do we know about the competition in the industry?**

So, it is a fragmented market with many competitors. Our client is one of the major players.

**Also, what are the Products that our client makes?**

So, the Client makes Steel rods & nails & uses finished steel as the raw material. But the client controls only the outbound logistics.

**Since, the client is also involved in the transportation & distribution apart from manufacturing, do we have any information related to any regulation which affects our client's business?**

Yes, so the client has to pay Toll/State tax at each border for inter-state travel. That's all we have.

**Sure sir, thank you! Just give me a couple of minutes to gather my thoughts and analyse the problem.**

Sure, Go ahead!

**Because this is related to costs, I would like to look into the value chain of our client's business. I have drawn the value chain from Inbound Logistics to Final delivery. But, since our client controls only outbound logistics, I would like to focus on that.**

Sure!

**Does our client owns its own vehicles for transportation & distribution or does it rent them? Do we have any data regarding that?**

Yes, we have. So, our client uses 3rd Party vendors to rent trucks. The average truck rental is Rs.25/Km. Average route length is around 1000 Km & on an average there are 30 trips annually.

**Thank you for this data. So, this comes to a cost of around Rs. 7. Lacs/year for a single truck. But to see how the client is doing on the cost front, we need some data to benchmark. If the client wishes to own his own truck, the cost that he incurs annually in that case can be a good benchmark for us to see how is he doing right now on cost front. Do we have any data regarding that?**

Yes. (Interviewer gives a data sheet mentioning all the relevant costs)

**In this case, the annual cost/truck comes to around Rs. 13,30,000 which is a lot more than current.**

Yes. So what do you recommend?

**I think owning trucks doesn't look like a relevant option for our client. But, to further reduce the cost I have following recommendations: We can try to negotiate cost with the current vendor or change the vendor if we get lower bid. We can try to utilize the full capacity of trucks in each trip so that number of trips can be reduced annually. Further, we can also look into the option of Route optimization which would reduce the average route length in each trip for our client. Also, if it's possible we can look into the cheaper modes of transport such as railways for bulk transport of our items which might help us to reduce our costs.**

**These recommendations look good to me. Well done!**

# Steel Manufacturer Costs



**Your client is the CEO of a Steel Manufacturing Company and he thinks that his transportation costs are very high. Help him understand if he is correct.**

## Case Facts & Notes

- **Client -** Steel Manufacturer- Major Player. Transportation/ Distribution along with Manufacturing. 2 Plants
- **Customers -** Mainly B2B across Delhi, Mumbai, Pune, Chennai, Kolkata.
- **Product -** Finished steel as raw material. Steel rods & nails. We only control Outbound logistics.
- **Competitors -** Fragmented Mkt. Client is one of major players making steel rods & nails.
- **Regulation/Route -** Toll/State tax at each border for inter-state travel.

## Approach

**Value Chain**

**Inbound Logistics (Raw Materials)** → **Manufacturing/ Processing** → **Warehousing** → **Outbound Logistics** → **Final Delivery**

Client is using 3rd Party Vendors (Truck Rentals)
Truck Rental: Rs. 25/Km
Route Distance: 1000 Km
No. of trips: 30 (Annually)
Total Cost: Rs. 30*1000*25
= **Rs. 7,50,000/yr**.

Note: Since we only have to concentrate only on Outbound Logistics, we analyse it further (confirm with interviewer)

To assess whether this figure is high, we need a benchmark,
What if the client wishes to purchase his own transport and own up the complete outbound logistics:
Cost of Truck Rs. 30 Lakhs ; Life 10 yrs. (Salvage value 0); Mileage 5km/ltr.

| Description | Value (Rs.) | Amount (Annual) |
|---|---|---|
| Fuel | 50/Ltr. | 3,00,000 |
| Driver Salary | 10000/trip | 3,00,000 |
| Toll | 100/100 km | 30,000 |
| Depreciation | 3,00,000/yr. | 3,00,000 |
| Maintenance | | 3,00,000 |
| Tyre Replacement | | 1,00,000 |
| **Total** | | **13,30,000** |

## Recommendations

- Change of Vendor OR Negotiate with current vendor
- Utilise the full truck load capacity to reduce the number of trips
- Route optimization
- Use cheaper means of transport: Railways for bulk transport

# Women Apparel Chain



**Your Client is a big 'women apparel' retailer is facing margins problem. They are experiencing a constant sales growth but there is a cost problem in the retail side. They want you to find out the problem & give recommendations.**

**I would re-iterate the problem statement first to be on the same page. Our Client is a big 'women apparel' retailer facing margins problem. They are experiencing constant sales growth but there is a cost problem in the retail side & they want us to find out the problem & give recommendations**

Yes, absolutely right. Go ahead!

**Before delving deeper into the Case, I would like to ask a few clarifying questions. Is that fine?**

Sure, go ahead!

**Where is the client based out of & where does it operate?**

The client is based out of USA & owns a retail chain operating in USA.

**Also, does the client sell its products only via its own stores or through some other channels as well?**

They sell only via their own retail stores.

**Thank you sir! Do we have any information regarding what kind of different products our client sells?**

You can consider the client sells Women merchandise. That shall suffice the requirements of this case.

**Sure sir, thank you! Just provide me a couple of minutes to gather my thoughts and analyse the problem.**

Sure!

**Sir, Since this is a Cost problem, I would like to divide the Costs into two components, Fixed & Variable costs. Fixed costs can be further segmented into 5 types: Rent, Utilities, Salary, Machinery & Administration costs. Variable costs can be segmented into 3 types: Raw materials, Transportation & Miscellaneous costs. Do we have any information regarding which cost segment is a cause of concern for our client?**

Yes! I would like you to look into the fixed cost component of Salaries.

**Sure sir! I would like to look into the structure of the retail side of our business as in where all do we pay salaries. I can think of Retail shop service staff, maintenance staff. Do we have any information on what are the various layers at which we pay salaries & how much?**

That' a nice observation. I would like to give you some data regarding our salary structure. We have 4 layers in our value Chain: Regional Sales Heads (4), Divisional Sales Heads (10), Territorial Heads (16) & Shop Sales Heads (60). The per employee salary at these 4 layers are: $350, $300, $280 & $100 respectively. Looking at this data can you tell me your observations?

**Thank you sir! So, Total Salaries at these 4 layers are : $1400, $3000, $4480 & $6000 respectively. What I can see is the salary expenditures at Territorial Head & Shop Sales Head levels are relatively higher. So, I am thinking of looking into these.**

Sure! Go ahead.

**I would want to benchmark our Salary expenditure at these levels with our competitors to check whether the compensation that we are paying at these levels are fair or not & also if our staffs are working at comparable efficiency or not. Do we have any information regarding these factors?**

**That is quite insightful. Yes, I have some data for you. Our competitor has 5 people manning each store whereas we have 6 people manning each store. What do you understand out of this?**

I think then we have identified the problem. There are two situations possible. Either the efficiency is not up to the mark or there is some problem in the training

**So, what do you recommend then?**

**Sir! I have two recommendations. Firstly, our client shall look into why we need 6 people as compared to 5. We shall take into account # of customer walk-ins & shift durations & act accordingly. Secondly, We Shall also analyze our Training process & look into Curriculum, duration & evaluation criteria & take corrective measures**

Good job! This looks perfect. We are done.

# Women Apparel Chain

Cost Reduction | Moderate | Bain & Co.



**Your Client is a big 'women apparel' retailer is facing margins problem. They are experiencing a constant sales growth but there is a cost problem in the retail side. They want you to find out the problem & give recommendations.**

## Case Facts & Notes

- **Client-**
  - Owns a retail chain operating in USA
  - Sells only via own stores
- **Product-**
  - Sells Women Merchandise

## Approach

- Cost
  - Fixed
    - Rent
    - Utilities
    - Salary
      - Regional Sales Head: Number: 4, Salary: $350 each
      - Divisional Sales Head: Number: 10, Salary: $300 each
      - Territory Head: Number: 16, Salary: $280 each
      - Shop Sales Head: Number: 60, Salary: $100 each
    - Machinery
    - Admin. Cost
  - Variable
    - Raw Material
    - Transport
    - Miscellaneous

## Analysis

- Regional Sales head - 1400
- Divisional sales - 3000
- Territory sales - 4480
- Shop sales - 6000

Territory sales, Shop sales → Higher → Benchmark with Competitors → Compensation / Efficiency

Competitor has 5 people manning/store whereas we have 6 people manning/store

## Recommendation

- Client shall look into why we need 6 people as compared to 5. We shall take into account # of customer walk-ins & shift durations & act accordingly.
- We Shall also analyze our Training process & look into Curriculum, duration & evaluation criteria & take corrective measures.

# 2024 Olympic TV Rights



**Your client is a major TV Network, wants to know how much to bid on the TV rights for the 2024 Olympic Games. Bid is to be paid in 2019.**

**Sir, just to be on the same page, our client is a TV network company, which wishes to bid for the 2024 Olympics Games TV rights. I have to help them figure this amount in 2019. I would like to ask some clarifying questions.**

Yes, you are right. Go ahead!

**What is the objective of this bidding?**

For a TV network the objective is to maximise profits.

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

Yes, they will only show the Olympics on their one flagship channel.

**And in what region are we planning to telecast the Olympics.**

Good question. Consider USA.

**Okay and Can I assume that Olympic programming will replace regularly scheduled programming.**

Yes, Go ahead!

**Okay for exact calculation of the advertisement revenue I will need specific data related to Olympics, so we will come back to it again. I would like to explore costs first. Do we have any data for coverage costs?**

Consider all costs associated with coverage are $500 Million

**Okay. Should I consider other costs too? Like opportunity costs of missing out on other content and revenue from them?**

Yes, consider opportunity costs too. The value is $1M/hour.

**If that all on the cost side. I would to move to revenue side. How long are the Olympic games?**

The duration of the Games is 16 days. This comprises of one day each for opening and closing ceremony and 14 days of events.

**And can I assume that Opening and closing ceremony will have higher viewership. Even certain times of the day and events will have higher viewership than other and we consider that in our pricing model?**

Yes, you are right. Event Broadcast timings- a) Weekdays: 9am – 12 pm, 2pm – 5pm, and 11 pm. b) Weekends: 11am – 9pm. Duration of opening & closing ceremony: 3 hrs each

**Okay, and how much are we charging per ad to customers. Also, since its Olympics I will assume all slots will be filled.**

- Ad costs: $400K/30 seconds during prime time and half of this ($200K/30) during non-prime time.
- Prime Time is considered anytime after 7pm on a weekday, and all day during the weekends.
- Ad duration: 10 min/hour
- Opening and closing ceremony ads costs 50% above primetime costs

**Okay based on the above data, the revenue come out to be $952M. Total costs are $500 + 146 hours * 1M/hour = $646M. Thus the profits come out to be $306M. So we can bid anything below $306M.**

Are you forgetting something?

**Oh yes, the bid is to be made in 2019. These profits are in 2024. So we will have to discount them to present value. Do we have the value for cost of capital?**

Take Cost of Capital as 10%.

**Based on this, the bid price shouldn't be greater than $190M in 2019.**

Good! It was nice doing a case with you. You may go now!

**Thank You!**

# 2024 Olympic TV Rights



**Your client is a major TV Network, wants to know how much to bid on the TV rights for the 2024 Olympic Games. Bid is to be paid in 2019.**

## Case Facts & Notes

- **Objective** – For a TV network the objective is profits.
- **Revenue Sources**-a) Advertisements on the channel is the major source of revenue
- **Region -** USA
- **Duration of the Games-** 16 days. This comprises of one day each for opening and closing ceremony and 14 days of events.
- **Event Broadcast timings- a)** Weekdays: 9am – 12 pm, 2pm – 5pm, and 7-11 pm. b) Weekends: 11am – 9pm
- Olympic programming will replace regularly scheduled programming.
- **Costs associated with coverage:** $500 Million
- **Opportunity Costs from other programming:** $1M / hour
- **Ad costs:** $400K/30 seconds during prime time and half of this ($200K/30) during non-prime time.
- Prime Time is considered anytime after 7pm on a weekday, and all day during the weekends.
- They will only show the Olympics on their one flagship channel
- Ad duration: 10 min/hour
- Opening and closing ceremony ads costs 50% above primetime costs
- **Duration of opening & closing ceremony:** 3 hrs each
- Cost of Capital : 10%

## Recommendations

To earn a profit, the bid amount should be less than **$190M.**

## Approach

Evaluating the costs and the revenues. → Costs will also include opportunity cost arising from other programs → Using Time Value of Money(TVM) concept to adjust for prepayment in 2019

**Profits**

- **Costs**
  - **Coverage Cost**: **$500 Million**: includes all fixed and variables costs for travel, equipment, salaries.
  - **Opportunity Costs**: **$1 Million/hour:** Total opportunity costs= 146 hours* $1 million =**$146 Million**
- **Revenues**
  - **Advertisement Revenue**: **Revenue from primetime + Non primetime + Ceremony hours = $640M+$240M+$72M= $952M**

| Slot | Total no. of hours | Ad Revenue (per min.) | Ad Minutes | Total Ad revenue |
|---|---|---|---|---|
| Primetime | 4*10+4*10=80 | $800K | 800 | 800*0.8=$640M |
| Non Primetime | 6*10= 60 | $400K | 600 | 600*0.4=$240M |
| Ceremony | 3+3=6 | $1200K | 60 | 60*1.2=$72M |

**Total Expected Profits**

= Revenue - Costs
= $952M-$146M-$500M= $306M

**TVM concept:**
Profits have been calculated in 2024
Since bid amount paid in 2019, these need to be discounted to present value.

**Profit Calculation in 2019:**
Profits in 2019 = Profit in 2024 discounted 5 times
=$306M/(1.1^5) =$190M

# Market Entry

Case Index | Main Index

# Home Insurance Entry

Market Entry | Easy | BCG

**Your client is a multinational insurance company and wants to enter the home insurance segment in the Indian market. It already has presence in health and life insurance segment in the Indian markets. How should they go about it.**

**So our client is multinational insurance company with presence in health and life insurance segment and wants to enter the home insurance segment**

Yes

**Sir I would like to ask a few clarifying questions.**

Sure, go ahead!

**What are the reasons the client has decided to enter this particulate segment and what are we are offering?**

The client is looking to enter this market because there is a projected real-estate boom in the next 5 years, hence potential in the home insurance segment.

**What is the market for home insurance currently, who are the major players?**

No significant competitors and the market penetration is also very low.

**Thank you! Just provide me a couple of minute of gather my thoughts and analyse the problem.**

Okay

**So I would like to first look at the target consumers for our product, analyse our strengths figure out the business structure and then analyse and the risk and barriers.**

Okay, that sound alright

**So looking at the target customers, a house can only be afforded by middle and higher income people. For middle-class, owning a house is a dream as well as they are risk averse, hence they would be interested in insurance products. But even high income people will be interested if they find value.**

Okay

**The client is already present in the Health and life insurance market, how do people buy insurance from our client?**

The client has trained on ground agents which sell insurance directly to people.

**Since we already have trained on ground agents, we can train them to sell this product and we can also look to hire new agents to get new customers immediately. We can also have strategic partnerships with banks where customers go to get loans.**

Okay

**Also because of low penetration and insignificant competitors, the possibility of a tie up or an acquisition seems unviable. So, the client should follow a market-development strategy, working on awareness. The client can get significant advantage by being the first mover.**

Right

**As far as risks go, since we are targeting mainly middle class consumers, they are very price sensitive and will move even if the competitors have marginally better prices. Hence, we would need to give special attention to the price point we fix.**

Okay

**My final recommendations thus are, following a market development strategy, focussing on awareness since there is low penetration and no significant competitor To sell the product the client should have training sessions for on ground agents for selling insurance products and strategic partnership with retail banks who can push home insurance products whenever they issue home loans**
**The roll-out would be slow and gradual. Also since we are educating the masses, we are educating them for the competitors too. Therefore, we need to pay attention on our price because even if the competitors have marginally better prices, the consumers would shift to them, being price sensitive.**

Yes, these recommendations sound good.

# Home Insurance Entry



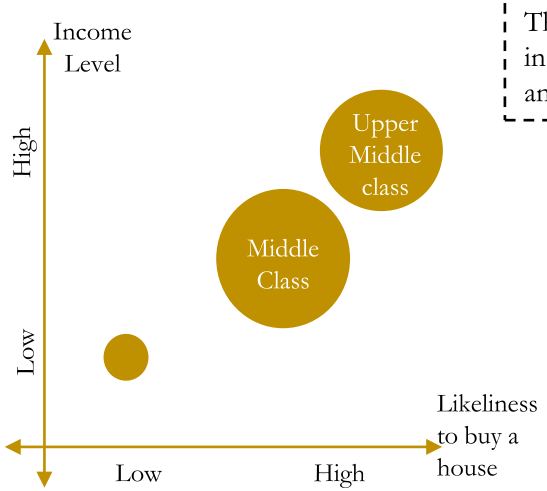
**Your client is a multinational insurance company and wants to enter the home insurance segment in the Indian market. It already has presence in health and life insurance segment in the Indian markets. How should they go about it.**

## Case Facts & Notes

- Projected real-estate boom in the next 5 years, hence potential in the home insurance segment
- Home insurance products to
  - New houses
  - Existing houses
- Very low home insurance penetration
- No significant competitor in that segment

## Approach

**Objective of market Entry** → **Target Customers** → **Analyze strengths** → **Business structure** → **Risks & Barriers**




"Customer lifetime value analysis" by taking into account their acquisition cost and the revenue earned per customer over their lifetime. This will give a quantitative assurance the market segment we are entering makes financial sense.

The client has already decided to enter the home insurance segment. Now, we can further segment and identify our potential target segment.

**Population**
- **Lower Class & BPL**
- **Middle class**
- **Upper middle class**

Income segmentation serves as a proxy for likeliness that a person will buy a house
- Very few people in low-income segment own a house
- For middle-class, owning a house is a dream as well as they are risk averse, hence they would be interested in insurance products
- Upper middle class would also be interested

Low penetration and no significant competitor, market-development strategy

**Awareness**
- Training existing **on-ground** agents
- Developing specialized **teams**
- **Strategic tie-ups**

1. on-ground agents, can be trained for selling insurance products.
2. Strategic partnership with retail bank to push home insurance products

**Market Structure**
- **Start from scratch**
- **Joint venture**
- **Acquisition**

## Recommendations

- Low penetration and no significant competitor, the client should follow a market-development strategy, working on awareness
- Training sessions for on ground agents for selling insurance products, strategic partnership with retail bank who can push home insurance products whenever they issue home loans
- The roll-out would be slow and gradual. Also since we are educating the masses, then we are also educating them for the competitors. So even if the competitors have marginally better prices, then people would go for them as people in this segment would be price sensitive.

# Sports Bike



**Your client is a sports bike manufacturer in Europe and they want to enter the US market. You have to analyze the proposal and give recommendations.**

**Okay, I'd like to understand what's the objective behind entering the US market? Also, do they have a timeline in mind in which they want to enter?**

Right, so like any other business, they want to maximize their revenues. Hence, they are looking to explore newer markets like USA. No, they haven't yet decided on a timeline as of now.

**Alright! I want to understand our client better. Since you mentioned they are a sports bike manufacturer, do they only manufacture sports bike or other bikes as well? Also, do we know about the target segment?**

Our client only manufactures sports bikes. There are other models of sports bikes and but they all fall in the premium range. I'd like you to give me your understand of who do you think should be the target customer?

**Okay, our target segment primarily would be young population of upper and upper middle class aged between 20-35 who are enthusiastic about bikes.**

Yes, absolutely!

**Do we have information regarding the current position of our client in Europe and since how long have been there in this market?**

Okay, there are 4-5 major players in this segment but we are the market leader holding ~50% of the market share and have been in this industry for the last 25 years. Why is the second question helpful, though?

**So, this would help me understand the standing of our client in the European market and accordingly figure out the next steps. For ex: If it would have been in this market only for a year or so then deciding to enter a new market may not be the ideal option.**

Sure, that makes sense. You can proceed with your questions.

**I would also like to understand the value chain of our client better. Do they sell via distributors/dealers or through their own stores only ? Also, are they an OEM or do they source certain parts and components and then assemble it?**

Okay. So, since the client's bike fall in the premium range, they sell through their own stores only. And they are an OEM i.e they manufacture everything in-house.

**Okay, in order to analyze whether we should enter or not, I think we should look at essentially four aspects - 1) Market attractiveness 2) Financial Viability 3) Operational Feasibility and 4) Major risks & synergies associated with entering the market.**

**In market attractiveness, we should look at the market size, major competitors in this space in US & the market share that we will able to capture. In the financial viability, I want to look at the investment required and if we are capable of making that investment. We can also do a break even analysis to understand if it's a good proposal. In operational feasibility, we need to analyze the parts of the value chain and check our capabilities.**

Seems good! Let's look at the market size first. Walk me through the approach of estimating the market size for a sports bike in US.

**Sure. In order to estimate the market size, we should look at population of US, segment it by gender, male population would be our major segment so we can consider only men. Then we can divide the population on the basis of income. Since, it's a premium sports bike, upper class and upper middle class would be our users as discussed before. Then we should do an age segmentation. Age group 20-35 would be our TG as they are looking for premium bikes. Then we should look at what % of them are bike users (and among bike users what % of them would like sports bike. Do you want me calculate the number?**

No, this suffices. Let's look at the financial viability part and do a break even analysis. Can you tell me the major costs incurred?

**Sure. We can break down the costs under two heads: Fixed costs and Variable costs. Under fixed costs, we will have R&D costs, plant and machinery cost, maintenance cost, administrative expenses, sales & marketing cost (some part of this would be variable as well) and permanent employee costs. Under variable costs, we will have raw material costs, labour costs, shipping and logistics costs and other variable overhead costs.**

Sure. Suppose the price of a bike is 1 Cr. The fixed cost is 20 Cr. Initial investment required is 100 Cr. The variable cost is 50% of the price of the bike. If we are to break-even in a year, how many bikes should be sold/ year?

**Okay. So, for BE point, total costs = total revenues. Since, we are to break even in a year, our total costs would be 120 Cr + 0.5Q Cr and total revenue would be Q Cr. Solving for Q gives me 240 as the ans. So, at least 240 bikes need to be sold in a year to break even within a year.**

Okay, thank you! We can wrap up this case, here.

# Sports Bike

Partner Case
Market Entry | Moderate | McKinsey & Co.



**Your client is sports bike manufacturer in Europe and they want to enter the US market. You have to analyze the proposal and give recommendations.**

## Case Facts & Notes

- **Objective** – Maximum Revenue
- **Company** – sells only sports bike through own stores, is an OEM.
- **Current Position** – Market leader with ~50% market share
- **Customers**- young upper middle and upper class aged between 20-35 years looking for premium bikes
- **Competitors**- 4-5 players, but not a threat

## Approach

- **Market Entry**
  - **Market Attractiveness**
    - **Market Size**
      - **Women**
      - **Men**
        - **Rest**
        - **Upper Middle Class & Upper Class**
          - **Rest**
          - **Age group 20-35**
    - **Competitors**
    - **Market Share**
  - **Operational Feasibility**
  - **Financial Viability**
    - **Investment Required**
    - **Break Even Analysis**
      - **Costs**
        - **Fixed Costs**
          - R&D
          - Plant and Machinery
          - Maintenance
          - Administrative expenses
          - Sales & Marketing Costs
        - **Variable Costs**
          - Raw material
          - Labour
          - Shipping and logistics
          - Variable overhead costs
      - **Revenues**
  - **Risks & Synergies**

**% of bike users * % of who will prefer sports bike**

**Total Costs = Total Revenues**
**100+20+ 0.5 Q = Q**
**0.5 Q = 120**
**Q= 240**

## Recommendations

- In order to break even in a year, they should sell at least 240 bikes in a year.

# Home Automation Player



**A European Home Automation Player wishes to enter the Indian Market. You have to figure out how they should go about it.**

**Thank you sir, I'd just like to confirm that our client is a European Home Automation Player that wishes to enter the Indian market and we have to find a way to go about it. Right?**

Yes, that's right

**Okay, so do they want to assess first if the market is attractive enough or has that stage passed?**

They're expecting you to do that analysis too.

**Okay, in that case before starting, I'd like to ask a few clarifying questions**

Sure, go ahead.

**Thank you! Could you give me a bit more information about our products, where we're based and who our customers are?**

Sure. They deal in mainly two automation components, cameras for security and appliance automation kits for appliance lighting control. The HQ is in Europe while the manufacturing is carried out in China. Who do you think our customers would be now that you have an idea about the business?

**Well, I think that for homes, only relatively better off families would install such technologies while on the other hand, I think it would be common in commercial buildings and offices**

Yes, that's right. Could you assess the market potential for the client now?

**Sure, do we have an idea about existing competition? Also I would want to know what our benchmark is so that we can know if the market size obtained is good enough.**

You can consider there are 2 major players Philips and Havells who are already into this kind of automation while others are relatively smaller. They aim to achieve breakeven in 3-4 years & would prefer a market size of $1Bn.

**Okay, thank you. So I'll start to estimate the market size by estimating it for households first and then consider that a mark-up of 50% on that would be the commercial demand. Is that fair?**

That sounds good.

**Great, so to calculate household demand, I would divide the total no of households in the country into those from rural and urban areas, considering only urban households would install this system. Then within the urban households, I would consider only the upper middle & upper class households to purchase such a system.**

That's right. (Candidate solves the guesstimate on paper)

**That will bring us to an estimated market size of $1.5Bn, assuming we capture about 10% of the market and the price of 1 kit is $ 5000. Since this is above our benchmark, I believe it is an attractive market.**

Great, then how do you suggest we go about it.

**In terms of entering the market, since we've established attractiveness, I would like to know if they are financially sound for different modes of entry like starting from scratch, M&A or JV?**

Yes, they are financially sound and capable.

**Okay, and how about our operational capabilities? What are the distribution channels?**

They distribute through retail and e-commerce channels and also provide post sales installation and repair.

**Okay, then I suggest in such a case I think that there exists a lot of scope to integrate and have synergies with existing players or newer players who are already present in similar product categories. For e.g., for retail they can partner with existing players like Tata and RIL to come up with such an automation system to give competition to Philips and Havells.**

Okay, that sounds okay and how about the E-Commerce capabilities?

**For E-Commerce, the client can partner with Amazon/Flipkart to be their exclusive selling partners. In fact, in case of Amazon, they can bundle their products with Alexa or other such home controlling device if possible.**

Great, that sounds good!

# Home Automation Player

Market Entry | Hard | McKinsey & Co.



**A European Home Automation Player wishes to enter the Indian Market. You have to figure out how they should go about it.**

## Case Facts & Notes

- HQ in Europe
- Manufacturing in China
- Home Use Customers– High income Groups
- Institutional Customers – Commercial buildings, offices
- 2 existing major players in the competition – Philips & Havells (line of connected bulbs). Our brand is unknown
- Objectives –
  - Global Expansion
  - Break even in 3-4 years
  - Market size should be $1B
- Home Automation Products –
  - Security (cameras)
  - Auto kit (appliance & lighting control.
- Financially capable & sound
- Distribution: Retail & E-commerce

## Approach

**Market Entry**

**Market Attractiveness**
- Customer Analysis
- Competition
- Market Sizing
- Regulatory Environment

**Resources & Capabilities**
- Product
- Financial
- Operational
- Marketing
- HR

**Execution Strategy**
- Start from scratch
- Merger & Acquisition
- Joint Venture

**Risks & Synergies**
- Barriers to exit
- Reaction by competition

**Competition Analysis**

**Large Brands**
- Retail
- Probably won't be interested in JV

**End to end automation**
- System Integrators (work with Interior designers)
- High end brand names

**White goods market**
- Chinese Goods
- Unofficial

**Start-ups**
- Not very big in size
- Bangalore & Pune hubs

**Market Sizing (Home Automation)**

Pop. of India = 1.35B
# of households= 340M

- Households 340M
  - Rural (70%)
  - Urban (30%) 100M
    - Rest (80%)
    - Upper & Upper Middle Class (20%) 20M
- Institutional
  - 50% markup on HH for easy calculation

**Price of 1 kit=$5000, Estimated Market share capture=10%**

**Total = 20M * 5000 * 10% * 150% = $1.5B**

## Recommendations

- Partner up with start-ups or get new players into the market for partnerships – Tata, Reliance.
- Exclusive sales through Amazon/Flipkart
- Bundling with products like Alexa or any other home controller if possible..

# Gold Mine in Mongolia



**Goldman Sachs' Investment Division is considering buying a goldmine in Mongolia. The mine is fully operational and producing 120,000 units/annum. The government of Mongolia is selling the mine to raise foreign currency to pay their dollar-denominated debt. They want you to provide a go or no-go decision.**

**So, just to be on the same page, I would re-iterate the problem statement. GS's Investment division is considering buying a Goldmine which is fully operational & producing 120K Units/ annum in Mongolia & they want us to provide a go or no-go decision.**

Yes, absolutely right. Go ahead!

**Before delving deeper into the Case, I would like to ask a few clarifying questions. Is that fine?**

Sure, go ahead!

**What are the various Prices & Costs related to purchase & operations of the mine? Do we have any information on that?**

Yes. The purchase price of mine is $200mn, operating cost is $800/unit & fixed cost is $25mn/annum.

**Also, what are the various options client is considering? Are they thinking of increasing or reducing the capacity of the mine after purchase?**

Good question! GS has the option of expanding the mine to produce addn. 20K units/ annum & in this case the additional purchase price is $20mn.

**How will the expansion further affect the costs & how much time will it take to become operational at new capacity?**

So the total development time for new capacity is 12 months after which the mine can be fully operated. It will increase the fixed cost by around 10% & variable cost by around 15%.

**One more question! Do we know the market price of Gold & what are the final objectives that GS is keeping in mind?**

Yes the Gold price is $1800/unit. Also, GS has 2 objectives: to generate 25% ROI in 3 years & to resell the asset at profit.

**Sure sir, thank you! Just give me some time to gather my thoughts and analyse the problem.**

Sure!

**Sir, the prime question is whether GS should buy the Goldmine or not. For that I am looking at 3 important factors: Market attractiveness, asset attractiveness & ROI target. First, I would want to look into market attractiveness. Can you tell me how Gold prices & demand vary according to economic growth, interest rates & inflation?**

Sure. Gold prices vary inversely with respect to economic growth. Gold demand increases during inflation & falls as interest rates rise.

**Thank you sir. Also, attractiveness of Gold mine will depend upon Legal aspects, Political & Financial aspects, Environment & technological considerations & exit options. What do we know about these?**

So, since we are dealing directly with the Mongolian Government, we are safe with respect to legal, political financial & exit factors. We have good technological partners in form of both local & global players. Environment conditions have also been taken care of.

**That sounds great! That brings us to our last factor of ROI Target. So, ROI is (Gain-Investment)/Investment. Do we have any information on the Gain proceeds, WACC, Tax rate & P/E ratio. I am thinking of calculating and comparing the ROI in current scenario & in case of expansion to see in which case are they performing better & also if they are able to meet our ROI target at all or not.**

This sounds good. So, the Gains will be coming from Operating income & Sales proceeds. WACC is 10%, Tax rate is 30% & P/E ratio is around 3.

**Sure. Just give me a few minutes to do my calculations**

Alright! Go ahead.

**So, In current scenario of no expansion, we have 57.63% ROI in the first year itself which is more than our target of 25% ROI in 3 years. Also, if we choose to expand, in the first year we are making 44.15% ROI. In the second year, as Profit after tax is further increasing, so we will have even more ROI**

That looks great to me. So, what are your final recommendations?

**We should go for the buy decision & the option of expansion shouldn't be preferred because our ROI is decreasing and even NPV is decreasing further.**

# Gold Mine in Mongolia

Market Entry | Hard | McKinsey & Co.

The Consulting Club

**Goldman Sachs' Investment Division is considering buying a goldmine in Mongolia. The mine is fully operational and producing 120,000 units/annum. The government of Mongolia is selling the mine to raise foreign currency to pay their dollar-denominated debt. They want you to provide a go or no-go decision.**

## Case Facts & Notes

- **Price & Costs (of Mine)-** Purchase price: $200mn,Operating cost:$800 /Unit, Fixed cost: $25mn/annum
- **Client-**
  - GS has option of expanding the mine to produce addn. 20K units/ annum
  - Purchase price on option to expand: $20mn
  - If expansion is done, total development time: 12 months & mine would immediately operate on new capacity.
  - With new capacity, Fixed cost: 10% ↑, Variable cost: ↑15%
- **Price (of Gold) -** $1800/Unit
- **Objective -**
  - Resell asset for a profit
  - Generate 25% ROI in 3 yrs.

## Approach

**Should GS buy Goldmine?**

**Market Attractiveness**
- Economic Growth – Gold prices vary inversely with EG
- Interest Rates – Demand for Gold increases as interest rates fall
- Inflation – Gold demand increases during inflation *(inflation hedge)*

**Asset Attractiveness**
- Legal Aspects: Licenses, Permits, Labor laws
- Political Stability in Mongolia
- Environmental Considerations
- Technological Requirements
- Financial Aspects – liabilities
- Mine – reserves, life of asset
- Exit Options

**ROI Target**
- ROI = (Gain – Investment)/ Investment
- Gain will be from Operating Income & Sales Proceeds
- Assumed WACC of 10%, Tax Rate of 30% & P/E ratio ~3
- Evaluate ROI in the current scenario & in expansion option
- The ROI is higher with option of expanding the mine

## Calculations

**Current Scenario**

| | | | |
|---|---|---|---|
| **Investment** | 20,00,00,000 | Profit Per Annum (after tax) | 6,65,00,000 |
| **Gold Price** | 1,800 | P/E ratio | Assumed 3 |
| **Quantity** | 1,20,000 | Selling Price | 19,95,00,000 |
| **Revenue** | 21,60,00,000 | PV of Sales Proceeds | 31,52,60,000 |
| **Operating Costs** | 9,60,00,000 | NPV | 11,52,60,000 |
| **Fixed Costs** | 2,50,00,000 | ROI | 57.63% |

**Expansion Option**

| | Year 1 | Year 2/3 |
|---|---|---|
| **Gold Price** | 1,800 | 1,800 |
| **Quantity** | 1,20,000 | 1,40,000 |
| **Revenue** | 21,60,00,000 | 25,20,00,000 |
| **Operating Costs** | 9,60,00,000 | 12,88,00,000 |
| **Fixed Costs** | 2,50,00,000 | 2,75,00,000 |
| **Option Purchase** | 2,00,00,000 | |
| **Profit Per Annum (after tax)** | 6,65,00,000 | 6,69,90,000 |
| **Tax Rate** | 30% | |
| **P/E ratio** | Assumed 3 | |
| **Selling Price** | 20,09,70,000 | |
| **PV of Sales Proceeds** | 31,71,40,000 | |
| **NPV** | 9,71,40,000 | |
| **ROI** | 44.15% | |

# Skin Care Manufacturer

Market Entry | Hard | Kearney



**A skin care manufacturer wants to enter the sunscreen market. Evaluate if they should enter the market or not? If yes, then suggest the ways for the same.**

**Sir, the firm had already made a decision to enter market or they are still evaluating it? And why is client looking to enter sunscreen market?**

The client is yet to decide. They want to expand their portfolio & increase their market share

**I would like know about the sunscreen market? Competitive landscape, size. Also, is the client looking to expand into any particular geography?**

The market is highly competitive but stable. The key benefit is that people are aware about sunscreens but because of it being perfectly competitive, pricing is market driven. Initially we are targeting India

**I would analyse the opportunity on four factors which are our product, customers, our capabilities and regulations. If we conclude to enter, then I would look at execution part**

The approach looks good to me

**Starting with the product, what is the USP of our product? How is our quality & offerings as compared to other products in the market?**

Our products are made up of natural ingredients which makes it suitable for any skin including oily skins. Also, our products will be available in smaller SKUs, thus more affordable and easy to carry. The shelf life of our product is higher than average & we provide vast variety for different skins

**Looking at our product, I believe our product is quite attractive to customers. Coming to customer segments specially in country like India, customers will be limited to urban areas?**

Skin care products are a premium product for Indian consumer, especially sunscreen. So yes, we will target only tier 1 customers, since they are the ones who invest in skincare products

**Owing to India's huge population, even that segment is huge in number. But do we have operational & financial capabilities to launch products in India? Also, how is our brand presence in India for other products?**

The client is an established player in the skin care market with strong brand recall in India. We have manufacturing capabilities for all major products with an efficient distribution network. Most of our products are STAR as per BCG matrix. And company have strong financials

**Most of these factors look favourable, what about the rules & regulations in India. Are there any barriers such as taxes, labour norms, stringent rules for foreign players?**

Fortunately, India is an open market with no constraints, favourable tax regimes. We will have cost advantage too due to both production & distribution within India

**As per my analysis, all the factors are favourable for the client to enter the Indian market, except the pricing power. If the R&D and manufacturing cost are as per the industry average, the client should go ahead. Would you like to explore the execution side of it?**

Yes, now that we have decided to enter, let's explore the implementation side of it

**We can either launch the product under our own brand name or a JV. But, since we are already an established player with good brand recall with existing manufacturing & distribution network, we should launch under our own brand provided we have the R&D facilities to manufacture**

We have R&D capabilities & yes, the client would like to launch it under its own brand name

**Coming to operational decisions, we can leverage the existing distribution network. Additional workforce and experts needs to be hired if required. We can use the existing manufacturing facilities & in future is current production capacity is not sufficient, looking at their strong financials, increasing the production capacity wouldn't be an issue**

Sounds like a good plan

**Though we are established brand, we currently have no presence in sunscreen market. So we need to market our product. We can leverage existing brand name to market the product, but we would also need to launch a unique marketing campaign to highlight our USP in this highly competitive segment. Since, India has huge celebrity following culture, we can rope in a known face to better market our product**

The marketing plan looks effective for our product

**I suggest we launch our product at a competitive price and try to capture the existing market. Further, once we have established ourselves, we can expand into new geographies and segments**

We can surely launch it at such price point since R&D cost involved in this product is not significant and the client aims to capture market share as quickly as possible

**Would you like me to explore any other aspect of the case?**

We can conclude the case here. Have a great day ahead!

# Skin Care Manufacturer

Market Entry | Hard | Kearney

The Consulting Club

**A skin care manufacturer wants to enter the sunscreen market. Evaluate if they should enter the market or not? If yes, then suggest the ways for the same.**

**Why Expand**
- Reason: Portfolio Expansion; Growth- To increase market share
- Competitive, well established market
- Advantage: People are aware
- Disadvantage: Pricing, due to perfect competition. Wants to enter Indian market first.

**Unique Features?**
- Uniqueness of product: Natural, available in smaller SKUs; suitable for oily skin too
- Durability of the product
- Variety of creams available for different skins

**Customers**
- Mainly to target the tier-1 customers, who already invest in skin care products.
- Currently there is a market demand for the product but is limited to premium buyers only. People in tier 2 and 3 cities still reluctant to try.

**Capabilities**
- Already established player.
- Manufacturer of major skin care products. Has a well-established distribution network and market presence
- Most of the products still lie in the Star category of BCG matrix (Financially strong)
- One of the market leaders in skin care

**Regulations**
- No regulatory constraints as such, since is an already established market and player.
- Introducing within India.
- Easy exit
- Well known markets, easy tax compliances.
- Production and distribution within India

**Based On Above Inputs We Decide To Enter The Sunscreen Market**

### Entry Options
Can launch under its own brand, without any JV or consortium, provided we have the R&D facilities to manufacture.

### Operational Decisions
Leverage the existing distribution network. Additional workforce and experts to be hired if required. Use the existing manufacturing facilities.

### Marketing Decisions
Use of existing brand name to market the product(established player). But, roping in a known face or a unique ad campaign to differentiate ourselves in a competitive market(can delve further).

### Growth plan and Conclusion
We can launch the product at a competitive price and try to capture the existing market. Further, once we have established ourselves we can expand into new geographies and segments.

# Smart Phone Market



**The CEO of a US oil & gas company is excited about the growing smartphone market in India. Formulate an approach to enter this market.**

**Sir, just to be on the same page, Our client is an Oil and Gas company and they are looking to invest in the Indian smartphone market and I have to look for an approach to formulate this entry. Can I ask a few clarifying questions regarding the case?**

Yes, go ahead!

**Is the decision to launch enter already taken? What are the objectives here?**

Yes. There are 2 objectives: – 1) Market entry into smartphone industry. 2) A metrics to evaluate business plan.

**Okay. Can you tell me more about the company?**

The company is an oil & gas company catering to US & Canada. It focusses on downstream activities, refining and distribution. They have good amount of capital to invest in India businesses.

**Okay! And do they have experience of diversification like this? Have they entered some other region in the same industry before?**

No, this will be their first entry.

**Okay. Give me a few moment to structure my thoughts.**

Sure! Take your time.

**So I would want to start with a broad market analysis of competitors, customers, need gaps , growth estimates, product and channels. Customer viewpoint towards these phones can be categorized into: Smartphone features, pricing, elasticity and market trends.**

Good start. But we you to start with the identification of market to enter.

**Okay sir. So we can divide the market into Smartphones themselves, component suppliers (OEMs) and smartphone embedded services.**

Hardware is a touch field to enter so we would like you to go ahead smartphone embedded services.

**Okay Sir! So smartphone embedded services can be categories into app based services and OS based services like android and apple iOS.**

Yes, good classification. OS is again a tough market to enter, let's move to app based services.

**So app-based can be categorised into costumer centric and business centric. Given client inclination, I believe they will be willing to move into customer centric apps. They can be further categorized into Communication, Entertainment, Food, Shopping, Transport and Health, based apps. Is there a particular category you wish for me to analyse.**

Yes, your assumption is right. Client is looking for something in the entertainment category in customer centric apps.

**So entertainment can be further classified into OTT platforms, Gaming and audio services.**

Move into OTT platforms. We are looking to do something in that category. This is the data we have for the current players: Hotstar, Amazon Prime Video and Netflix. ( Shows data)

**Okay. This is an growing field and something that can be targeted.**

Good! On what metric will you evaluate this particular apps of yours.

**Sure sir. Just give me a minute. We can evaluate the performance in 4 categories, customer satisfaction, financial, employees, and operations or processes. In the customer side of things, we can look for NPS and customer acquisition and retention rates (DAU/MAU). For financials, we can look at return on capital employed and customer lifetime value. In employees we can look at employee NPS and turnover rate and in operations and processes, we can look at technological prowess, ability to compete with existing players and quality of content.**

Okay Thank you! You can leave now.

**Thank you sir!**

# Smart Phone Market



**The CEO of a US oil & gas company is excited about the growing smartphone market in India. Formulate an approach to enter this market.**

## Case Facts & Notes

- **Objective** – 1) Market entry into smartphone industry. 2) A metrics to evaluate business plan.
- **Company** - Oil & gas company catering to US & Canada. Focusses on downstream; refining and distribution.
- **Market Analysis Factors** – Competitors, Customers Need gap, growth estimates, products & channels.
- **Client's Experience in this industry** - None

## Customer Viewpoints

- Smartphone Features
- Pricing / Elasticity
- Market Trends

## Approach

- Smartphone Market
  - Phones Themselves
  - Smartphone Embedded Services
    - App Based Services
      - Consumer centric
        - Communication
        - Entertainment
          - Video Services
          - Gaming
          - Audio Services
        - Food
        - Shopping
        - Transport
        - Health
      - Business centric
    - OS Based Services
  - Part Suppliers (OEM)

| Company | Type of service | Pricing |
|---|---|---|
| Netflix | Paid / Subscription | INR 600 per month |
| Hotstar | Freemium | INR 1500 per year |
| Amazon Prime | Paid | INR 1000 per year |

## Evaluation metrics

- Performance Metrics
  - Customer
    - Net promotor score (NPS)
    - Referrals
      - Acquisition
        - Rate
        - Cost
      - Retention
        - Average screen time
        - Trend of referrals
        - Satisfaction
  - Financial
    - Return on capital employed
    - Profit Margin
    - Customer lifetime value
  - Ops/ Processes
    - Technological prowess
    - Content development
  - Employees
    - Employee NPS
    - Turnover rate

## Recommendations

- Introduction of a video on demand service, competing with Netflix, Hotstar.
- Close monitoring of parameters like avg increase in viewership per episode.
- High marketing efforts needed to make the consumers aware. YouTube and FB to be primary drivers for online marketing.

# South African PE Firm



**Your client is a south African PE firm and wants to invest in Indian tech-consultancy and advisory company. Suggest how to do it?**

**Sir, if I understand correctly, our client is a South African Private Equity form and they want to invest in Indian tech-consultancy and advisory company. I need to devise a plan of action for the same.**

Yes, you are right. Please go ahead!

**First of all, I wanted to understand the objective of doing this investment. Is it from the growth perspective and to synergize with current holdings or is it their first investment in India or something totally different?**

The client has no previous experience of investing in India and have decided to enter the market. The primary objective is to tap the growing Indian IT market and exit in 8-10 years.

**Okay! Since the decision to enter has been taken I would like to start with understanding the Indian IT industry by looking at growth drivers and trends. I would then move to the various options we have by analysing various companies and finding the target company. At the same time I'll also establish a competitor study. At the end I'll suggest exit strategies for the same. Does this sound okay to you or is there something I should change?**

That sound good. Please proceed. I want you to identify the parameters on which you'll evaluate the various headers you just listed.

**Sure. I'll start with the industry analysis. I think to have a sound understanding about the industry, I need to know the market size, growth figures along with recent initiatives and investments by other players that maybe private and public.**

What is the key factor that we are missing here?

**Oh yes we also need to check the forecast for next decade since out exit is in 8-10 years.**

That's right. Please go ahead.

**I think now I'll define the parameters to find the company of choice for our client.**
**I think the key parameters are Sales, sources of revenue, financials, management and growth potential. Do you think this list is exhaustive or should I look at any other parameter as well.**

**For source of revenue as stated in the problem statement, we'll have 2 components – Tech consulting and software services. Both the components should be evaluated based on 3 key parameters – Market share, growth numbers & their forecast and finally, share in revenues.**
**In financials, 4 key parameters can be looked upon – Profitability, EV/EBITDA, Margins and ratios. These will define financial health of the company and back the qualitative assessment with quantitative assessment.**
**Since management forms a key bucket in the future of the investment, I suggest 3 key parameters for judging i.e. the quality of management(openness to new technology, focus on innovation), experience (past experiences help in understanding the vision of the company better) and average age (since it's a relatively long-term investment, it is important that the team sticks for the duration as well as is experienced enough) .**
**Future growth in IT sector is impacted by the projects in pipeline, innovation mindset and forward and backward tech integration.**
**Competitors can be analysed based on the same parameters.**

That is quite detailed analysis. Can you suggest some good exit strategy for the business?

**Sure. There can be multiple strategies like going for IPO, secondary sale and strategic acquisition.**

Okay. Thank you for your detailed analysis.

**Thank you for your time, Sir**

# South African PE Firm

Market Entry | Hard | Kearney

The Consulting Club

**Your client is a south African PE firm and wants to invest in Indian tech-consultancy and advisory company. Suggest how to do it?**

## Case Facts & Notes

Note:
1. Decision to enter has been taken.
2. No previous investment experience in India
3. Objective: The objective is to tap the growing Indian IT market and exit in 8-10 years.

## Approach

**Factors Affecting Investment**

- Target Company
  - Sales
  - Sources of
  - Financials
  - Management
  - Future Growth
- Industry
  - Market Size
  - Growth Figure
  - Growth Forecast
  - Environmental Factors
- Competitors
  - Revenue
  - Sales Volume
  - Market Share
  - Margin
  - Financials
- Client
  - Reasons for Investment
  - Financials
  - Exit Strategy

**Sources of**
- Tech Consulting
  - Market Share
  - Growth
  - Share in Revenues
- Software Services
  - Market Share
  - Growth
  - Share in Revenues

**Financials**
- Profitability
- EV/EBITDA
- Margins
- Ratios

**Management**
- Quality
- Experience
- Average Age

**Future Growth**
- Pipeline Projects
- Innovation
- Tech Integration

# 5G Launch in India



## A telecom operator in India wants to launch 5G services, analyze this decision.

**Sir, just to be on the same page, Our client is a 5G operator and they want to launch 5G services in India. Can I ask a few clarifying questions regarding the case?**

Yes, go ahead!

**Is the decision to launch 5G already taken? What parts of this decision you want me to analyse?**

Yes. We are looking for financial profitability in the next 2 years. Apart from that we want you plan execution and pricing of service.

**Okay. What is the current industry scenario like? Are there any other players in this domain?**

At the moment there is no 5G player at present. There are 4 players in the market, 3 of them have 4G capabilities. There was disruption and price war recently in the industry but things are stabilizing now.

**Thank you! I'd like to know more about the company. Why are they looking to move to 5G?**

They want to be first movers in the market. 5G is the future. With this move, they wish to capture 40% of the market share in the industry and consolidate their customer base. Their core competencies are: Good brand image, international expertise and market experience.

**Thank You! And can you tell me more about the customers? How adaptable are they?**

The customers are very price sensitive. But when 4G was launched, 90% of the customers shifted to 4G within 2 years. We expect the same pattern with the launch of 5G.

**Thank You! Can I have a few moments to gather my thoughts about the approach.**

Sure! Take a minute.

**Okay! As profitability is the objective, I will be approaching this case by finding the major costs and expected revenue we can generate. Revenues will depend on number of customers which will depend on customer adoption rate and benefits of 5G over 4G. Also the revenues will depend on our price. But I would like to analyse the cost side first.**

**The biggest cost will be spectrum costs. Other than this, infrastructure cost, procurement cost & installation cost I believe would be important since the tech. base of 5G is considerably different from 4G. Do we have any data regarding this?**

The spectrum costs are 1500 cr. Apart from that, we are planning to install 2500 towers, each costing 2 Cr

**That will make the total costs around 6500 Cr. Are there any other costs involved? If not, can I move to the revenue side? I would like to understand more about the customer adoption rate.**

No these are the only costs. Customer adoption rate ffollows a normal curve with innovators (10%) adopting within 3 months, early adopters (20%) within 6 months, majority (50%) within 9 months and others adopting within 12 months (10%).

**Okay. I can calculate number of customer from that. For price I need to understand the benefits of 5G over 4G and current prices of 4G services being offered first.**

Good question. In 5G services, internet access speed (establishing connection) improves from 1s to 0.2s/10MB & call connection time improves from 2s to 0.4s. ? Current 4G packages are offered @Rs150 pm with 1.5GB of data per day. Estimate this to rise to 5GB a day in 5G.

**Alright, to calculate price, we can take 3 approach-cost based pricing, value based pricing or competitive pricing. In this case the # of customers are coming to be #of 4g users (30 Cr)*market share (40%)*adoption rate = 7.2 Cr in the first year. Based on this, the price/month should ideally be Rs 75. But this is lower than 4G services. Since we are providing more value to customer. We can go for value based pricing.**

How would you calculate the price of value being offered?

**Sure. For that, we should calculate the value of added benefits over 4G. We can break the benefits into call & internet based. There are no considerable benefits over calls via 4G. However, in terms of data, there are 2 benefits, decrease in connection time and amount of data. The former is negligible, hence the only major benefit is 5 GB/day data over 1.5 GB/day today. Based on simple proportionality we can price our services anything from Rs. 150 to 450. To ensure faster adoption we can charge a 10% mark-up over our current offering and price the service at Rs. 165.**

# 5G Launch in India

Pricing & Market Entry | Hard | Bain & Co.

The Consulting Club

**A telecom operator in India wants to launch 5G services, analyze this decision.**

## Case Facts & Notes

- **Objective** - Financial profitability in 2 years. Execution & pricing of service.
- **Industry -** No 5G player present currently. Disruption and price wars recently.
- **Company** - First movers in 5G technology. Max market share (~40%).
- **Customers**-Upgrades to latest technology within 2 years. Very price sensitive.
- **Competitors**-Oligopolistic Market (3 players). All have 4G capability.

Core competencies of client company? - Good brand image, international expertise and market experience.

**Customer adoption rate?** Follows a normal curve with innovators (10%) adopting within 3 months, early adopters (20%) within 6 months, majority (50%) within 9 months and others adopting within 12 months (10%).

**Costs for launching 5G?** Spectrum allocation, new infrastructure and tower upgradation, need for high speed fiber cables, technical upgradation of HR.

**Benefits of 5G over 4G?** Internet access speed (establishing connection) improves from 1s to 0.2s/10MB & call connection time improves from 2s to 0.4s.

**Pricing of 4G?** Current packages are offered @Rs150 pm with 1.5GB of data per day. Estimate this to rise to 5GB a day in 5G.

## Approach

Benefits

- Revenue
  - Price
  - Avg. # customers Yr 1
    - =(#of 4G users)*(market share)*adoption rate
      - =#of 4G users (30 Cr)*market share (40%)*adoption rate (60% = 0.1*1+0.5*0.75+0.2*0.5+0.1*0.25
- Costs Rs. 6500 Cr
  - Fixed Costs
    - 1500 Cr
  - Variable Costs (5000 Cr)
    - # of Towers = 2500
    - Cost per tower = 2 Cr

## Pricing

- In order to break-even in an year:
- 7.2cr*price/month*12 = 6500cr => Price/month ~= Rs75
- Pricing can be done in these manners:
  - Cost plus pricing
  - Alternate benchmarking
  - Cost-benefit analysis
- First movers, want to maintain market dominance after competition enters the 5G space, use value based pricing and then switch to cost plus/competitive pricing.

## Recommendations

- Should enter the 5G market.
- Can realize the investment within an year given current estimates.
- Would help gain market share given the pricing structure.
- **Pricing Strategy** – Price the service at Rs165/month initially and decrease/increase as the competition enters.

## Customer Cost Benefit Analysis

Benefits

- Calls (Negligible)
  - # of calls a day
  - Time saving per call
- Internet
  - Data Used a Day → 5000 MB
  - Time Saving per unit of data → 0.08s/MB

## Pricing Decision

- Total time saving = 400s ~= 10 min
- Assuming average income of person using 5G = Rs1500/day
- Rs 10 benefit/day
- Total benefit/month = Rs 300
- Therefore, the service can be priced anywhere between Rs150 – 450/month: To start can begin with 10% markup over original Rs.150

# Coffee Capsule



**Your client is global F&B company based out of Switzerland. They want to enter the Indian market with product which uses coffee capsules (or pods) for making coffee. They need your help in understanding how to do so.**

**I'd like to reiterate the problem. Our client is a global F&B company based out of Switzerland. They have come up with a product which uses coffee capsules/pods for making coffee and they want to enter the Indian market. Is my understanding correct?**

Yes, you may proceed.

**Okay. What is the objective for our client? Do we have a timeline that we need to follow? What does the product portfolio of our client look like?**

Our client wishes to enter the Asian market through India and capture market share. They have already established a market in North America and Europe. We do not have a specific timeline in mind. Our client has a wide variety of products, but a subsidiary of this company just focuses on coffee; this subsidiary wishes to enter the Indian market with the machine as well as the capsules.

**Understood. Has our client established a presence in India through another subsidiary or is this the first time we are entering the market? Who are our competitors?**

The company has entered India with other products, even coffee, but not with this machine and capsules. We can try approaching the competitive scenario of this product when we dive into the case.

**Okay, sure. So I'd also like to know where are our products manufactured currently and what our distribution channels are currently in India? Do we have sufficient financial resources to enter the market?**

Our products are manufactured in Europe. Our distribution channels are through online & offline retailers. Yes we have sufficient financial resources

**I'd like to know more about the products. As per my knowledge, a coffee capsule machine will be priced differently based on its features and the capsules will be priced differently based on the variety of flavours. Do we have any information regarding the pricing of both the machine and the capsules, the different flavours available and what we're planning to enter the market with? I assume since our USP is it's a coffee capsule machine, we will have no issue with differentiating ourselves from the market.**

Good question. We are planning to enter the market with our most basic machine which is currently priced at about EUR 150. There are a total of 36 flavours in the European market, but we wish to enter the Indian market with 5 basic flavours; Vanilla, Hazelnut, Caramel, Chocolate and Coconut all priced the same. Your assumption about differentiation is correct.

**I'd like to proceed by looking at these factors: first, I'd look at our market attractiveness in which I'll explore our target segment and our potential market size. Second, I'd look at the operational feasibility of our client entering the market wherein I'll explore the value chain. Third, I'd look at barriers to entry including our competitive scenario. Fourth, if our plan is feasible, I'd like to explore modes of entry. Does this seem alright or should I cover any other aspect as well?**

This seems okay, but I'd also want you to look at how we can potentially price our product for India once we have established an understanding of our market.

**Okay, I'll include it in the analysis. For segmenting our customers, I would assume that our customers belong to the upper-middle to upper income segment in the urban areas of India. For estimating the market size, I'd first look into the population of India, then the urban population, then upper-middle and upper income class population. I will then divide it on the basis of age wherein 15-40 would be the major coffee consumer category and then look at % of coffee drinkers in this category. I'd then look at frequency of coffee consumed and focus on those who consume frequently, say 3 cups of coffee a day. Would you like me to come up with a number as well?**

Yes, that would be helpful. We can discuss the pricing later, but let me know your thoughts on the target population number.

**Sure, I'll just take a few moments. As per my calculations, our population would be 1.34 Cr and cups of coffee consumed will be 4.03 crore cups of coffee.**

Okay, this seems fair. Now let's talk about how we can price this product for the Indian market.

**Sure, so I'd like to look at it in 3 ways; first, we could explore cost-based pricing wherein the costs involved for the machine and the capsules would be considered. Second, we could explore competitor-based pricing wherein we look at what our competitors in the market. Third, we could focus on value-based pricing.**

Let's track down the costs associated with both the machine and the capsules.

**Sure. So, based on what I know, the various cost heads for the machine would be:**
**a) Cost of raw materials such as plastic, metal, wiring, technology used. b) Cost of manufacturing which involves assembly of the sub-components and labour involved c) Cost of packaging for shipping d) Costs related to importing the finished machine from Europe e) Costs related to distribution and marketing e) Miscellaneous administrative costs**

# Coffee Capsule



**Your client is global F&B company based out of Switzerland. They want to enter the Indian market with product which uses coffee capsules (or pods) for making coffee. They need your help in understanding how to do so.**

That is quite thorough. Could you also list down the costs associated with just one capsule?

**Sure, I can think of the following costs for the one capsule:**
**a) Costs associated with sourcing the coffee grounds to be filled in the capsule b) Cost of designing the capsule c) Costs of the material used for packaging the capsule (the capsule body, filter film.) d) Costs of assembling the capsule (labour, sealing, production expenses.) e) Cost of labelling the capsule and packing it f) Cost of distribution (margins) g) Cost of marketing and branding h) Miscellaneous administrative costs i) Cost of recycling and reverse supply chain. Do we have any data regarding the costs?**

Thorough analysis! We don't have a breakdown of these cost heads. Let's explore competitor based pricing. Who do you think would be our direct competitors?

**Our machine and capsule can be priced separately. We can carry forward the machine cost from the European market i.e. EUR 150. It would be about INR 13k. Is that okay?**

Yes, that should be fine for now.

**For the coffee capsule, since we're catering to a premium coffee segment, our competitors would be high-end cafes and chain stores such as Starbucks, Tim Hortons. I'd also assume that due to the nature of coffee capsules, it'd be similar to a "ready-to-go" coffee such as instant coffee.**

Okay, let's consider Starbucks and instant coffee only.

**Sure, I'd assume that an average cup of coffee from Starbucks would be priced somewhere between Rs. 300-400. Before I proceed to instant coffee, could I know what the average quantity of coffee in a capsule?**

Let's take the average price of a Starbucks coffee to be about Rs 150 for the smallest size. The quantity of coffee in a capsule is about 5-7 grams.

**Sure, so if I assume a coffee jar of 25g, it's priced at approximately Rs. 100. So, for a 7g coffee, it would be priced at Rs. 28. We can take a premium on this by 50% so our lower benchmark could be Rs. 42. We can assume Rs. 150 to be our upper benchmark. We can price a capsule at Rs. 100.**

Okay, this sounds fine. Let's move on to the operational aspect of our analysis.

**Sure, I'd explore the value chain in 4 components: sourcing of coffee, processing the coffee into the capsule & its packaging, distribution and sales & marketing. Would you want me to focus on one aspect or should I explore each of these one by one?**

Let's explore each briefly.

**Sure. We can have two varieties of coffee; one could be from Indian plantations so that our costs would reduce and our capsules are palatable to the Indian consumers and another could be from Switzerland to add a new collection to our portfolio.**
**For the processing of the coffee, we can set up our own plants or we can use our existing plants in Switzerland. But, initially, till the time we set up our own plants we can continue to source from Switzerland. We can continue to import the machines from Switzerland while we set up our own manufacturing plants here for the machine.**
**For packaging, we can sell the capsules along with the machine maybe in a SKU of initial 10 and we can also sell capsules in different SKUs such as 10, 50, 100 capsules and so on.**
**For distribution, we can continue to explore our established distributors in the offline and online retailer space and we can also target high-end cafes to sell our capsules individually.**
**We can run campaigns on social media to create awareness about our capsules and our machine.**
**Do you want me to explore the risks associated with our entry as well as the mode of entry as well?**

I think we can wrap up the case here. We have all the information we need.

**Thank you!**

# Coffee Capsule



**Your client is global F&B company based out of Switzerland. They want to enter the Indian market with product which uses coffee capsules (or pods) for making coffee. They need your help in understanding how to do so.**

## Case Facts & Notes

- **Objective –** Capture market share with both machine and coffee capsules
- **Context** – Entering India with coffee subsidiary first time
- **Company** – Established in North America and Europe
- **Timeline** – No timeline
- **Manufactured** - Europe
- **Machine Price** - EUR 150
- **Product** – Machine & Capsules/pods
- **Capsules** – 36 flavours, enter India with 5 only
- **Distribution** – Existing online and offline retailers
- **No financial constraints**

## Approach

**Market Entry**

- **Market Attractiveness**
  - Customer Analysis
  - Market Sizing
- **Competitors & Pricing**
  - Cost-based
  - Competitor-based
  - Separate for machine & capsule
- **Operational Feasibility**
  - **Process**
    - Varieties
    - Plants
    - Import
  - **Package**
    - SKUs of capsules (10/50/100)
  - **Distribution**
    - Current offline & online channels
  - **Sales & Marketing**
- **Risks & Mode of Entry**

**Pricing**

- **Cost-Based**
  - Cost heads
  - Machine – EUR 150 i.e. Rs. 13k
- **Competitor-Based**
  - Starbucks, Tim Hortons
  - Instant coffee
  - Coffee shops

→ **Capsule**

- Starbucks – Rs. 150
- Instant coffee (7g) – Rs 28
- Premium (50%) – Rs. 42
- Capsule – Rs. 100

**Market Sizing (Coffee Consumers)**

Pop. of India = 140 crore

- Urban Upper-Middle & Upper Class (20%)
  - 15-40 years (60%)
    - Coffee Drinkers (40%)
      - High Frequency (20%)
      - Moderate Frequency (40%)
      - Low Frequency (40%)
    - Rest (60%)
  - Rest (40%)
- Rest (80%)

High Frequency (20%) → Let frequent coffee consumers consume 3 cups of coffee/day
Total coffee consuming population = 140 * 0.2 * 0.6 * 0.4 * 0.2 = 1.34 cr

## Recommendations

- Pricing for coffee machine to be kept same as European market as it's a premium segment. Each capsule to be priced at Rs. 100. SKUs of capsules can be packaged (10/50/100 capsules)
- Same distribution channel to be followed as previously established, along with coffee shops
- Import from Switzerland, set up plants in India for manufacturing of machine and capsules

# Growth

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# Appliance Distribution Company



**Our client is a PE Firm which has recently invested $400mn in an appliance distribution company, ABC Ltd. You are hired to increase company's profits**

**Thank you sir, I'd just like to confirm my understanding. Our client is a PE Firm that has invested $400mn in an appliance distribution company and now they want us to help them increase profits. Right?**

Yes, that's right

**Okay, so I'd want to know if we have any minimum threshold of profit increase?**

We are looking for an increase in profits by around $300 Mn.

**Okay, thank you. I'd like to clarify a few more aspects regarding ABC. Where are we based, what are the goods we deal in, who our customers are and what the competition looks like?**

ABC is based out of US, dealing in white goods like ACs, refrigerators, ovens and more. They're basically involved in distributing products to retailers, both big and large retailers all across US are their customers. The market is fragmented and has about 5-6 players.

**Thank you sir! Can I also know a bit about the revenue and business model? Also, our USP?**

Sure, no specific USP exists but as far as revenues are concerned, current revenue figures are at $1500Mn, 33% of which are profits.

**Okay, so as I see it, we aim to increase about $300mn , i.e. about 20% of the current revenues.**

Yes, that's right.

**Okay. So would you want me to consider only one of increasing revenues or lowering costs to increase profits, or should I look into both?**

You can focus on increasing revenues. Their costs are under control and competitive.

**Okay, thank you. So I'll start by enlisting a few ways by which the company may increase its revenues and formulate a strategy for growth. The first would be geographical expansion.**

Sure, that sounds good. What do you exactly mean by geographical expansion and what do you think would the pros & cons of your suggestion be?

**Sure, pros could be that with expanding, they could tap into untapped markets and get access to new customers, technology. while cons would be that there may be a considerable amount of capital investment involved along with looking out for any regulatory constraints.**

Okay, what else do you think could be ways to increase revenues?

**The client can also expand into new products of the same categories like electronic equipment, consumer durables. Similarly, we can look to expand within the existing market too.**

That sounds interesting, how do you propose to do that?

**For this, I'd like to ask if our retailers purchase only from us or other distributors too?**

That's a good question. Retailers currently purchase about 50% of their inventory from us while competitor retailers have 70% of their products worth from their major distributors.

**Oh then that surely has a scope of improvement. We can work on negotiating terms to increase share in each retailer's inventory. We can also look to onboard other retailers in the long term.**

Great, that sounds good! Any other solution?

**For any inorganic growth option, I don't think it's very feasible currently since there is time yet to realise full potential in the current market, making capabilities to offer in case of a merger less attractive.**

Right, that was insightful, thank you!

**Thank you!**

# Appliance Distribution Company

Growth | Easy | BCG



**Our client is a PE Firm which has recently invested $400mn in an appliance distribution company, ABC Ltd. You are hired to increase company's profits**

## Case Facts & Notes

- **Objective**: Gain a better return on investment/ increase profits for the ABC company both in the short and the long term.
- The metric is also to increase profits by $ 300 MN.

Note: Instead of applying a typical Profitability framework, we have to instead consider only the revenue part as we need to increase profits equal to 20% of present revenues, also the PE firm has already invested $400 MN. Hence, this is a case of growth strategy.

## Approach

**ABC Limited : Business**

**Client**
- Based out of US dealing in goods like ACs, refrigerators, ovens.
- Basically, distributors who directly provide products to the retailers
- Present across USA

**Market**
- Competitive market with the presence of 5-6 big players
- No specific USP for our client
- Apart from major competition, fragmented market with a fixed revenue model based on sales by the retailer.

**Customers**
- Current revenue figures are at $ 1500 Mn.
- Both large retail chains and small individual retailers are currently present as customers for ABC Ltd.
- 33% of the revenue is the profit

**Value Chain/Operations**
- White goods are manufactured by different companies and kept in their respective warehouses.
- ABC Ltd. collects the same and transports them to the end retailers or retail chains.
- Currently client is only in the business of white goods.

**Growth Strategy**
- Geographic Expansion
- Portfolio Expansion
- Inorganic Growth
- Existing Market

## Recommendations

- The client can expand geographically domestically or internationally. Uncertainty about the new markets; Capital investment; Unfavourable regulations would have to be kept in mind in this case. Moreover the client can still further expand in the existing geography
- The client can expand into new products of the same or related categories like electronic equipment, consumer durables, brown goods. This would lead to an increase in revenues.
- The client can add more retailers or can increase share from each retailer. If the retailers are using less of client's products as their total inventory compared to our competitors retailers, if we upsell, profits can rise.

# Apparel Business Topline



**Our client is in the apparel business in the US and wants to expand its top-line. How should we go about it.**

**Sir, just to be clear, out client wants to increase revenue? And, does he have any target in mind?**

Yes, our clients wants to grow its top line by 25%

**Sir I would like to ask a few clarifying questions.**

Sure, go ahead!

**What product does our client provide? What is its USP? What is the client's market share?**

Our client provides mid-priced jeans which are known for quality at affordable prices. The market is quite fragmented, but our client is amongst the top 5 players in the market

**Thank you sir! Since the jeans are know for their quality at affordable price, is it fair to assume that target customer are low income families? Or they want to target a new segment as well.**

The clients targets low-income adults – both men and women. For now, lets focus on same segment

**Thank you sir! The are two options available to us. Either the client can grow organically or via acquisition which would require huge capital investment form clients' ends**

The client just want to grow organically for now.

**Sure sir! Revenue is function of number of customer and revenue per customer. For organic growth we can increase both. For revenue/customer, either we can increase the price or/and increase the prices, though because of our USP, I would suggest not increase price. To increase number of customer, we can either enter new markets or penetrate deeper in existing markets**

Sounds good to me. First let's explore revenue per customer. As you correctly pointed out, we can't increase price, so lets target the frequency of purchase

**To increase the frequency, I suggest we can strategically tie-up with departmental stores and retail chains for cross-selling promotions. This would also help us expand our customer base. Second, We can also investigate the marketing activities over E-commerce segment and provide bulk discounts. Third, we can start with loyalty program if there aren't any.**

That interesting. Let's explore how we can increase customers starting with new markets.

**For new markets, either we can enter new geographies, we can target other customer segments like upper income group, kids, and we can launch new products to attract more customers**

If the client goes with your first option of new markets, what factors should we consider?

**As per my understanding, we should evaluate any new market considering size of the market in terms of demand for jeans and favorable attitude to jeans, paying capacity, competition and ease of setting up manufacturing/distribution operations.**

Are there any potential risk as well?

**Yes, with new markets there might be some associated risks as well. Let us say we select China as a new market to explore, potential risk I could foresee are; 1. Mid-priced jeans in US might be comparatively expensive in China, 2. Getting licenses and permissions might be difficult, and 3. Existing low-cost competitors in China**

All these are legitimate concerns. We will keep them in mind while moving forward. What are your thoughts on existing markets?

**To achieve deeper penetration in existing markets, we can look for new marketing campaigns to reach out to untapped costumer and simultaneously expand our existing distribution channels to serve more customers**

We can present all these ideas to the client and ideate further. Thank you! Have a great day ahead.

# Apparel Business Topline

Growth | Easy | BCG

**Our client is in the apparel business in the US and wants to expand its top-line. How should we go about it.**

## Case Facts & Notes

- **Objective**–Increase revenues. Target of 25% increase.
- **Product-** Mid-priced jeans. Known for quality at affordable prices.
- **Market-**Fragmented market. Client is one of the top 5 players
- **Target Segment**-Low-income adults – both men and women

## Approach

As this is a fragmented market, there would be many small players. The company can investigate strategic acquisitions to expand into different customer segments or acquire differentiated product capabilities.

- Increase revenues
  - Without acquisition (organic)
    - Increase revenue per user
      - Increase frequency of purchase
        - Cross-selling
        - Loyalty programs
        - Bulk and other discounts
      - Increase price
    - # of customers
      - New markets
        - New geographies
        - New customer segments
        - New product launches
      - Existing markets
        - Improve marketing
        - Expand distribution channels
  - Acquisition

Factors for exploring new markets, we can keep the following factors into consideration

- Size of the market in terms of demand for jeans and favorable attitude to jeans
- Paying capacity
- Ease of setting up manufacturing/distribution operations
- Competition

## Recommendations

1. Strategic tie-ups with departmental stores and retail chains for cross-selling promotions. This would also help us expand our customer base.
2. We can also investigate the marketing activities over E-commerce segment.
3. Starting loyalty programs.

However there might be some associated risks as well. Let us say we select China as a new market to explore

Potential risks / concerns

- Mid-priced jeans in US might be comparatively expensive in China
- Getting licenses and permissions
- Existing low-cost competitors in China

# Book Publishing



**A private equity firm wants to acquire a legal book publishing house, but is concerned about their future prospects. They want you to analyse if the market of the publishing house is attractive enough or not.**

**Okay, I would like to make sure I've understood the problem correctly. Our client wishes to acquire a legal book publishing house and they want to know whether this is a viable option and whether they can grow in the market if they go forward with the acquisition. Is that correct?**

Yes, that's correct. How would you approach this?

**I would like to ask a few questions just to understand the problem better. First, I'd like to know what is our objective? Second, I'd like to know if we have a specific timeline in mind?**

The objective is to understand what kind of market we are looking at. They also want to know what are the avenues of growth we can explore i.e. new markets maybe. There's no timeline as such since this is just the exploration stage.

**I'd like to know more about our client, the private equity firm. Do we have any information regarding their current portfolio and their debt to equity ratio? Where are they based out of?**

We only know that they are based out of USA. Let's focus on the other aspect of the case i.e. the TargetCo. to acquire.

**Sure. Where is our TargetCo. i.e. the legal book publishing house based out of? What kind of material do they publish?**

The publishing house is based out of India. They publish one-time publishing material such as books and repetitive publishing material such as legal journals, cases. Can you think of segments to which the publishing house can cater to with these products?

**As per my knowledge, we can cater to different individuals, such as students (i.e. aspirants preparing for bar exam or law students currently pursuing the subject), working professionals (i.e. lawyers, CAs or consultants who can use the books for research) and non-formal professions such as clerical work. Can I know which segment we're currently catering to?**

We're only catering to D2C sales in specialty academic bookstores involving the segments you just mentioned. Our TargetCo. has been looking to expand for a while. What can you suggest?

**Apart from this, we can also look at expanding into bookstores of institutions such as universities & colleges, schools. We can expand further into chain and independent bookstores which sell fiction and non-fiction books and not just academic bookstores.**

Okay, this seems fair but let's explore more avenues. What else can you recommend?

**We could also look into libraries of institutions along with public libraries. Also, we can explore legal conferences/conventions and seminars and try to set up exhibitions in these events.**
**Another avenue we can explore are D2C retailers such as Amazon, Flipkart and even the websites of bookstores where our product is selling. We can even create our own website for a long-term option and also offer subscription services once we have our own distribution channel set up.**
**As another option, we can explore second-hand online and offline marketplaces.**
**We can even distribute it to coaching classes to reach students better and companies wherein people look for legal material for research (i.e. CAs and consultants).**

This is extremely thorough! To close out our case, how would you segment the population for our market? Only focus on one of our products and one of our avenues of distribution and try to come up with a formula.

**I'd like to look into only books and only libraries of universities.**
**First we should segment the libraries on the basis of scale i.e. small, medium and large libraries based on the number of students in each university. Then we can take what % of these libraries have legal books. I'd also take into factor the no. of copies of a particular book maintained at the library Should I explore each of these factors further?**

No, this is sufficient. We can wrap up the case.

**Thank you!**

# Book Publishing



**A private equity firm wants to acquire a legal book publishing house, but is concerned about their future prospects. They want you to analyse if the market of the publishing house is attractive enough or not.**

## Case Facts & Notes

- **Context** – Exploration stage
- **Timeline** – No specific time provided
- **Objective –** Analyse potential markets
- **PE Firm** – based in USA
- **TargetCo–** based in India
- **Material** – Books, journals, cases.
- **Current distribution** – D2C sales through specialty academic bookstores

## Approach

**Material Available**

- **One-time**
  - Books
- **Repetitive**
  - Journals
  - Cases

**Distribution Channels**

Specialty academic bookstores

- **Individuals**
  - **Students**
    - Aspirants
    - Legal students
  - **Working Professionals**
    - Lawyers
    - CAs
    - Consultants
  - **Clerics**
- **Institutions**
  - **Bookstores**
    - **Academic**
      - In universities
      - In schools
    - **Non-Academic**
      - Chain Bookstores
      - Independent Bookstores
  - **Libraries**
    - University /College
    - Public
  - **Online**
    - **Retailers**
      - Amazon
      - Flipkart
    - **Bookstores**
    - **Self**
      - Own Website
  - **Legal Events**
    - Conference
    - Seminar
    - Convention
  - **Misc.**
    - Secondhand stores
    - Coaching classes

**Scale of Univ Libraries (Small, Medium, Large) x % of libraries having legal books x No. of copies of a particular book maintained**

## Recommendations

- Finding newer places to sell the material, such as libraries, online retail, legal conferences.
- Market sizing can be done to understand potential markets

# Pediatric Vaccine Manufacturer

Partner Case

Growth | Moderate | Bain & Co.



**Your client is a pharma company that is selling pediatric vaccines. They are looking for strong growth in the next 3 years. Is it possible for us to grow in the market? If yes, then devise a plan for the same.**

**Reiterating the problem statement, our client is a pediatric vaccine manufacturer. They are looking to grow in the next 3 years and I need to propose a plan for the same.**

Yes, that's correct. Go ahead!

**I would like to know more about the vaccine. Assuming that it's a pediatric vaccine, it would be used primarily for children. Could I also know which age group is this vaccine made for?**

It is a Hepatitis B vaccine. As you pointed out, it's used for children aged 0-2 years.

**Okay! As per my understanding, vaccines are provided in multiple dosages, the first being given right after the birth of the child. Could I know what is the dosage schedule?**

You are right. One dosage is right after birth, one 3 months after birth and the last one around 18-24 months after birth.

**Thank you for the information, it's very helpful. Could I know if we have any price associated with the vaccine? Do we have any USP associated with our vaccine, in terms of efficacy, immunity or something else?**

Yes, they are on the more expensive side. The price in a private clinic is Rs. 1500-2000 per dose. The vaccines are also available for free in government hospitals, but we want our growth to be driven by the private sector. No, we do not have any specific USP.

**Do we have any information on our competitors in this space? What are their vaccines priced at?**

Yes, there are few competitors. They have priced their vaccines in the same range as ours. But, we have a market share of 55% and we hope to grow to 75% in the next 3 years.

**Thank you for the information. I would now want to understand the market where we're based and since when have we been operating in this space? Do we have any insight on whether we wish to expand internationally?**

Our client is based out of India and has been operating in this market for the last 20 years so we have a lot of trust associated with our brand. We want our growth to be focused only in the Indian market.

**I just have another question before proceeding to the case. I'm assuming that since our vaccine is on the expensive end, not all babies would be vaccinated with the same.**

That is correct. This is not a mandatory vaccine. Only 10-15% of babies get this vaccine at birth. This number is what we want to focus on for growth.

**Thank you! I have all the information I need. In order to understand whether the growth is possible or not, I would like to focus on the customer journey of the baby getting vaccinated and then understand on which segments we need to focus on in order to witness a growth. Is this okay?**

That seems fair. Continue.

**We should look at four stages to drive growth; first being need of the vaccine, second being awareness about it, third being can the parents access the vaccine at all and fourth would be if it's affordable to the parents.**

Can you elaborate further?

**Sure. Under need; since it is an optional vaccine I'm assuming parents would not know about the implication of Hepatitis B and why it is important for their children's health. For this, we would need to increase awareness for which we can have two ways i.e. offline and online. In offline, we can target the health care centres (such as private/government hospitals, paediatric centres, family physicians.). We can focus on digital marketing and utilise SEO techniques for parents who are looking for baby products. We can also release educational content on social media.**

Yes, that sounds good. Let's now focus on the last stage which is affordability.

**All right. Since our product is a premium vaccine, we need to target the upper class and upper-middle class parents first and we can improve on this once we penetrate the market.**

Okay, but can you tell me how we can see an increase in affordability in the next 3 years?

**I'll just take a few moments to gather my thoughts.**
**So according to my understanding, the affordability will increase when there is a rise in disposable income. This would depend on two major factor i.e. per capita income and cost of living.**

All right, suppose there is a rise in disposable income, but how do we know that people would spend their extra income on our vaccine?

**Okay. Specifically talking about our targets segment, in order to know if they've spent that extra income on our vaccine we should look at their spending pattern for the products that they buy for their babies i.e. the premium baby products such as diapers, baby toys, clothes. If we see an increase in this spending pattern, we can assume that if our awareness increases then they would spend their extra income on our vaccine as well.**

Okay, this sounds great. We can wrap up the case, thank you!

# Pediatric Vaccine Manufacturer

Partner Case
Growth | Moderate | Bain & Co.

**Your client is a pharma company that is selling pediatric vaccines. They are looking for strong growth in the next 3 years. Is it possible for us to grow in the market? If yes, then devise a plan for the same.**

## Case Facts & Notes

- **Context** – Client operating in India since 20 years
- Product - Hepatitis B vaccine meant for 0-2 year olds
- **Timeline & Objective –** 75% in the next 3 years
- **Pricing & USP** – Priced at Rs. 1500-2000/dose
- **Industry Scenario** – 55% market share
- **Value Chain** – Distribute to private and govt hospitals
- **Only 10-15% babies get this vaccine at birth**

Dose 1 – At birth

Dose 2 – 3 mos after birth

Dose 3 – 18-24 mos after birth

## Approach

**Growth of Pediatric Vaccine**

**Customer Journey**

- **Need**
- **Awareness**
  - **Offline**
    - Private/govt hospitals
    - Pediatric centers
    - Family physicians
  - **Online**
    - Digital marketing techniques (SEO)
    - Educational content on social media
- **Accessibility**
- **Affordability**
  - **Rise in disposable income**
    - **Per capita income** ↑
      - Spending pattern
      - Extra income spent on vaccine if awareness increases
    - **Cost of living**

**Target:** Upper and upper middle income class parents

**If parents spend on 'substitutable proxies' such as baby clothes, toys, they would also be willing to spend on the vaccine**

## Recommendations

- Increase awareness of vaccine through offline, online methods
- Analyze spending pattern of parents for baby products

# Truck Manufacturer



**Your client is a truck manufacturer looking for growth. They need your help in devising their growth plan.**

**I would like to confirm my objective before I proceed. Is the client looking for increase in their topline or is there some other objective as well? Also, do we know the growth rate they are targeting and the timeline to achieve the same?**

They are looking for 20% revenue growth in next 3 years.

**I would also want to understand the kind of trucks we manufacture and their price points. Also, do we have information about how each of our products are segmented in our portfolio i.e. the %?**

There are three major kind of trucks we manufacture – Light Commercial Vehicle (LCVs) with a payload capacity of 5 tons, MCVs with a capacity of 5-7 tons and HCVs with capacity more than 7 tons. They are priced in the range 12.5L-50L. MCV & HCV trucks constitute 80% of our trucks manufactured.

**I would also like to understand the value chain for this client. As far as my understanding goes, it involve the following steps: R&D, raw material procurement, manufacturing, distribution, sales & marketing and customer service. Is my understanding correct?**

Yes. Your understanding is correct. Moreover, we are an OEM (Original Equipment manufacturer), so all parts are also manufactured in-house.

**Okay, I would want to understand is the region of our operations and is who all are our clients? I assume this would mainly be a B2B business.**

Yes, so as rightly mentioned, it's a B2B business and the clients are distributors and dealers across different locations. Coming to your first question, we are operating pan-India.

**That helps. Before proceeding further, I would want to understand the market dynamics and the current position of our client in the market. Who are the major competitors in this space?**

Right, so there are 4 major players in the market but are client has more than 50% of the market share and is the market leader in this space.

**I will also want to understand the growth rate of the industry in order to understand the difference in the two and accordingly come up with a strategy.**

Okay, so the industry is growing at CAGR of ~7% per annum.

**In order to increase the revenues, we can look at growing organically or inorganically. Is there some specific preference of client towards organic/ inorganic growth?**

Let's look at growing organically only.

**Okay, so the revenues can be increased by increasing revenues from existing customers or look at revenue from new customers. Do you want me to look at some specific segment first?**

Let's look at revenue from existing customers, first.

**To improve revenue from existing customers, we can look at it from three aspects. First, improve the relationship with the dealer/distributor. Second, provide them incentives to push our products and third look at improving their capabilities (provide them training about usage and features).**

Okay, what next ?

**Now, let's dive into revenue from new customer. New customers can primarily come through new clients, new industries & new products and services . In new clients, we can look at geographical expansion into different countries where there is demand for truck, we can also look at building new client relationships in existing geographical locations.**

Sure. What all would you look at under exploring newer industries?

**For new industries, we should look at the current industries we are serving (logistics, transportation.) and then look at the other potential industries which can be served. For ex: Frozen foods industry in growing, if we could come up with refrigerated trucks, then we could tap on this industry. We can also supply certain parts and components to different industries. Do you want me to further identify such industries?**

No, let's explore new products and services, for now.

**In new products, we can start manufacturing other heavy duty automobiles. With shift towards sustainability, we can also look at how manufacturing electric trucks. This will require investment in R&D. We could also come up with refrigerated trucks as mentioned earlier.**

Okay, anything else you want to look at?

**In services, we can provide maintenance and repair services, driver training to improve safety & fuel efficiency, and end-to-end logistical support. Since technology is ruling the world, we could also explore providing some tech related services like telematics and GPS tracking.**

Okay, we can wrap up the case. Thank you

# Truck Manufacturer

Buddy Case

Growth | Moderate | BCG

**Your client is a truck manufacturer looking for growth. They need your help in devising their growth plan.**

## Case Facts & Notes

- **Growth Target** -20%
- **Duration** - Next 3 years
- **Product portfolio** - HCVs, MCVs, LCVs with MCVs & HCVs ~ 80% of manufactured trucks
- **Operations** - B2B sales
- **Geography** -Pan India
- **Value Chain** - Typical value chain of an automobile industry, but not an OEM
- **Industry growth rate** – 7%

## Approach

- Growth
  - Organic
    - Existing Customers
      - Build long-term relationships
      - Provide incentives
      - Improve capabilities
    - New Customers
      - New Clients
        - Existing Geographical locations
        - Geographical Expansion
      - New Industries
        - Current Industries
          - Logistics
          - Transportation
        - Potential Industries
          - Supply components to other industries
          - Frozen food industry
      - New Product & Services
        - Products
          - Heavy duty automobiles
          - Electric Trucks
          - Refrigerated Trucks
        - Services
          - Maintenance
          - Training
          - Logistical support
  - Inorganic

## Recommendations

- Get into newer categories like other heavy duty automobiles, electric trucks.
- Get into newer markets through geographical expansion
- Provide additional services like maintenance & repair, training.

# Pricing

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# Golf Course



## The client wants to setup a new golf course. They have hired you to come up with a pricing strategy for the same

Our client possess a huge field. They want to set up a golf course there, and they've hired you to help them come up with a price that they should keep for their customers to come and play golf.

**Alright, so I'll just start by clarifying a few aspects and the objective, and then we could go into how we can arrive at the right price point. Is that fine?**

Yes, that sounds good

**Firstly, I will want to know if we have any prior experience in setting up this kind of a complex or golf-course?**

No, this is the first time we're thinking of setting up such an entertainment/sports facility

**Okay, so are there any competitors we have in this space?**

Yes, this field is in Gurgaon, and as you may be knowing since you've worked there, there is a Golf Course nearby on the Golf Course road, owned by DLF.

**Yes, right, I know about that. So, what is our aim i.e. what do we plan to achieve with the price? Profitability first or Market Share first?**

The DLF Golf Course that is our competitor, charges a very high membership fee to its customers, i.e. around Rs 8000 per year. This doesn't allow a huge group of golf-lovers to come and enroll themselves. So, our aim is to capture that share of people.

**Do we also want to keep an annual membership-fee based structure?**

No, we do not have any rigid structure in mind. Whichever pricing plan you think will attract the target customers would be fine with us.

**Alright. When we talk about pricing strategy, we can come up with three kinds of methods to arrive at a fair price. They are Cost Based, Competitor Based, and Value Based Pricing.**

Okay, seems fair.

**If we look at competitor-based pricing, we have the price of the DLF Course at hand, hence, we would be similarly priced or lower to tap into the economy segment. We can come back to this later, but first, I would want to know the costs involved in this effort so that I can achieve a minimum price using the cost-based approach that we can charge**

Since we own the land ourselves, there is no cost involved there, Although there are maintenance and upkeep fee along with the expenditure for the initial construction of the facility.

**Do we have numbers/data regarding these costs?**

Currently, no. You can consider that you have a very short time to spend with your client and this is a conversation over coffee, hence an in-depth cost analysis and calculations aren't possible. You need to think of something quickly & produce an approach that is simple & easy to convince the client

**Alright, in that case I think we should go by considering what our value proposition is.**

Okay, tell me more about what you're thinking

**Since we're trying to reach to an affordable price, to tap into the mid-income golf-lovers market, we should consider what are proxies for such an activity be, i.e. those activities that they undertake in place of playing golf as currently, it is too expensive.**

Okay, that sounds interesting, carry on.

**As an example, we can consider that currently, to indulge in a two/three-hour recreation, they can plan to go for a movie.**

Right.

**There, they spend about Rs. 500 on an average for a three-hour long engagement. So, here, if we consider that they want to come and play golf instead, they would be willing to pay at least that amount for a 2/3hr play, given that there's an option of no annual membership fee and they can pay on-demand instead, whenever they wish to come and play.**

Yes, that seems right.

**Now, since this option provides a whole new elite experience altogether because of the kind of sport golf is, we can attach a premium to it. Additionally, we can appeal to the people based on the fact that they are now able to indulge in their favorite activity at an affordable price, contrary to the prior scenario when they couldn't afford it due to the high fixed-fee subscription**

Okay, that's great. How much premium due you intend to charge?

**I believe we can ramp up the fee to be about 50% greater than the movie ticket prices, giving us a total of around Rs 750 for every 2 or 3 hrs spent. Also, since there's flexibility now around choosing your frequency of visit and paying on site, people would not be hesitant in spending this amount of money.**

Great, that sounds like a perfect price. We too arrived at a range of around Rs. 700-800 for the fee without a subscription model.

# Golf Course



**The client wants to setup a new golf course. They have hired you to come up with a pricing strategy for the same**

## Case Facts & Notes

- **Objective**
  - Access to Golf to maximum people
- **Previous Experience**
  - None
- **Location** - Gurgaon
- **Competition**
  - DLF Golf Course
  - Subscription – Rs. 8000 per annum
- **Constraints** - None

## Approach

**Pricing**

- **Competitive**
  - Use as benchmark later
- **Cost Plus**
  - Construction, Maintenance & Upkeep.
    No time for detailed analysis
- **Value Based**
  - Perceived Value to be evaluated

**Factor**

- **Target Segment**
  - Mid- Income Golf lovers who can't afford annual membership fees
- **Proxy**
  - Movie which is 2-3 hours engagement
  - Rs 500/person on average for the experience
- **Premium**
  - Golf being an elite experience, premium can be charged of around 50%
- **Model**
  - On demand pricing model

## Recommendation

- Price based on value derived from the experience.
- Keep On- demand model to reduce hesitation of initial spending

Price = 1.5 * 500 = ~INR 750/session

# Paint Manufacturer



**Your client is a paint manufacturer who has developed a new paint that lasts three times longer than the original paint. Help them to price it.**

**Sir, if I understand correctly, our client is a paint manufacturer who has developed a new paint that lasts 3 times than the current paint that they sell. I have to figure out a price at which they should sell.**

Yes, you are right. Please go ahead!

**I would like to understand a few important details about our client. What is the geography we are operating in and how is our client's performance against competitors.**

The client is Indian-based and has services across the country. They are a leading manufacturer of paint in the exterior paint category and enjoys a market share of 20% which makes them 3rd in the list.

**Okay! Since this is a new product I would like to understand this as well as the old product from pricing, features like shades and durability.**

The new product is 3 times as durable as the older paint. The old paint costs Rs 500/Litre and the new product is an innovative product and no substitute exist in the market. Both the paints are available in all major shades and kinds.

**Oh! That's sounds like a great product for a TG which looks forward to a long duration product. Is there a pattern or target group that the company cater to or it has all kinds of customer?**

The major customers belong to tier 1 and 2 cities and have an affinity towards durability.

**Since we have to price this brand new product, so I wanted to know if there are any regulations?**

There are no regulations and barrier in launch a new product and pricing it.

**Okay! I would like to use Value Based Pricing since we are introducing a new product having superiority over existing products. I would calculate price based on the value addition provided by the new paint over the existing one. Does this approach sounds good to you?**

Yes, this sounds good for a new product. You can proceed.

**So, I'll calculate the cost needed to paint a 10,000 sq. ft area. I am assuming that 1 Ltr of paint can paint an area of 100 sq. ft. Hence 100 Ltr of paint will be used here.**
**Next cost head will be wages of the painter. Assuming 1 person can paint an area of 100 sq. ft. in 1 day**
**And charges Rs 1000/day. This brings the cost to Rs. 100,000/day. Are these estimates correct or they need to be altered?**

These seem correct, you can continue with your approach.

**Okay, thank you. I would like to see the cost to be paid by the customer with earlier product over 9 years as new paint will last 3 times the duration of older paint. The major cost heads are – paint, painter, overheads, convenience. Out of this paint and painter are the ones impacted in new product.**
**Earlier, total cost of paint would be 3x500x100 = 150k.**
**Cost of painter would be 3x100k = 300k**
**Total cost = 450k**
**Now, let the new price be p, then total cost will be px100+100k**
**Therefore p = Rs. 3500/ltr**

That seems like a fair price. Thank you for your analysis.

**Thank you Sir for your time.**

# Paint Manufacturer



**Your client is a paint manufacturer who has developed a new paint that lasts three times longer than original paint. Help them to price it.**

## Case Facts & Notes

- **Market/Client -** Leading Exterior Paint Manufacturer. Current Market share of 20%. Top 3 manufacturers
- **Product -** New, durable- thrice of current paint available. No benchmark available; Old paint cost Rs. 500/Ltr. Available in all shades and kinds.
- **Customers -** Tier-1 &2 cities. Would prefer durability due to obvious reasons.
- **Regulations -** No price ceiling/floor for paints. No barrier related to entry of any player or introduction of any new product

## Approach

**Pricing**

- **Competitive**: Use as benchmark later
- **Cost Plus**: Maintenance and Upkeep. No time for detailed analysis
- **Value Based**: Perceived Value to be evaluated

**Costs to Customer (Regular Paint Case)**

- **Paint**
  - 1st yr-500x
  - 4th yr-500x
  - 7th yr-500x
  - where qty x= 100 ltr.
  - Total cost is 1500x = Rs. 150,000
- **Overheads**
- **Painter**
  - Rs. 1,00,000/-(one time)|will be used thrice in the 9 year period
- **Convenience**

Suppose we need to paint 10,000 Sq. ft. :
Costs involved:
1 Ltr. Can paint 100 Sq. ft; Hence 100 Ltr. will be used
Wages: 1 Person can paint 100 Sq. ft.;
Charges : Rs. 1000/day

Hence Total cost of getting painting done: Rs. 1,00,000/-
**Note**: Normal Paint Lasts 3 years, hence this will last 9 years

## Recommendation

Hence total cost to customer in original paint case is 150k +3*100k = 450 k; which the customer can pay one time provided the paint lasts for 9 years.
Hence, total price = (450k-100k)/100 litre = Rs. 3500/Ltr

# On Demand Truck Platform



**An upcoming trucking platform wants to come up with a pricing structure. Analyze the factors affecting pricing.**

**Before we begin, I'd like to confirm my understanding. Our client is a trucking platform and wants us to come up with a pricing structure for the same?**

That's right. Are you aware of what a trucking platform is?

**Not exactly, but from my understanding it could be a platform providing on demand trucks?**

That's correct, you can consider it to be similar to Uber for trucks. However, our client has their own fleet of trucks (rented).

**Thank you for the clarification. I'd like to know what type of pricing structure is the client looking for? A dynamic pricing system – depending on location, route, peak hours or a fixed pricing system?**

The clients wants a fixed pricing structure, subject to revision each quarter.

**I wanted to know if the client will be providing inter city services or intra city services? I'd also like to know about our competitors if any and their pricing structures.**

You can consider a singular route between Mumbai and Delhi for your analysis. We currently do not have any direct competitors.

**There are two approaches that I can think of – first, pricing according to expected value addition to customers and second by calculating the costs incurred, then charging a margin over it.**

Could you elaborate more on the first approach.

**Sure, I'd like to determine the factors driving customer satisfaction, then benchmark our client's offerings to other alternatives. Then comparing to the pricing structure of other alternatives and cumulative scores on all parameters, I'd arrive at the pricing structure for our client. I'd like to compare our client's services with 3 party logistic providers and with the end customer having their own transportation. The parameters I can think of are i) availability of services ii) flexibility in services iii) capital expenditure iv) customer involvement**

That seems fair, but we do not have data to benchmark with. Why don't you proceed by analysing the costs incurred

**I can think of four broad categories of costs that would be incurred – costs related to travelling (fuel costs, toll payments, driver renumeration), costs related to vehicles (maintenance, rent, parking cost during non usage), costs related to maintaining the platform (servers, software development) and other administrative costs.**

Good, you've been able to identify most of the factors. I'd like you to look into travelling costs and suggest methods to reduce it.

**Okay, first looking into fuel costs – this would depend on the cost of fuel per litre, the mileage of the vehicle and the distance travelled. The price of fuel is a factor beyond the client's control so they could work on reducing the distance travelled and the mileage by regular maintenance of the vehicles and by regulating driving habits (speeding, sudden breaking).**

Your analysis of the mileage seems fair, but for price per litre you are missing out on stealing by drivers, which is rather common. Could you provide solutions in reducing cost for both?

**For mileage, we could have a tracking device installed and if a driver overspeeds/breaks too often, they could be given penalties for the same. As for stealing, from my understanding drivers usually make transactions which are then reimbursed. They tend to get bills of a higher value. This can be circumvented by tying up with certain petrol pumps who would directly bill the company, or have specific payment cards for these transactions.**

Okay, could you also look into the distance travelled? Our client has found that the drivers are taking longer routes. Can you identify the reason for this?

**Sure. The drivers could be taking longer routes to avoid tolls, avoid routes with bad roads, go through routes they are familiar with, go via routes which have better amenities (e.g. dhabas) or take detours to meet family/friends along the way.**

The last case seems to be the situation. Can you suggest how the client can avoid this?

**The previously mentioned tracking device can be used for tracking their route, and drivers can be penalised for taking long routes.**

Integrating other solutions seems like a great idea. Thank you for your analysis of the case.

# On Demand Truck Platform



**An upcoming trucking platform wants to come up with a pricing structure. Analyze the factors affecting pricing.**

## Case Facts & Notes

- New platform, like an Uber for trucks
- Want a fixed pricing, subject to quarterly reviews
- No competitors
- Based in India
- Fleet rented by client, drivers hired
- Client also looking for solutions to minimize costs

## Approach

Pricing

- Competitive
  - No competitors, can not be used
- Cost Plus
  - Evaluation of costs + charging profit margin (considering first entrant advantage)
  - Journey Costs: Fuel Costs, Driver Renumeration, Tolls/Taxes
  - Vehicle Costs: Maintenance, Rent, Parking
  - Platform Costs: Development, Maintenance, Server Costs
  - Other Costs: Marketing. Administrative
- Value Based
  - Perceived Value to be evaluated

| | Client | 3PL Provider | Customer's own fleet |
|---|---|---|---|
| Availability | | | |
| Flexibility | | | |
| Capital Exp | | | |

Fuel Costs = (Effective price per litre) * (mileage of vehicle) * (distance travelled)

**Effective Price per litre**

- Transportation industry susceptible to stealing by drivers
- Most fuel transactions are cash and drivers reimbursed on bills. Drivers get bills of higher value, while getting less fuel filled

**Mileage of Vehicle**

- Mileage depends on specification of vehicle and the driving
- While specifications can not be changed for a specific vehicle; overspeeding, sudden breaking can be reduce to improve mileage

**Distance Travelled**

- Drivers found to be using longer routes
- Tend to take longer routes to meet family/friends

## Recommendations

**Pricing Structure**

- Lower limit determined by cost plus method (monthly costs/total journeys)
- Upper limit determined from relative value to customers

**Reducing Fuel Costs**

- Tie up with petrol pumps & provision of fuel cards to drivers so that company immediately receives details of transactions
- IOT device to track route and speed of vehicle. Drivers given penalties and pay cuts for long routes/poor driving
- Speed limiting device to restrict top speed, improving mileage

# Hepatitis-B Drug

Pricing | Hard | McKinsey & Co.

**Our client is a pharmaceutical company. They recently invented a drug to cure Hepatitis-B. They have hired you to find the annual price range of treatment.**

**Before I dwell into the analysis, I would like to ask few clarifying questions in order to better understand the client, the product and the market. May I know the geography where our client is operating.**

Yes, the client is based out of the US.

**Can you tell me about the treatment?**

The treatment goes on for 1 year. The cost of the treatment is borne by the health insurance cover provided by the government.

**Does it have a substitute? I would also want to know the success rate of our drug compared to the existing drug.**

Both are equally effective. They cure the patient completely in the given time-frame (1 year). Can you tell me about the parameters on which drugs can differ?

**I think these the parameters on which drugs can differ are side-effects, effectiveness, mode of delivery, frequency of delivery**

Great! The drugs primarily differ on "side-effects". While using the existing drug there is a 20% chance of going for a Liver Transplant (LT) whereas the new drug is free of all such risky side-effects.

**Do we have data about the price of LT?**

Yeah, the complete treatment costs close to $300,000.

**To price this drug, I would like to suggest multiple approach. There can be 3 types of pricing strategies used cost-based, value-based and competition-based. Do we have information about the pricing of the current treatment?**

There are 2 kind of existing drugs:
- Generic drug - $1,000 – 80% market share
- Niche drug for pregnant women - $10,000 – 20% market share

**Do we have data from some credible source about the number of patients going for treatment?**

There are close to 150,000 going for treatment each year according to Public Health Department.

**I think to decide about the price, I'll use a mix of cost-based and value-based method. I'll find the base and add price of value created in the form of no risk of LT. The expected cost should be (20%*$300,000 = $60,000). The price range for the treatment hence should be $61,000-$70,000.**

This figure matches the expectation of the client. Can you try to find out the total money spent by the government? Take adoption rate to be 50%.

**I am assuming a 80-20 split in the generic and innovative niche treatment in the 50% adoption rate scenario. In one year, following are the major cost brackets for the government**
- **Investments (assumed $1Bn)**
- **50% adoption rate implies 75,000 people to be treated**
- **Assuming price of $65,000 for the treatment**

**Total spending = 1Bn + 75K*65K = $5.875Bn**

What are the risks involved if the client decides to launch this new drug?

**I can think of the following 3 major risks**
- **Resistance from government due to high one-time costs**
- **Resistance from doctors and hospitals who depend on LT as an important component of income**
- **Competing firms can replicate the success of the drug and would eat the profit in the coming time**

Good work! This analysis sounds fair

# Hepatitis-B Drug



**Our client is a pharmaceutical company. They recently invented a drug to cure Hepatitis-B. They have hired you to find the annual price range of treatment.**

## Case Facts & Notes

- US based company
- Govt. provides health insurance
- Treatment takes 1 year
- Equally effective substitute
- 150k patients
- Current Drug Analysis
  - Generic – 80% Market Share - $1000
  - Niche – pregnant women – 20% M.S. - $10,000
- Liver Transplant treatment cost - $300,000

## Approach

**Pricing**

- **Competitive** – Use as benchmark later
- **Cost Plus** – Maintenance and Upkeep. No time for detailed analysis
- **Value Based** – Perceived Value to be evaluated

**Parameters of Difference in Drugs**

- **Side Effects** – 20% chance of Liver Transplant
- **Effectiveness**
- **Mode of Delivery**
- **Frequency of Delivery**

## Cost to Government

- Adoption rate – 50%
- Fixed Investments required - $1 Bn
- 50% of 150k x $65,000/patient + $1 Billion
- = $5.875 Billion

## Risk involved

- Resistance from government due to high costs.
- Resistance from doctors and hospitals who depend on LT as an important component of income.
- Competing firms can replicate the success of the drug and would eat the profit in the coming time

## Recommendation

Pricing – 20% of $300,000 + 1-10k
This gives price between 61k-70k

# Ride hailing Helicopter Cab Service



**A ride hailing service wants to start a helicopter based cab service in Indian market. You are required to price this service for them.**

**So, just to be on the same page, I would reiterate the problem statement. Our client is a ride hailing service who wants to start a helicopter based cab service in India & they want us to price this service for them.**

Yes, absolutely right. Go ahead!

**Before delving deeper into the case, I would like to ask a few clarifying questions. Is that fine?**

Sure, go ahead!

**Does the client operate only in India & are there any other operations run by the client ?**

So, the client is Major cab aggregator service provider in Indian & global markets. You can take a Proxy as Uber.

**Also, do we have any competition in air-cab service or any other competitor also planning to start similar service?**

As of now, there is no direct competition in the air cab service segment as no such service is available anywhere else in world. Also, we don't know of any other player who is planning to start similar service.

**Thank you sir! Do we have any information regarding the Customer segments we are planning to target with this new service & is this launch in India the first one for us?**

So we are planning to target ride passengers only. No cargo/freight service. Yes, this is the first such launch for us & its going to be a pilot launch.

**Also, has the launch decision be made already or we have to look into that also?**

Good question! The launch decision is already made. Only the pricing is to be done & we want your help in that. Objective is finding the right audience & penetrating effectively. Break even is not a target

**Sure sir, thank you! Just provide me a couple of minutes to gather my thoughts and analyse the problem.**

Sure!

**Sir, there can be 3 ways to do it: Competitive pricing, cost-plus pricing & value-based pricing. Since there is no competitor in this segment & cost is not a concern for the company right now, I think we can't apply competitive & cost-plus models here. Therefore, I am thinking of looking into value-based pricing as to know how much value is this service adding for a customer. Is that fine?**

Sure, Go ahead!

**We can look into 4 factors: Routes, feasibility/capability, Convenience/experience & Benchmarking. Regarding routes, I am thinking of Inter-city routes rather than Intra. In that also, we shall focus on Metro-Tier 1 or 2 cities as prospective routes. Major flight routes won't be preferred by customers. New routes would do much better we can take an example of Delhi-Indore**

Fine, Go ahead!

**Regarding feasibility, various remote routes shall be avoided since currently they won't have helipad facility for landing. Regarding convenience & experience, there will be lesser security (than airports), no baggage allowed, no in-flight meals, allowance of upto 4 passengers only, quicker speed than train but lower than flight, loud chopper noise & relatively less safety too than the flights. Benchmarking can be done based on target audience. For the middle class, train, car & ships & for businesses, flights & private jets.**

That is quite insightful. So, what do you think finally about route, target audience & pricing?

**For routes, we shall focus on Inter-city & Metro-to-Tier 1 which are not major flight routes. We can target both middle class & corporates. For middle class we can price lesser to give them affordable flying experience & for corporates, we focus on convenience. Pricing shall be higher than trains but lower than flights.**

That looks great to me. Can you summarise your final recommendations?

**Sure, we shall launch service on inter-city routes for middle class & corporates. Price be lesser than flights to attract middle class. We shall also launch for the routes that are not serviced by flights at all.**

Good job! Hope to see you in the next round.

# Ride hailing Helicopter Cab Service



**A ride hailing service wants to start a helicopter based cab service in Indian market. You are required to price this service for them.**

## Case Facts & Notes

- **Company -** Major cab aggregator service provider in Indian & global markets. Proxy-Uber
- **Customers -** Ride Passengers only. No cargo/freight service. Only for Indian market (Pilot Launch)
- **Competition -** No direct competitor in air-cab service. No such service available anywhere in the world
- **Objective -** Finding the right audience & penetrating effectively. Break even not a target.
- **Pricing Decisions -** Launch decision made. Only Pricing to be done

## Approach

Pricing

- Competitive
- Cost Plus
- Value Based

Factors

**Geographies/Routes**
- Inter v/s Intra city routes
- Major cities to TI or TII cities

**Feasibility/Capability**
- Helipads are currently available only in airports.
- Remote routes incapable of service by aero-plane possible provided landing space is available

**Convenience & Experience**
- Relatively less security checks
- No baggage allowed
- No in-flight meal
- Loud chopper noise
- Only 4 passengers allowed
- Faster than trains but slower than aero-plane.
- Less safe than aero-plane.

**Benchmarking**

Benchmarking can be done on basis of target audience:
- Middle Class
  - Train
  - Car
  - Ship
- Businesses/Corporates
  - Flights
  - Private Jets

**Pricing Decision**

**Routes**
- Intercity
- Metro to Tier1: Delhi to Indore

**Pricing**
- Benchmark with trains
- Price to be less than flight but more than train

**Target Audience**
- Middle Class target
- Business heads don't pay out of their pocket. Convenience & experience more of a concern for corporates.

**Routes**
- Major flight routes would not be preferred by customers.
- New routes would be more popular

**Target Audience**
- Flying experience can be made affordable for middle class
- Business heads would shell out for convenience & speed

**Pricing**
- Delhi to Indore: Train: INR 1000/- , Aero-plane: INR 4500/, **Heli-cab ~ INR 3000/-**

## Recommendations

- Start service on inter city routes for middle class & corporates.
- Pricing less than flights to attract middle class population.
- Launch for routes that are not serviced by aeroplanes as well.

# Unconventional

Case Index | Main Index

# Logistics Efficiency

Unconventional | Easy | Kearney

**Your client is the ministry of road, transport & highways. They want to improve the logistics efficiency of the country. Give recommendations**

**Sir, just to be on the same page, ministry wants us to come up with ways to improve logistics efficiency. And what actually does client mean by logistics efficiency?**

Yes and logistics efficiency, it means time taken to transport goods from A -> B

**Is it fair to assume that ministry is considered only about road transportation and not other modes? Also, we are focussed on PAN India road or international routes too**

Yes, the ministry is considered only about roadways PAN India and not international routes

**Are there any operational or financial constraints that I should keep in mind?**

There is no financial or operational constraints for the client

**Thank you sir! Any timeline we are looking at to increase efficiency?**

The project needs to completed as early as possible

**Thank you sir! There are five external factors I can think of which impacts the efficiency namely road capacity, road quality, stoppage time, total average distance and transit permits. Other factors are vehicle & driving expertise but they lie within the purview of the companies.**

That correct. Let's explore each of these and what ministry could to increase efficiency

**Sure Sir. To increase road capacity client can increase number of lanes, develop alternate routes for busy routes, dedicate lanes for different vehicles, restrict truck/car width according to road dimension to fit maximum vehicle, and develop freight Corridors**

Sounds good to me. What about road quality?

**To improve road quality, client can ensure better quality of material is used, quick repair of potholes, preventive maintenance of the roads, conduct Audits and regular reporting of conditions, and perform timely/deadline-based repairs**

What are your thoughts on stoppage time?

**Sir, I believe stoppage time will depend on factors such as number of red lights, traffic jams, tool booth & government checkpoints.**

That's correct. What steps do you think the client can take to reduce time at toll booth?

**The average time by a vehicle spent on toll booths during its journey will depend on total number of toll booths it came across, wating time & processing time. To reduce the number of tool booths, we can optimize the toll network. To reduce the waiting time, we can increase the number of lanes. To reduce the processing time, the ministry can launch RFID tags, designate specific lanes based on kind of vehicle & hire mobile toll collection personnel.**

All these sounds good to me. The client can surely look into these. What about the total average distance and transit permits?

**To reduce the total average distance, we can the come up with a plan to optimize the road network and increase the total road length to connect more places via it. Though this would take considerable investment, effort and time. For transit permit, the we can create a centralised system & reduce the number of permits required. Also, if there is scope of reducing the time required to procure them, we should definitely come up with process to make it quicker. Lastly, if there are cross border check points, the ministry with support of central and state government can explore the option of removing them or at least make the process less time consuming**

The ministry will excited to explore all the options in order to increase efficiency.

**Sure sir. Would you like me to explore anything else?**

That won't be required. We can close the case here. Have a good day!

# Logistics Efficiency

Unconventional | Easy | Kearney



**Your client is the ministry of road, transport & highways. They want to improve the logistics efficiency of the country. Give recommendations.**

## Case Facts & Notes

**Logistics Efficiency**

Logistics efficiency = Time Taken to transport goods from A -> B

**Key Medium**

Roads are the primary medium

**Geography**

PAN India Implementation (not international routes)

**Constraints**

Financials – None
Operational - None

**Objective**

Initiative internally driven, to be completed at the earliest

## Approach

**Time**

**Road Capacity**

- Increase number of lanes
- Develop alternate routes for busy routes
- Dedicate lanes for different vehicles
- Restrict truck/car width according to road dimension to fit maximum vehicle
- Freight Corridors

**Road Quality**

- Increase in quality of material used
- Reduction in number of potholes
- Preventive Maintenance of Roads
- Audits and regular reporting of conditions
- Timely/Deadline based repairs

**Stoppage Time**

- Red lights & traffic jams : More traffic policemen to control traffic
- Toll booth
- Government Check Points

**Total Average Distance**

- Optimization of road network
- Increasing average distance covered

**Transit Permits**

- Reduction in number of permits required
- Reduction in time taken to get permits
- Are there cross border checkpoints? If yes, can they be removed/checking time reduced

**Time at toll booth**

**Number of toll booths**

- Optimization of toll booth network

**Number of lanes**

- Increase in number of lanes at each toll booth

**Processing/ Toll Collection Time**

- RFID Tags/Fast Tag to decrease time spent per vehicle
- Separate lanes as per different types of vehicles
- Mobile toll collection personnel

# Manufacturing Efficiency



## A mining player in South Africa has seen a decrease in manufacturing efficiency for an intermediate product in raw materials

**Before we begin, I'd like to first confirm my understanding. Our client is a mining player in South Africa and they have seen a decline in manufacturing efficiency for an intermediate product.**

Yes, that's right.

**I'd like to know more about the client and their operations. Do they currently only operate in South Africa? As per my understanding, the industry would be supplying to businesses so the we'd be involved in only B2B sales, is that correct?**

Yes, our client is only involved in B2B operations solely in South Africa.

**I'd like to further understand the manufacturing operations of our client. I am not very well-versed with the manufacturing process of the industry, but I'd like to outlay my understanding of the value chain. First there would be mining for the raw material, then manufacturing of an intermediate product, then distribution and sales. Could you aid me in understanding if I'm missing something?**

As you mentioned, raw material such as limestone is mined. This limestone is then crushed and blended. This blended raw material is then heated in a kiln to produce a substance called clinker. This clinker is then mixed with additives to create cement. This cement is stored in bulk in silos before being packaged into bulk containers and then distributed. Cement is further mixed with aggregates such as water to produce concrete used in construction. Our client is involved in mining of limestone and manufacturing clinker.

**Thank you, this is of great help! I'd also like to know how long have we been seeing this decline in efficiency? Is this problem being faced specifically by our client or the industry as well?**

The client has been facing this issue for about 6 months now. The issue is only with our client.

**Okay. According to my understanding, efficiency per person can be defined by the number of units produced per unit of time taken. So have we been facing an issue with either of these factors over the last 6 months? Have we seen a decline in the number of people who have been working with us?**

This understanding seems fine. The client has been facing an issue in terms of more time being taken to produce the same unit of product. This means that what took previously 12 hours to produce X units of product is now taking 13 hours. There has been no change in our workforce number.

**Okay, thank you. I think I have all the information I need. First I'd like to focus on evaluating each aspect of our client's value chain i.e. mining raw materials to manufacturing intermediate and final product and then distribution and sales. Does this approach seem okay to start with?**

This is okay but I'd like you to only focus on the manufacturing part of the value chain

**Sure, so under the manufacturing aspect of the value chain, I would look into 3 things: machinery, labour and the technology used. Is there anything specific I should explore out of these?**

Let's look at just the labour aspect. How would you go about exploring it?

**I'd like to look at the way the employee interacts with the client's workplace. That is, I'd like to walk through the customer journey. I'd like to divide looking at this into three parts, considering that they have a typical workday as any other employee in a company. First would be before lunch and the second during lunch and third after lunch.**

That seems like a sound structure to follow. What would you explore in each of these 3 aspects?

**Before lunch, the employee would log in/punch in to work. Then they would prepare to start working i.e. maybe write a to-do list. After that they would finish working the first half of the day and attend meetings. Second, a lunch break; either for eating, socializing. Now, after lunch break they would finish the rest of their work then maybe report their completed work. Then they would punch out of work. Is there anything else I should explore which I'm missing?**

This is extremely thorough, thank you. We have identified that the issue is during lunch. There has been an overall increase of people spending lunch break from 1 to 2 to 1 to 2:40. What reasons can you identify could be the problem here?

**Sure, either it would be an issue with the employee or with the Canteen/Mess.**

The issue with the employee's time itself. The mess is the same as it was before.

**For the employee's time, it would either be an internal or external issue. The employee would be napping, taking extended washroom breaks, spending too much time interacting with colleagues or getting involved in activities such as watching TV. It could also be an issue with the working conditions or there would be a protest/strike.**

Okay. The employees seem to be taking more time sitting and watching TV. We have also installed Acs there making them spend more time. What would be your recommendations to rectify this?

**Based on evaluation of increase in efficiency vs employee satisfaction; we can first implement an incentive-based approach wherein they are recognized for efficiency. Secondly, introduce a productivity challenge wherein they would get special prizes. Third, to provide flexible working hours. Would you want me to give more suggestions?**

This should be sufficient. Thank you!

# Manufacturing Efficiency

Unconventional | Moderate | BCG

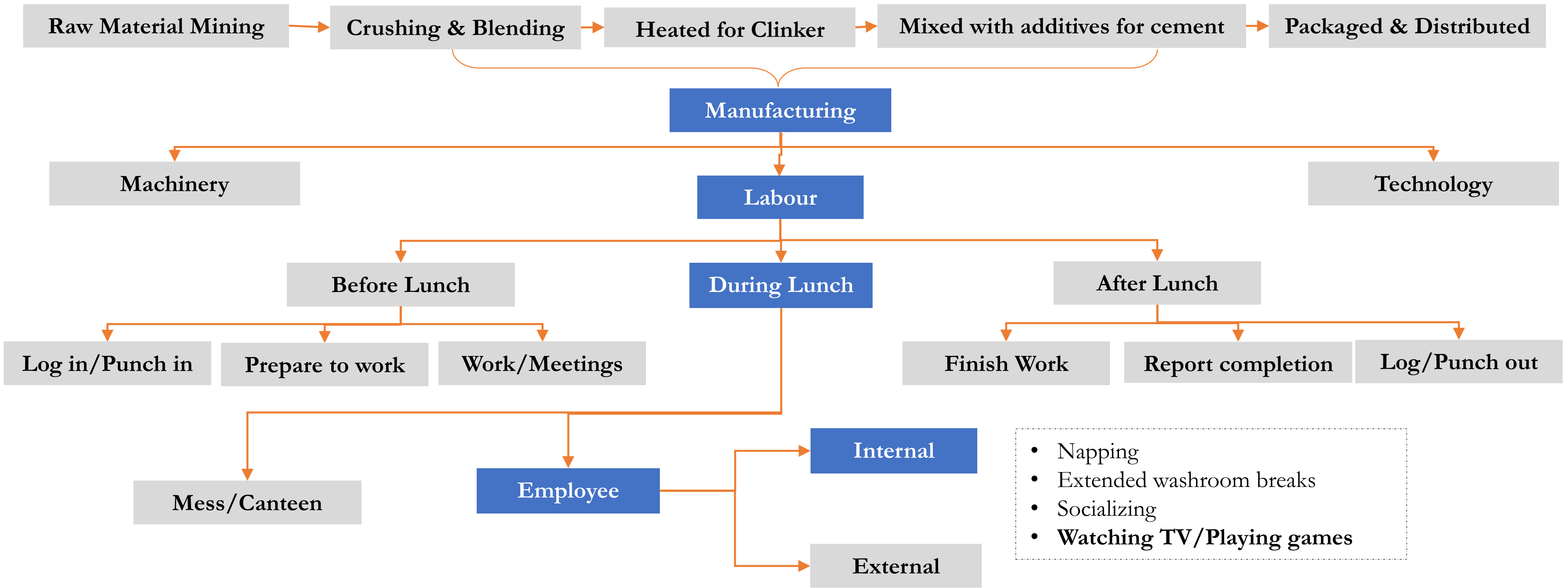


**A mining player in South Africa has seen a decrease in manufacturing efficiency for an intermediate product in raw materials**

## Case Facts & Notes

- **Duration –** Last 6 months
- **Operations** - B2B sales
- **Geography** – Solely in south Africa
- **Company vs. Industry** – only an issue with company
- **Efficiency =** Number of units produced / Time taken
- More time taken to produce same units
- **Value Chain** – Focused on manufacturing only

## Approach




## Recommendations

- Map out the significance of each initiative through an efficiency vs satisfaction matrix
- Incentive-based, motivational and positive approaches to increase morale and efficiency

| Initiative | Efficiency Increase | Employee Satisfaction |
|---|---|---|
| Recognition programs | Moderate | High |
| Productivity challenge | High | High |
| Flexible working hours | Moderate | High |

# Time Management



**Your client is a student at FMS, Delhi and they want to know how can they best utilize their time at the institute.**

**Thank you for the statement! Just to clarify again, our client is a student at a B-School and they wish to know how best they can utilize their time at the institute.**

Yes, that's correct, please proceed.

**I would like to clarify what does "best" mean in this scenario? And if we know which B-School they have joined?**

"Best" in this statement refers to our client's pursuit of their short-term and long-term goals in the most efficient way possible. The B-School they have joined is FMS, Delhi.

**I would also like to know more about the student; are they a new student at the institute? As per my understanding, a B-School has multiple programs such as Full-Time, Executive. So are they pursuing any of these?**

The student has recently joined in the new batch and they are pursuing the Full-Time program.

**I would also like to know what the profile of the student is so that I can get an idea of what their possible goals are? By profile, I mean a brief about their background, age, education.**

The student is an undergraduate in mechanical engineering. They have work experience at a boutique consulting firm of about 3 years. They are currently aged 25 and are from a metropolitan city and belong to a well-educated family. They have also been an avid sportsperson all their life.

**Now that I have a fair view about the student, I would solve the student's problem from two aspects. First, what are the student's short-term and long-term goals? Second, what can the B-School can offer to them?**

Sure, go ahead.

**In both the short-term and the long-term goals, I'd like to look at the various personal and professional goals that the student can pursue.**

All right, that sounds good.

**For the personal goals, we can divide it into three major segments; family, education and health.**
**In family goals, they might want to start a family in 3-5 years, own a house and a car.**
**In educational goals, they might want to be awarded with the merit list.**
**In health goals, they might want to follow a healthy lifestyle, be fit and active.**

All right. Do you want to explore the professional goals?

**Yes, in professional goals, we would again look at three segments i.e. financial, career progression and professional interest. In financial goals, they might want a starting package of a certain amount which would be ideal for them. In career progression, they might want a steep learning curve, fast-track growth and a lucrative position in the company in the future (Ex: CEO). In professional interests, they might want to excel in a particular domain (Ex: Consulting, Marketing) or a particular industry (Ex: FMCG, IT).**

That sounds very thorough. Would you want to explore anything else as well?

**Yes, so now that we've looked at the short-term and long-term goals, I would now like to look at what the institute can offer to them.**

What all will you covering in this aspect? Let's dive into this.

**According to my understanding, what B-Schools offer can be divided into four major categories:**
**1. Academic 2. Placements 3. Extra-curricular 4. Networking & socializing.**

All right. Let's look at each of these now.

**Okay. In the academic aspect, we can look into three factors: first is grades, where a student can achieve a good performance via high grades (Ex: CGPA). Second being faculty relations, wherein they can build rapport with the faculty, publish papers with them. Third being subjects where the students can choose the electives they want to major and/or minor in**
**For the Placements aspect, we can look at 2 angles: first, being summer and final placements, in which we can analyse companies that come to campus and the ones the student is interested in. The second would be case competitions and live projects that the student would participate in.**

Okay, this sounds like a good plan. Let's talk about Extra-curriculars and Networking briefly.

**In extra-curriculars, we can look at the clubs and societies the student can be a part of as well as sports and fitness facilities available. We can also look at international summer schools.**
**In Networking, we can look at interactions with peers (flats, classes, events), faculty (informal and formal connects) and companies (guest lectures, case competitions, live projects)**

This sounds great! Thank you.

# Time Management

Unconventional | Moderate | McKinsey & Co.



**Your client is a student at FMS, Delhi and they want to know how can they best utilize their time at the institute.**

## Case Facts & Notes

- **Context –** Student has joined FMS as a full-time student.
- The student is a mechanical engineer, aged 25, with 3 years of work experience in a boutique consulting firm with an interest in sports..
- **Break down the Problem Statement -** "Best" means that the student should fully utilize their resources

## Approach

**Time at B-School**

- **Short-Term & Long-Term Goals**
  - **Personal**
    - **Family**: - Start a family - Own a house - Own a car
    - **Education**: - Merit list - Univ recognition
    - **Health**: - Healthy lifestyle - Be fit/active - Pursue sports as a hobby
  - **Professional**
    - **Financial**: - Ideal salary/ package
    - **Career**: - Steep learning curve - Fast-track growth - Position
    - **Prof Interest**: - Excel in a domain/ industry
- **B-School Offerings**
  - **Academic**
    - **Grades**: - Good CGPA/ grades
    - **Faculty**: - Publish papers - Live projects
    - **Subjects**: Electives (major/ minor)
  - **Placements**
    - **Process**: - Summer/ Final placements - Cos. in campus/student aspires for
    - **Industry**: - Case comps - Live projects
  - **Extra-curricular**
    - **Societies**: - Clubs to be a part of
    - **Facilities**: Sports/ extracurricular
    - **Summer Schools**: Int'l – foreign exchange /summer school
  - **Networking**
    - **Peers**: Flats/ classes/ events
    - **Faculty**: Informal & formal connects
    - **Industry**: - Guest lectures - Pre-placement - Live projects

## Recommendations

- Segment the time into achieving personal & professional goals and also look into what resources the student can utilise in the B-School

# CO2 Emissions



**Your client is the Ministry of Road Transport and Highways. They wish to reduce CO2 emissions of the road transportation sector. They have approached you for your help.**

**I'd like to re-iterate the statement; our client is the Ministry of Road Transport and Highways. They wish to reduce CO2 emissions of the road transportation sector and they need our help.**

That is correct. You can start.

**I'd like to ask whether we want to reduce the emissions in a particular region or across India?**

We'd like to reduce it pan-India.

**All right. I also want to know if there is a drastic increase in emissions? Or are we just planning to reduce the existing level?**

Good question. So, right now we're just focusing on reducing the current level. There's been no drastic increase as such.

**Are we focusing on reducing the current emissions by a certain level i.e. a certain %?**

No, we do not have a particular target in mind.

**Sure. So as per my understanding, there could be multiple sources of CO2 emissions; majorly from vehicles, both passenger and commercial, along with construction activities as well. Are we focusing on anything particular?**

We are focusing primarily on vehicular emissions. You've mentioned a good point about emissions from construction activities, can you think of any other sources?

**Yes, I can also think of emissions through commercial offices and residential buildings as well. Along with that, manufacturing and industrial activities and from waste management activities.**

Lets focus on vehicular emissions and construction activities since they are associated with our Ministry.

**Sure. I have a few other follow-up questions as well before I dive into the problem. We mentioned construction as a possible source, so do we have any information regarding who we are involved with for construction activities?**

Yes, so we operate through 3 contract financing options; EPC contract i.e. Engineering, Procurement and Construction contract, PPP contract i.e. public-private partnership contracts and third is through tolls.

**Could I get a bit more understanding on what do EPC and PPP contract models involve?**

EPC contracts are focused on construction phase including site preparation, roadbed construction, they may even involve private players for expertise. PPP contracts involve a more long-term partnership between both the public sector and private sector for development, operation and maintenance of road infrastructure.

**This is helpful, thank you. Now, I'd like to look into the problem through two avenues; first through vehicular emissions and second through construction activities.**
**Focusing on vehicular emissions, we can think of emissions through passenger vehicles and freight vehicles. Under passenger, I'd want to focus on 4 major aspects; first being vehicular improvements, second being sustainable fuel choices & infrastructure, third being traffic management and fourth, policy support. Would you want me to dive into each of these?**

Yes, let's go ahead with each briefly.

**So under vehicular improvements, we can look at promotion and adoption of EVs or hybrid vehicles, enforce stringent standards for vehicle manufacturers to ensure use of better emission technologies and encourage research and development of innovative vehicle technologies.**
**Under fuel choices and infrastructure, we can promote alternative fuels such as biofuels, CNG and hydrogen and also establish strict fuel quality standards for cleaner options, improve public infrastructure such as cycling, metro and install EV charging/hydrogen refueling options**
**Under traffic management, we can implement intelligent transportation systems for traffic optimization, promote and develop carpooling and invest in pedestrian-friendly infrastructure.**
**Lastly, under policy support, we can provide incentives and subsidies for low-emission vehicles, launch public awareness campaigns and implement emission & testing inspection programs.**

Okay, this is great! Let's go forward to explore freight vehicles.

**Sure, so we can have better fuel choices and vehicular technology, same as was discussed before. Specifically, for freight vehicles, we can look into 3 more additional aspects: first, fleet optimization which includes optimizing routes, reducing idling, low-resistance tires and supporting research. Second, sustainable practices such as improving intermodal transport, optimizing loading/unloading. Third, policy support, which includes emission reduction targets for freight transport and collaboration with private companies for establishing best practices**

This is extremely thorough. Let's move on to construction. What all will you explore this?

**I'd like to focus on the process of construction, specifically roads. First, we remove the vegetation to clear the path and level the ground, second we prepare the soil underneath the road by adding aggregates to make the surface stronger and compact. Third, we add a base such as crushed gravel, then fourth, we add in the asphalt for laying the road. Then, fifth, we smoothen the road and add markings. Is there any part of this process I should focus on for educing emissions?**

# CO2 Emissions



**Your client is the Ministry of Road Transport and Highways. They wish to reduce $CO_2$ emissions of the road transportation sector. They have approached you for your help.**

| |
|---|
| Yes, let's focus on just the removing vegetation and laying road i.e. asphalt. How can we focus on making these processes better? |
| **Okay. So, for removing vegetation, we can look at a few aspects to reduce emissions: one could be to reduce lesser vegetation, engage in sustainable clearing techniques such as mulching, prevent soil erosion, use eco-friendly equipment and engage in designing of roads with sustainability as a priority.**<br>**For road laying, we can use concrete as an alternate material, use recycled blocks and incentivize contractors for using better materials. We can also implement green roads and highways as a long-term strategy** |
| Okay, this sounds good, let's wrap up the case here |
| **Thank you** |

# CO2 Emissions

Buddy Case
Unconventional | Moderate | Kearney

The Consulting Club

**Your client is the Ministry of Road Transport and Highways. They wish to reduce CO2 emissions of the road transportation sector. They have approached you for your help.**

## Case Facts & Notes

- **Location** - Pan-India
- **Objective –** Reduce current level
- **Sources of CO2 emission –**
  - Vehicular
  - Construction
  - Buildings
  - Manufacturing
- **Contracting** – 3 options:
  - PPP
  - EPC
  - Tolls

## Approach

**Sources of CO2 Emissions**

- **Vehicular Emissions**
  - **Passenger Vehicles**
    - **Vehicular Improvements**
      - Promotion of EVs/Hybrids
      - Stringent standards
      - Encourage R&D
    - **Fuel Choices & Infrastructure**
      - Biofuels/CNG
      - Fuel quality standards
      - Public infra – cycles, metro.
      - Charging stations
    - **Traffic Management**
      - Intelligent transportation systems
      - Carpooling
      - Pedestrian-friendly
    - **Policy Support**
      - Incentives/subsidies for low emission vehicles
      - Emission & testing programs
  - **Freight Vehicles**
    - **Fleet Optimization**
      - Routes
      - Reducing idling
    - **Sustainable Practices**
      - Intermodal transport
      - Loading
    - **Policy Support**
      - Emission targets
      - Cooperation with private cos.
- **Construction Activities**
  - **Clear Path**
    - Lesser vegetation
    - Better methods for design
  - **Prepare Soil**
  - **Add Base**
  - **Lay Road**
    - Alt material
    - Green roads
  - **Smoothen & Add Markings**

## Recommendations

- For passenger vehicles, explore promotion of improvements to the vehicle, better fuel choices and govt support through policies
- For freight vehicles, optimize logistics operations
- Improve the process of clearing vegetation and laying roads by better sustainable practices

# Footfall of Church



**The footfall in a city church has been dropping. You need to figure out what are the reasons and give recommendations on how to counter the same.**

**I'd like to re-iterate the statement to ensure I haven't missed anything. Our client is a city church who's footfall has been dropping. I need to figure out the cause and give recommendations.**

Yes, you can proceed.

**Okay, so my first question would be about the duration that we've been seeing this decline for and if we have any specific figure with the quantum of decline?**

We've been witnessing a decline since the past 1 month and it's approximately a 20-30% drop.

**I'd also like to know more about the location of the church and more about the city. Is the church on the outskirts or inside the city? Is the city a metropolitan city or a smaller city?**

The church is located in the centre of the city. You can consider that the city is metropolitan like Delhi.

**Okay. So can I assume that the demography of the city in would be similar to Delhi? That is, the income classes, ages, religions would be the same? Is our church open to all such segments?**

Yes, the church is open to all. In fact, we've been seeing a decline across the board.

**That's quite interesting. I have a few more questions before we proceed to the case; do we have any particular operating hours? Is there a peak time or non-peak time? Has there been any change in timings over the last 1 month?**

The church operates from 9 AM to 5 PM. There are no peak/non-peak hours and no changes to the timings.

**Thank you, I have all the information I need. I'd like to proceed with the problem by looking at two factors i.e. no. of hours spent by a visitor and the avg. number of visitors. Since we know that there has been no change to the hours, I would want to focus on two factors under the number of visitors; internal and external. Is this approach alright or should I look at it in any other way?**

Let's not talk about the hours at all, like you mentioned. Let's focus on the visitors itself. Under internal what all would you explore?

**Under internal, I would look at the journey of a visitor to our church. If we are exploring external as well, I'd explore the different external factors affecting our visitors such as political unrest.**

What all would you explore under the visitor journey?

**I can outlay the journey and then focus on the issue. Our visitor would travel to our church, then they would enter the church premises, they would then interact with the church through the services provided (praying, baptism), then they would receive communion and socialize, they would then exit the church and travel back home. Is there anything that I should focus on?**

You've laid out a pretty thorough outlay of the journey, but let's only focus on the services offered by the church. You mentioned praying and baptism. Is there anything else you can think of?

**Yes, so there could be community events such as a potluck, special occasions such as Christmas and Easter and occasions where the visitor would want to seek confessional services, as well.**

Okay, so let's focus on what is involved in the confessional services.

**Sure. Again, to outlay a brief journey for our visitor, they would seek out the clergyman and/or the hours for which this service is provided, they would enter the confessional box, they would reflect, confess and pray, the clergyman would engage with them, they would then leave the box.**

Alright. So, we've seen a drop in our confessional services. Can you try to narrow down the reasons?

**The reasons could involve the visitor, the clergyman or the infrastructure involved i.e. the box itself. For the clergyman, it could be an issue with experience, trust, or the clergyman is facing some personal issues. For the visitor, there could be the factor of trust again or they are not comfortable. The infrastructural issues could be related to wear and tear of the box, the benches.**

This is a good analysis. Issue is with the clergyman's confidentiality. They seem to be leaking information. Before we proceed to the recommendations, I'd also like to tell you that we've also seen a decline due to our praying services albeit minor compared to the confessional issue. What could be the reasons for this?

**For the praying services, I can think of problems with the visitor or with the church. The church could have infrastructural issues (internal or external to the church) or issues with the clergy as we have already explored in the confessional services. For the visitor, they might have cultural differences or conflicts with the church proceedings.**

The issue is with the internal infrastructure of the church.

**Internally, the issue could be with the idol, the seating, the lighting.**

The issue is with the benches. They are wooden and have major wear-and-tear which is causing discomfort.

**For the benches, I'd recommend to first repair the wear and tear, second would be to replace them with new wooden benches and third would be to get benches of a more durable material.**
**For the confessional services, we can first, address the issue by conducting an internal investigation, second would be to report this to higher authorities such as a governing body and third would be to conduct sensitization programs with the employees of the church. If we observe the same issue is persistent after the above process, we can look at employee turnover measures.**

Okay, we can wrap up the case now.

# Footfall of Church

Unconventional | Hard | Bain & Co.

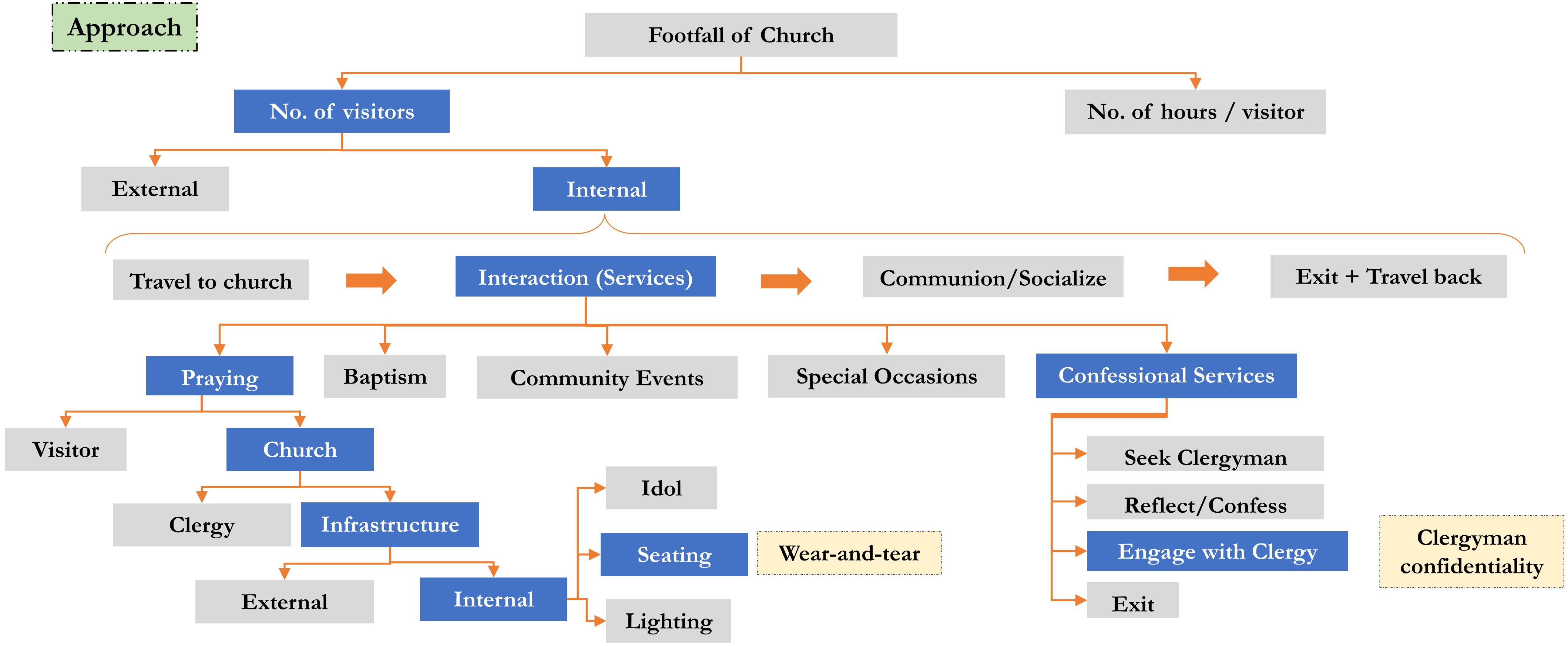
The Consulting Club

The footfall in a city church has been dropping. You need to figure out what are the reasons and give recommendations on how to counter the same.

## Case Facts & Notes

- **Duration** – 1 month
- **Quantum** – ~20-30%
- **Location** – City center. Consider metropolitan city like Delhi.
- **Operational timings** – 9 AM to 5 PM. No peak hours, no changes to timings
- **Visitors to church** – All allowed, no restrictions.

## Approach




## Recommendations

**A. Confessional services**

1. Conduct internal investigation to find root of problem
2. Report to higher authorities, like a governing body
3. Conduct sensitization programs for the employees

Re-hire if problem still persists

**B. Praying Services**

1. Repair wear-and-tear immediately (short-term solution)
2. Replace with wooden benches
3. Invest in benches made of a more durable material

# Money Heist



The Consulting Club

**You are a thief planning a robbery. You have pinned down three places which you can rob: 1. A Chai Shop 2. An Archie's Gallery 3. A Luxury Furniture Shop. Which one will you choose and why?**

**Interesting, what's the objective of the thief, other than of course maximizing the loot?**

The thief should not be caught and hence wants you to help out in terms of breaking in & out without alarming the police.

**Understood. I would now want to know a bit more about the thief, especially the personal details.**

The thief is a middle-aged, healthy man with no family and operates in a tier-2 city. He lives in a hideout outside the city. He doesn't have any major financial dependencies and needs cash for daily spend.

**Okay. How experienced is the thief and does he have a police record? Also, what's his skill set and is he a lone wolf or works in a team?**

He has been a thief for 7 years. He has never been caught and doesn't have a police record. He is not tech-savvy, uses a basic lever, hammer and cutter to break in. He prefers to work individually but has quite a few contacts in the community. He uses a 125cc motorcycle to get in and out.

**Just one more thing, for the robbery, does he look for cash or kind or both? Also, is he interested in pickpocketing as well?**

He prefers cash as he doesn't have black market links for selling stolen goods. He is not involved in any P2P activities including pickpocketing.

**Thanks for the info. Have there been any incidents recently which would have increased police presence more than the usual?**

Good Question. There have been a few robberies in the city mall and neighbouring areas which has increased police patrolling in those areas.

**Understood. I would now like to know more about the robbery target places, especially their size, products and location.**

Sure. Chai Shop is a small eatery located in a busy street on a crossroad. They sell Chai and Samosa and have no seating Arrangement. Archie's Gallery is a mid-segment gift shop in a congested market area. Furniture store is luxury furniture goods store located on the 2nd floor of the city Mall.

**Got it. Also, what are the security measures in place at these stores?**

Chai Shop has a metal shutter with a 3-lever lock. Archie's shop has an industry grade glass door and a passcode based alarm system. Furniture Store also has measures similar to that of Archie's, in addition it is located in the mall which has a couple of security guards in place.

**Understood. Considering the location of each shop I'd suggest a night time robbery with the assumption that the cash is kept in the cash counter overnight. Should I go ahead?**

Yeah, that's a good assumption. Go ahead.

**I would like to plan the robbery on the basis of 3 factors: Cash revenue, Shop security & access and Police Presence. For cash calculation, I would like to consider hourly footfall, customer conversion rate, operating hours, avg customer spend and % cash payments out of the total transactions. I would like to assume that Chai shop operates for 12 hrs/day (early morning start) and the other two would operate for 10 hrs./day.**

Good, carry on.

**Starting with cash assessment, chai shop would have around 25 customers/hr with an avg. spend of Rs. 20 and 75% of them would pay in cash. This gives a daily cash revenue of Rs. 4500. Archie's gallery would have around 10 customers/hr with a conversion rate of 60%, avg spend of Rs. 250 and around 50% cash payments. Hence the daily cash would be Rs. 7500. Similarly, for the furniture shop, the hourly footfall would be around 4, with a conversion rate of 20%, avg. spend of Rs.15,000 and around 20% payments in cash. The daily cash revenue would be Rs. 24,000. Hence, Furniture shop would provide the maximum loot.**

Okay. Assess the other parameters.

**Right. Assessing security and access, the Chai shop's basic lock and shutter suit the thief's expertise. Furniture shop & Archie's have a industry grade glass door & alarm system which would be difficult for the thief to bypass without tech knowledge. In addition, mall's security deters entry to the furniture shop. Now considering the police presence, due to the recent incidents, patrolling is more frequent near the mall. Although the police presence might be similar for the other two but Archie's - in a congested locale - faces greater vulnerability and CCTV exposure. Considering all these variables, chai shop seems to be the safest bet.**

Alright. Give me your final recommendations.

Weighing all the factors, if the thief operates solo, Chai Shop, despite modest returns, should be the preference as it is the safest option requiring no tech expertise. Alternatively, collaborating with a tech-savvy accomplice could make Archie's Gallery a profitable option, hinging on their loot-sharing arrangement.

Okay, thank you. Let's wrap the case here.

# Money Heist

Unconventional | Hard | McKinsey & Co.



**You are a thief planning a robbery. You have pinned down three places which you can rob: 1. A Chai Shop 2. An Archie's Gallery 3. A Luxury Furniture Shop. Which one will you choose and why?**

## Case Facts & Notes

- **Context –** Robbery planning; Loot maximization and safe breaking in and out.
- **Need** – Cash for daily spend
- **Thief Details -** Middle-aged, healthy man with no family; Operates in Tier-2 city, no financial dependencies.
- **Shop Details:**
  1. Chai Shop: Samosa, Tea; No seating Arrangement; On a busy street;
- 2. Archie's Gallery: Gift Shop, Mid segment gift items; congested market area;
- 3. Furniture Shop: Luxury items, high price point; Mall;

## Approach

- Robbery
  - Objectives
    - Maximize Loot
    - Break in
    - Escape
  - Plan
    - Cash Assessment
      - Hourly Footfall
      - Conversion rate
      - Average Spend
      - Operating Hours
      - % Cash Payments
    - Security Assessment
      - Gate Quality
      - Lock Quality
      - Tech Features
    - Area Assessment
      - Residential/ Market
      - Entries/Exits
      - Open/ Congested
      - CCTV
    - Police Presence
      - Patrol Frequency
      - Distance from station

**Furniture shop provides max loot but Police presence and difficult access/exit makes it the riskiest avenue.**

**Chai shop is the safest bet but provides smaller loot. Archie's Gallery is a lucrative option if the thief can team up with a tech-savvy partner.**

**Cash = Hourly Footfall * Customer conversion rate * Avg. Customer Spend * Operating Hours * % Cash payments**

| Shops | Cash | Rank | Security & Access | Rank | Police Presence | Rank | Preference |
|---|---|---|---|---|---|---|---|
| Chai Shop | 25*1*20*12*0.75 = 4500 | 3 | On a Crossroad; Metal Shutter; 3-lever Lock | 1 | Low | 1 | 1st |
| Archie's Gallery | 10*0.6*250*10*0.5 = 7500 | 2 | Congested Area; Dark Street; Industry Grade glass door; Passcode Alarm | 2 | Moderate | 2 | 2nd |
| Furniture Shop | 4*0.2*15k*10*0.2 = 24000 | 1 | Mall, 3rd Floor; Security Guards; Industry Grade Glass door; Passcode Alarm | 3 | High | 3 | 3rd |

## Recommendations

- If working alone, Chai Shop should be the preference (Safest but less lucrative, doesn't require tech knowledge).
- If working with a tech-savvy partner, Archie's Gallery can be a lucrative option (depends on cash division).

# Increase in Road Accidents



**Your client is a state road and transport corporation and they are experiencing an increase in road accidents. Find all the reasons & give solutions.**

**Sir, just to be on the same page, our client is a state road and transport corporation and they are experiencing a rise in road accidents. We have to find out the cause of this and give solutions.**

There can be multiple reasons. I want you to find all that you can. A state run transport corporation is responsible running government buses in the state. Take UPSRTC as a proxy.

**Sir I would like to ask a few clarifying questions.**

Sure, go ahead!

**Since when are we facing this problem? And is it specific to a single state only?**

Number of accidents have increased since 2013. On national level it has decreased.

**Thank you! So what kind of services do we offer? Are the number of accidents increasing in all kind of services?**

There are 3 types of services - Interstate, Intrastate, Intracity. Yes, all three services are seeing an increase in the number of accidents.

**Okay. What about buses? Are all of the same kind? If not, are all facing issues?**

Good Question! We have around 12500 buses. There are 20 different kind of buses. 6 new types of advanced buses have been introduced in the past 5 years and sadly, all 20 of them have accident issues.

**Okay. What about the service of these buses? How is it carried out?**

Good question! We have 250 depots to hold these buses. 80% of them have our own service centres.

**Thank you! Just provide me with a couple of minute of gather my thoughts and analyse the problem.**

Sure! Take your time.

**So, since accidents can be caused due to a lot reasons, I would like to break the problems into internal and external. In internals reasons, I will break them into the bus, the driver, the passengers and the depot. In external, I will classify the reasons into weather, infrastructure and other issues.**

Good approach. Lets start with the depot. What problems can you think of?

**Before we proceed, I want to include management practices of SRC too. We can look at these in the depot only. So I will break this category into 2 things: the staff, and the maintenance issues. Has there been a decrease in staff at the corporation in the past 5 years?**

Yes, so in our industry, staff is defined in terms of crew : bus ratio. It has decreased from 8:1 to 6.4:1 in the last 5 years.

**Well this can be one reason. But we first need to establish what is a good crew : bus ratio.**

The national ratio is 5. Some states even have a crew : bus ratio as low as 3.5 but are not facing any issues like this.

**Okay. Maybe in culmination with other factors, it might be impacting the performance. Lets move to maintenance. What kind of maintenance schedule do we follow?**

Good question. Buses are repaired when they are damaged. New buses are serviced regularly but as the bus gets older, the frequency of service and repair decreases. Can you think of the reasons for this?

**Maybe as the bus gets older, the cost of repair and maintenance increases due to non availability of parts.**

Good. Lets move to buses. As mentioned before, both old and new buses are facing issues. What do you think are the reasons here? Specially in the new buses.

**Sure sir, as the old buses are serviced less, they might breakdown more frequently. As for the new buses, may I know where are they being used?**

Yes, apart from service and maintenance, can you think of some other issue in old buses. Some along the technical lines. As for your other question, new buses are being used for intracity transport in big cities like Lucknow, Noida.

**Well, I know that government has made it mandatory to install speed governors in new public transport vehicles and taxis. This is something that is not available in older buses. So over speeding might be occurring and because of it, the accidents.**

# Increase in Road Accidents

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**Your client is a state road and transport corporation and they are experiencing an increase in road accidents. Find all the reasons & give solutions.**

**Regarding new buses, are they complicated to drive?**

Good reasoning for old buses. That in fact is one of the reasons. Define complicated to drive?

**Are there too many controls? Any change in physical dimension of the bus?**

Yes, the new buses are 13m in length whereas the older ones were only 11m in length. The drivers of the new buses are facing issues in driving longer buses in the dense city traffic.

**Since you mentioned drivers, we have till now found two reasons that might be leading to a rise in the number of accidents. One is the lack of training on new buses and the second is over speeding of old buses due to lack of speed governors. Do we have any more reasons to attribute to drivers?**

What impact do you think a decrease in the crew : bus ratio might have on long interstate travel buses?

**Let me think! Well, less staff means current staff needs to work over longer periods of time. Long distance drives with a single driver might be contributing to more driver fatigue and hence leading to more accidents.**

Okay. Good! Lets move to the final header under the internal factors; Passengers. How will they cause a rise in the number of accidents?

**Well overloading of buses with passengers could be a big issue. It can result in both distraction of drivers and impact the general safety of the bus.**

What if I say that the overall load factor is 70%.

**Well then I will need to analyse the load factor of each type of service. Is it uniform across intracity, intrastate and interstate buses?**

No it is not uniform. Intracity routes have a load factor of 90%, interstate, a load factor of 60%, but the intrastate buses have a load factor of 125%.

**Well, then it will be a contributing factor. Should I analyse external factors too?**

Sure, go ahead!

**I will like to break the external factors into the weather conditions, the infrastructure and the government management. Would you like me to look into any particular header?**

I would like you to deep dive into infrastructure.

**Okay, So I can break the infrastructure into roads and other infrastructure. Has the condition of roads worsened over the years?**

On the contrary, the conditions have improved drastically in the last 5 years. What would you cover under other infrastructure.

**The other infrastructure would be the lighting on the road, the sign boards on the road. Are these properly installed across highways and new roads?**

Yes, this is a problem. New roads are constructed but signs are not installed. Lets move to the solutions now.

**Alright! There can be multiple solutions pertaining to each problem. Predictive maintenance instead of reactive maintenance for the buses. A proper audit of the maintenance schedules and processes. Retiring extremely old buses and end of life buses from the service. Retrofitting speed limiter devices in all the buses. Training drivers on the new buses. Starting an yearly training program for new buses, processes, routes, rules and regulations. Route Optimization on intrastate routes. Monitoring service wise load factor instead of total load factor to prevent overloading, urging the state government to install signs on the newly constructed roads, installing Navigation systems on the buses.**

Great! Good solutions! It was fun doing the case with you. We will move you to the next round.

**Thank You! It was a great experience.**

# Increase in Road Accidents

Unconventional | Hard | McKinsey & Co.



**Your client is a state road and transport corporation and they are experiencing an increase in road accidents. Find all the reasons & give solutions.**

## Case Facts & Notes

- State Run Transport is responsible running government buses in the state. Consider UPSRTC.
- No. of accidents have increased since past 5 years. On national level it has decreased.
- Type of service – Interstate, Intrastate, Intracity. Facing accident Issue in all types.
- 12500 buses. 20 different types. 6 new types introduced in the last 5 years. Problem in both old and new buses.
- 250 depots. 80% have service centers.

## Approach

**Reasons**

- **Internal**
  - **Depot/SRC**
    - **Staff**
      - **Crew : Bus decreased from 8 to 6.4 in last 5 years.**
    - **Maintenance Schedule**
      - As the bus got older maintenance frequency ↓
      - This was because of increasing cost of maintenance of old buses
  - **Bus**
    - **Old Buses**
      - No speed limiters → Over speeding.
    - **New Buses**
      - Length ↑ from 11m to 13m.
  - **Driver**
    - **Fatigue**
      - More fatigued due to staff.
    - **Training**
      - Not Trained on new buses. Trained only once in job when starting.
  - **Passengers**
    - Load Factor – 71%
    - Is this uniform?
    - No, intracity – 90%; interstate – 60%; **intra state – 125%**
- **External**
  - **Infrastructure**
    - **Road Condition**
      - New roads made over past 5 years.
      - Old roads made better.
    - **Other Infra**
      - Lighting on the road? Improved over the years.
      - **Signs on Roads? Yes, this is a problem. New roads are constructed but signs not installed.**
  - **Weather**
  - **Government**
    - Traffic Police
    - Other Factors

## Recommendations

- Predictive maintenance instead of reactive maintenance of buses. A proper audit of maintenance schedule and process.
- Retiring Extremely old buses and end of life buses from the service. Retrofitting speed limiter devices on all buses.
- Training drivers on new buses. Starting an yearly training program for new buses, process, routes, rules and regulations.
- Route Optimization on intrastate routes. Monitoring service wise load factor instead of total load factor.
- Urge state government to install signs on new roads. Install Navigation systems on buses.

# Swedish Government



**In the 1960's, the Swedish Govt. wants to switch from driving on the left-hand side of the road to driving on the right. You are asked to chalk out a plan.**

**Sir, just to be on the same page, the government wants to switch from left hand side driving to on the right. May I know why do want to do it?**

The government has observed that cars typically had the steering wheel on the left, leading to increased number of accidents on narrow roads. Thus, they want to switch to right. Many European nations have already shifted to right-hand side driving.

**Sure Sir. Since few nations have already shifted, have we also tried attempting it before or is it the first time we are taking this initiative.**

This if first time we are attempting it. In past decade, the ideas was voted down several time, so we never reached the implementation planning stage.

**Okay, so do we have any timeline in mind? And any other constraints, operational or financial?**

We are looking at time frame of 2 years with no financial or operational constraints.

**Okay. They way I look at it, to switch to right hand side, we need to look at three key steps to implement it. First, change in the infrastructure, both vehicles and road infrastructure. Second, we need to have systems and processes in place. Third, to ensure that people adapt to this new system. Would you like me to look any other aspect here.**

The approach looks good. Let's proceed with infrastructure first.

**Sure sir. First, we would need to look at the current vehicles and what segment/percentage of them have right hand side driving?**

Most of them are configured to right side except buses.

**So, we would need to discuss manufactures and come up with a plan to modify the buses. Coming to road infrastructure, I believe the current system is designed for left hand driving?**

Yes, your assumption is correct.

**Okay, so we need to revamp the current infrastructure including intersections, traffic lights, road signs, landscaping, entry and exit points. All these would require significant investment. Since, we do not have any financial constraints, I believe the govt. can bear the cost for collective good.**

The government can incur the investment. What about the systems and processes?

**In systems and process, we need to all the legal aspect of this transition including permissions, following security protocols. Also, since it's a large scale transition, we need to create/revamp different departments to assist with the transition.**

The client has sufficient resources and manpower to create new departments.

**Coming to people, We need to work on awareness, acceptance and training of the people. For awareness, we can go for mass media advertisements along with use of physical stickers and logos. For acceptance, we need to come up with a long term education program, preferably remote along with physical demonstrations. Third, implement the training exercises for all kind of drivers, both long & short term and also for people who are yet to start driving.**

What do you think can be potential risk or considerations while executing the plan?

**First, since the idea was voted down several times, we need to consider the possibility of opposition turning decision against the current government. Second, We need to retrain the all drivers. Though younger generation could easily adapt to the change with sufficient training, it would be difficult for elderly and long-term drivers finding to adjust. Thirdly, since we have never attempted this before the government should take recommendations from countries who have already implemented and have similar demographics**

Sounds like a good plan

**Anything else you would like me to explore?**

That will be all. Thank you for your time. Have a great day!

# Swedish Government

Unconventional | Hard | McKinsey & Co.



**In the 1960's, the Swedish Govt. wants to switch from driving on the left-hand side of the road to driving on the right. You are asked to chalk out a plan.**

## Case Facts & Notes

- **Objective -** European neighbors had shifted to right-hand side driving. Cars typically have the steering wheel on the left, leading to increased number of accidents on narrow roads.
- **Previous Attempts -** Idea voted down several times in past decades. First attempt to implement.
- **Time Frame** – 2 Years
- **Constraints** - None

## Approach

**Analysis**

- **Infrastructure to be changed**
  - **Vehicles**
    - **Existing**
      - Most already configured to right-side.
      - Buses to be modified.
    - **New**
      - Discuss with Swedish manufacturers to modify.
  - **Road infrastructure**
    - Traffic Lights
    - Intersections
    - Road signs
    - Landscaping
    - Entry & Exit
- **Systems and Processes**
  - Legal Aspects to be covered
  - Different departments to be created to help with transition
- **People**
  - **Awareness**
    - Mass media advertisements
    - Stickers and logos
  - **Acceptance**
    - Long-term education program
  - **Training**
    - Long-time drivers
    - Short & Medium-term drivers
    - Yet to start driving

## Recommendations & Risk Mitigation

**Retraining**
- Drivers to be retrained after initial phase.
- Especially elderly and long-term drivers finding it hard to adjust.

**Political Factors**
- Explore possibility of opposition turning decision against government.

**Learn From Others**
- Take recommendations from countries who have already implemented and have similar demographics.

# Customer Satisfaction

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# Light Bulb Company



**Your client is a light bulb firm who sell through 2 channels – trade retailers (90%) and modern retailers (10%). Sales team (DSM) is responsible for selling to trade retailers. Each DSM has an app which tracks every call (visit) and a beat plan (call plan for 20 retailers per sales representative). On an average a DSM makes 15 calls a week of which only 5 are productive (industry average is 8). You have to suggest how they can increase the number of productive calls per DSM.**

**Ma'am, if I understand correctly, our client is a light bulb manufacturer which is facing low productivity issues in Sales team called DSM. We are clocking 33% conversion where industry average is more than 50%. I have to suggest a plan to increase the productivity of the team.**

Yes, you are right. Please go ahead!

**First of all, I would like to understand the model of running the team to understand the problem, then suggest a strategy to solve the problem. In that regard, I would like to understand what is the plan followed in a week and how are the clients allocated. Also since when are we facing this issue?**

We have been facing this issue for the past 6 months when we included the productivity KPI for the team. Before, we didn't have any metric. As mentioned, the beat plan is used to allocate the clients to DSM every week. It tells when a person has to go to a particular client and which route to follow.

**Okay! Which area are we operating in? Is it rural or urban?**

We are operating in the Delhi NCR region.

**Can you tell me more about the product line. Basically about various type of bulbs available.**

We sell a single type of bulb and have been in business for 5 years.

**Okay. So to understand the productivity, I would like to look at it from 2 segments:**

1. **Total number of calls**
2. **Conversion rate**

Sure that sounds good.

**The total number of calls/visits a DSM makes is a function of 3 factors:**

1. **Total working hours 2. Idle Time 3. Time/visit and this can be segmented into Transit and Duration of visit.**

**The conversion rate depends on major stakeholders: DSM and retailer.**
**DSM effectiveness can be attributed to her knowledge about the product, frequency of visit and her negotiation skills whereas retailer's willingness will be majorly impacted by the existing inventory, financial benefits and consumer demand for the products.**
**Is there any area I should focus on or do you want me to suggest a consolidated strategy?**

You can develop a plan based on your finding which seem comprehensive to me.

**One way of increasing the number of productive calls is increasing the total number of calls per DSM. This can be done by increasing total working hours, reducing idle time (like lunch breaks). The time per visit can also be reduced. Route optimization can help improve transit time.**

The industry average is a total of 15 calls per week and we are meeting that, so there is no problem with the total number of calls.

**Whether the call is productive or not depends on 2 factors – how well the DSM is doing his job and whether the retailer is willing to buy. DSM effectiveness depends on how well they know the product (training), price negotiation skills and whether they are actually visiting the retailer (can be tested through GPS records on the app).**
**Retailer willingness to buy would depend on financial incentives (margins compared to competition), end customer pull and whether the retailer actually needs the product when the DSM visits. If the retailer is a small counter where few customers buy, the stock will need to be replenished less frequently as opposed to a large counter. Hence, we could look at beat plan optimization so that the frequency of visits to a retailer is optimum leading to better call conversion.**

That is a good strategy. Thank you for your analysis.

**Thank you Ma'am for your time.**

# Light Bulb Company



**Your client is a light bulb firm who sell through 2 channels – trade retailers (90%) and modern retailers (10%). Sales team (DSM) is responsible for selling to trade retailers. Each DSM has an app which tracks every call (visit) and a beat plan (call plan for 20 retailers per sales representative). On an average a DSM makes 15 calls a week of which only 5 are productive (industry average is 8). You have to suggest how they can increase the number of productive calls per DSM.**

## Case Facts & Notes

- **Objective**: Find reasons for low productivity of sales team and suggest ways to improve it.
- Delhi NCR based client
- **Customers:**
  - Trade Retailers (90%),
  - Modern Retailers(10%)

## Approach

- **Increase # productive calls per DSM from 5 to 8 per week**
  - **Total # Calls**
    - **Total Working Hours**
    - **Idle Time**
    - **Time Per Visit**
      - **Transit Time**
        - **Mode of Transport**
        - **Route**
      - **Duration of Call**
  - **Conversion Rare (% Productive Calls)**
    - **DSM's Effectiveness**
      - **Product Knowledge**
      - **Frequency of Visit**
      - **Price Negotiation**
    - **Retailer's Willingness**
      - **Need (Inventory)**
      - **Margins**
      - **Customer Pull**

**Increase it by-**
- **Increasing working hours**
- **Reducing idle time**
- **Route optimization**

## Recommendations

DSM effectiveness can be improved by
- Product knowledge
- Training on negotiation skills
- Keeping track of frequency using an app

Retailer's willingness can be tackled by
- Monetary incentive
- Increasing demand via advertisement locally
- Replenishment tracker
- Beat plan optimization synced with replenishment

# Bottling Plant



**A Cola Manufacturer's bottling plant has excess inventory and increased customer complaints. Find out reasons and recommend solutions.**

**Thank you sir, I'd like to confirm my understanding that our client is a cola manufacturer's bottling plant and they have the problem of excess inventory and customer complaints. We have to find reasons and help fix the issue, Right?**

Yes, that's right

**Okay, so I had a few questions to clarify my thoughts.**

Sure, please go ahead

**By bottling plant we mean that the client only does the bottling & no manufacturing of cola?**

Yes you're right. The client receives all the made Cola from the manufacturer and their job is to only bottle it into different SKUs and be ready for distribution.

**Okay, thank you. Also, I wanted to know if this problem is recent or has been persistent?**

We've only recently started to face this problem since the last three months.

**Okay, so I would need to figure out what has changed in the last three months to cause this problem. Have competitors also suffered?**

Yes, that's right. No, the competition isn't facing this problem.

**Okay, so to understand the problem of piling up inventory, I would start by looking at the client's complete value chain and then at each step try to find if any issue exists. Is that fine?**

Sure.

**Thank you. So, as I understand it, cola would be transported to our plant and then bottling would occur and finally the packaged Cola would be distributed. Is that right?**

Yes, that's right. To add to your understanding, before bottling is done, first the bottles are sterilised and then filling is done of the bottles. Only post sterilising and filling is bottling done.

**Okay. So I'd like to know if there has been any change in our inbound cola's quality/quantity?**

Quality hasn't changed. Just our volumes have increased by almost 2x. Earlier, we used to receive 6000 bottles worth Cola in a day while now we receive roughly about 10000 bottles worth due to summers.

**Oh, so maybe in that case it means our demand has increased but distribution has taken a hit which is why customers also seem unhappy.**

Yes, that seems fair. I'd like you to find why distribution must have taken a hit.

**Okay, so I'll move to the next step. Are our machines able to sterilise, fill and bottle 10000 bottles in a day? If yes, then I would look into outbound logistics, else will drill deeper.**

That's a good question. We are not being able to bottle these high quantities demanded.

**Okay, so could you tell me if we are running at full capacity?**

Not entirely, but almost 100% capacity. We have the capabilities to sterilise 10,000 bottles a day, fill 9000 bottles a day and bottle 8000 bottles a day.

**So this means that bottling is a bottleneck. Inventory must be piling up before this stage and we would not have been making enough finished goods to be distributed, leading to complaints.**

Yes, that's absolutely right. Could you recommend ways to deal with this issue?

**Sure, Sir. As I see it, we could do two things broadly, either fix the bottleneck at out own plant or outsource/shift this process to another plant.**

Right, go deeper into the former please.

**Okay, so for fixing the issue at our own plant, we can do three things. First, we can install new bottling machines, but that would involve Capex and I'm not sure if that would be feasible only for seasonal demand change. Second, we could share the workload among the other machines that are idle and capable, making it possible to increase production. Lastly, we can work on making sure that we run at 100% capacity by proper QA, however we may still not be able to completely fulfil demand in that case.**

Great, that sounds good!

# Bottling Plant



**A Cola Manufacturer's bottling plant has excess inventory and increased customer complaints. Find out reasons and recommend solutions.**

## Case Facts & Notes

- Kind of inventory – inventory from suppliers
- Magnitude of increase – 2x increase
- Timeline of increase – last 3 months
- Nature of complaints – increased delivery time to customer by 5x
- Reduce inventory and lead times as much as possible
- Production process
  1. Sterilizing
  2. Filling
  3. Bottling

## Approach

Reduce inventory and customer delivery times in bottling plant

- Inbound Operations
  - **Has there been in a change in the quantity supplied? Why?**
    Demand has gone up from 6000 to 10000 bottles a day, since it is summer.
- Manufacturing
  - **Has there been a change in the manufacturing process?**
    No
- Outbound Operations
  - **Why are customer orders delivered late?**
    The factory is not producing enough to meet demand, forcing us to cancel some shipments

### How does Manufacturing Work?

Sterilize 10,000 bottles/day → Filling 9,000 bottles/day → **Bottling 8,000 bottles/day**

**New Demand – 10,000 bottles/day**
**Demand > Supply => Product deficit**

## Recommendations

The bottling part of the manufacturing process causing inventory build-up leading to customer delays

- Fix the bottleneck to eliminate inventory build-up
  - **Move Q&A process before the bottleneck** → By moving the Q&A process before the bottleneck, we can ensure that the bottleneck is being used at max. capacity and hence, maximum product possible is produced
  - Expand the bottleneck → Will involve Capex which may not make sense for a seasonal demand surge
  - **Share bottleneck's workload** → Makes sense since the surge is seasonal
- Outsource process or shift production to another plant

# Telecom Provider



## A telecom provider in Kenya has seen a major dip in customer satisfaction levels.

**Sir, just to be clear, our client is facing a dip in customer satisfaction level and wants to know reason behind it. Any secondary objective I should look for?**

Yes, our clients want to increase customers satisfaction levels to retain subscription base

**Sir I would like to ask a few clarifying questions.**

Sure, go ahead!

**What services does our client provide? What about the geography and market share?**

Our client provides mobile services, Broadband, customer services. Its clients include both businesses and individuals with country wide operations. It currently owns 40% of the market.

**Thank you sir! Regarding the problem – Since when is the client experiencing this problem? Are we the only ones suffering or are the competitors impacted too?**

Well they have been experiencing this problem for the past few years. As far as we know, the competitors are not impacted by this problem.

**Thank you sir! I would like to know about our operations in consumer service. What all services come under customer service and how does it operates? One of them I believe is customer calls.**

So we provide support via call centres. The customer calls are routed via interactive voice response to our call centres where our staff assists the customer with complain resolution

**Thank you sir! Regarding service, I would like to break-down the operations in three steps, first IVR, then customer calls and finally the resolution and post call service.**

Sounds good to me.

**Coming to IVR, how many options do we have in it? And what are all the relevant options available and how easy is to for the customer to access them?**

All the relevant options are available to the customer with options organised in order of most commonly opted to least.

**Sir, as per my experience the primary reasons for calling customer center are for information, Requests & grievances. What is the breakup among these three?**

Queries, requests and complaints comprises 20%, 20% & 60% of total calls respectively. Queries and requests are above industry average whereas as complaints are below industry average.

**Either our services have improved suddenly in past few months, which is unlikely or, customer is unable to get through to customer service executive.**

We have observed that complaints not getting through to CC staff, leading to high wait times & lower satisfaction levels.

**I see that not being able to reach to CC staff is aggravating the situation. In order to counter it, I propose 1. We can educate the customers about common functionalities and Query or Requests through campaigns; 2. Improve the IVR system and add most common Query and Request option in main menu on a regular basis. For educating customers, we can educate customers through pamphlets, information booths, stores about Q&R functionalities to reduce call volume based on Q&R. Simultaneously we can move customers to digital platforms for Q&R. Incentivize use of these platforms. Both can be implemented in short term.**

Sounds like a good plan. What about IVR?

**We can implement AI & NLP solution to route customer calls & provide appropriate information. Since it would require considerable effort from tech division, I believe the time required to execute it will be substantially longer than the other two.**

I think the client would be willing to implement it as a part of their long term strategy.

**Would you like me to delve into resolution and post call service?**

That won't be required. We can close the case here. Have a good day!

# Telecom Provider



**A telecom provider in Kenya has seen a major dip in customer satisfaction levels.**

## Case Facts & Notes

- **Services** - Services offered – Mobile services, Broadband, customer services.
- **Timeline of dip–** Past few months
- **Competition-** 40% market share. Company specific problem, industry satisfaction at normal levels.
- **Objectives** - Increase satisfaction levels of customers to avoid loss of subscription base.
- **Client Line** - Businesses & Individuals.
- **Country-wide operations**
- **Customer Service -** Calls routed through IVR. Call center with staff for resolution.

## Approach

**Optimize Operations**

**Interactive Voice Response (IVR)**

The number of options on IVR?
All relevant options available
Ease of access of most used options & CC staff? Low

**Customer Calls**

Primary reasons for calling customer center are for information (Q), Requests (R) & grievances (C)
Increased average wait time
What are call volume divisions between these?

**Resolution & Post Call Service**

- Call center staff capability? - above average.
- No complaint post connection to staff.
- Efficiency & motivation of staff? - Optimal

Query (20%)
**Higher than industry avg**

Request (20%)
**Higher than industry avg**

Complaints (60%)
**Lower than industry avg**

Complaints not getting through to CC staff, leading to high wait times & lower satisfaction levels

## Recommendations

The customers that call for complaints are not able to reach through to call center staff which aggravates the situation.

1. Educate the customers about common functionalities and Query or Requests through campaigns
   - Short term → Educate customers through pamphlets, information booths, stores about Q&R functionalities to reduce call volume based on Q&R
   - Short term → Move customers to digital platforms for Q&R. Incentivize use of these platforms
2. Improve the IVR system and add most common Query and Request option in main menu on a regular basis
   - Long term solution → Implement AI & NLP solution to route customer calls & provide appropriate information

# M&A

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# Airline Acquisition



**A major airline operator needs advice whether they should make an acquisition to drive up their revenues, and if so, which one.**

**So our client is a major airline operator needs advice whether they should make an acquisition to drive up their revenues, and if so, which one?**

Yes

**Sir I would like to ask a few clarifying questions.**

Sure, go ahead!

**What does the client's business look like, what kind of services are provided by the client and where does it operate?**

The client offers passenger services and cargo and is present in all north, south, east, west and central regions the share of revenues of these regions is given in Exhibit B.

**What is the objective of our client with this acquisition?**

The client believes that broader coverage across the country will lead to an increase in revenues and profitability, so the client wants to diversify its footprint.

**What is competitive landscape like, how much market share our client owns and what are other competitors?**

The size of the industry has increased from $22.2B in 2010 t0 $29.5B in 2014, up by 25%, even though our revenues have increased, our market shares has gone down, the revenues for major competitors have been given in exhibit A.

**Thank you! Just provide me a couple of minute of gather my thoughts and analyse the problem.**

From exhibit B we can conclude that Our market share has increased in North, South and Central regions while our market share has decreased West and East regions.

**Yes**

**Since our client wants to gain markets where the company doesn't has low market share, I would like to know the markets of all the competitors.**

Competitor A: Major player operating routes that connects major cities across the country as well as connecting them to international destination
Competitor B: Emerging airline player operating flights in Central, West and East regions
Competitor C: Acquired by Competitor A in 2013
Competitor D: Emerging airline player operating in South and Central regions
Competitor E: Emerging airline player operating in North region

**Based on insights from exhibits A and B and this data, we can generate a plot between 'degree of overlap' and 'revenue' for every player in the market. This plot will be useful in making a decision as to which player should be acquired. 'Degree of overlap' is an approximate measure that would indicate the overlap of customers between the client and the competitor. Our objective would be to choose a player that has greater revenues and smaller degree of overlap. Is this approach feasible?**

Yes

**Competitor B has the lowest degree of overlap and has good revenues as well, Henceforth, competitor B would be the recommended player for acquisition.**

Okay

**Do you also want me to look at operational synergies like aeroplane models.**

No, these recommendations look good

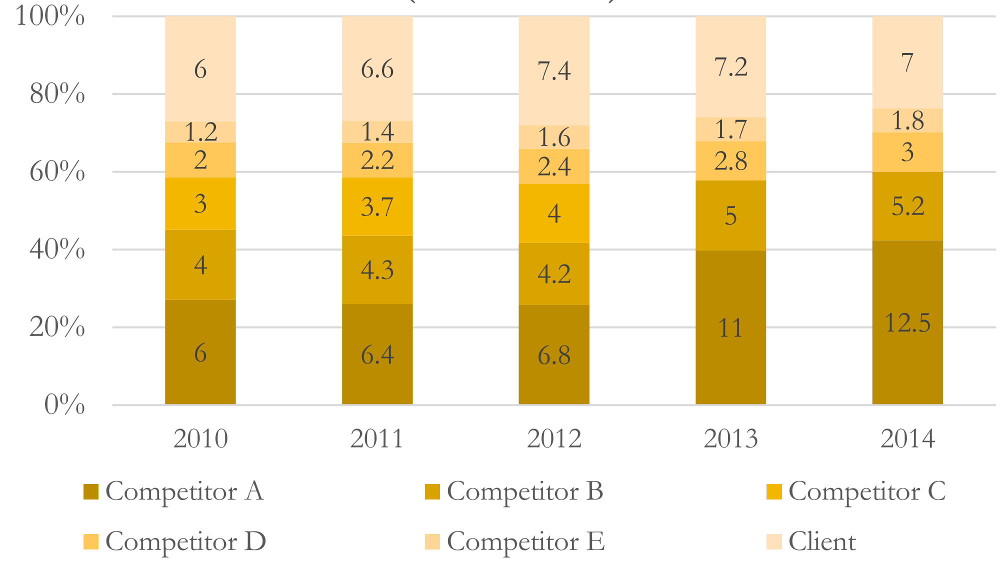
# Airline Acquisition

M&A | Moderate | McKinsey & Co.

**A major airline operator needs advice whether they should make an acquisition to drive up their revenues, and if so, which one.**

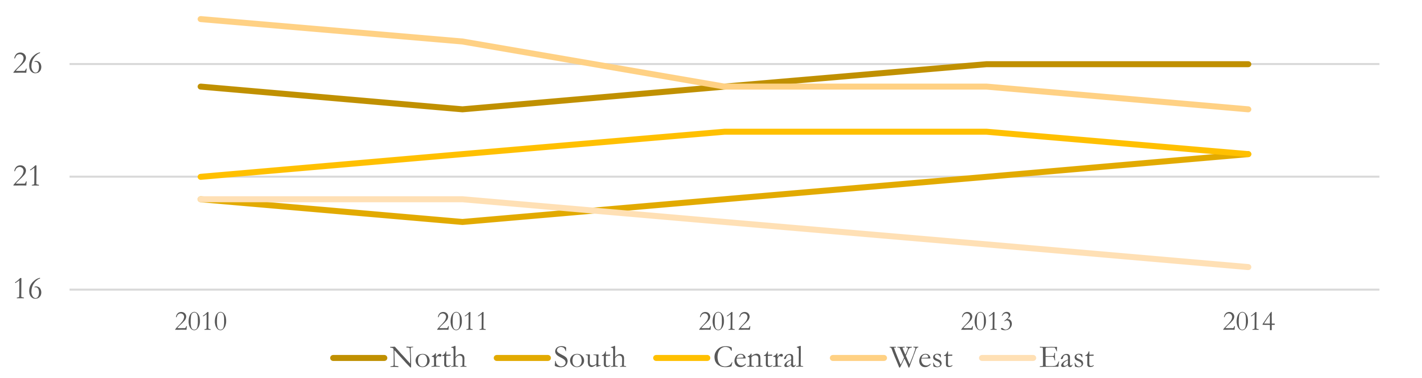
**Approach:** Need for acquisition → (Company + Industry) analysis → Due diligence → Valuation + Financing decisions → Exit strategies

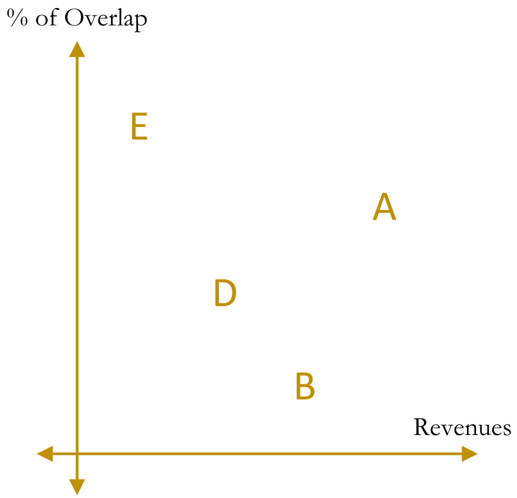
**Exhibit A: Market Share among airline carriers (in US $ billion)**




Competitor A: Major player operating routes that connects major cities across the country as well as connecting them to international destination
Competitor B: Emerging airline player operating flights in Central, West and East regions
Competitor C: Acquired by Competitor A in 2013
Competitor D: Emerging airline player operating in South and Central regions
Competitor E: Emerging airline player operating in North region

Exhibit B: Client's market share in revenues by geographic region (In US $ billion)




Based on insights from exhibits A and B, we can generate a plot between 'degree of overlap' and 'revenue' for every player in the market. This plot will be useful in making a decision as to which player should be acquired. 'Degree of overlap' is an approximate measure that would indicate the overlap of customers between the client and the competitor. Our objective would be to choose a player that has greater revenues and smaller degree of overlap. Henceforth, competitor B would be the recommended player for acquisition.

Insights from Exhibit A and Exhibit B:
- The size of the industry has increased from $22.2B in 2010 t0 $29.5B in 2014, up by 25%
- Even though our revenues have increased, our market shares has gone down
- Our market share has increased in North, South and Central regions
- Our market share has decreased West and East regions

Note: Although the primary need for acquisition in this case would be to increase coverage revenues, listing down other possible objectives can help prioritize/decide between different options for acquisition. For example, in case of airline operators, operational synergies can be achieved by acquisition of a competitor which operates airplane models which are already present in our client's fleet.

# PE Cosmetic Chain

M&A | Hard | BCG

The Consulting Club

**Your client is a PE firm looking to invest in large chain of cosmetic stores in Australia. Figure out whether they should go ahead or not.**

**So our client is an PE firm which is looking to invest in cosmetic chains in Australia and I need to figure out whether they should go ahead with it.**

Yes

**Sir I would like to ask a few clarifying questions.**

Sure, go ahead!

**What are the objectives for client?**

The client wants a 25% rate of return, high growth and a turn around time of 5 years.

**What is the product mix of the client?**

The client has a new product, a Botox substitute at 20% price. The Cosmetic clinics provide laser hair removal and Botox implants (anti-wrinkle injections)

**What are target customers for our client?**

The target customers for the client are high to middle income, middle aged women in Australia.

**Thank you! Just provide me a couple of minute of gather my thoughts and analyse the problem.**

Sure

**I would like to first go understand the consumer and what is the consumer journey like, how do they buy, what brands are preferred and what other factors are?**

Customer rely on doctor recommendations and no specific brand is preferred and customers will adopt Botox if price is slashed by 50%.

**I would like do a market sizing to determine what kind revenues and profits our client can generate out of the business. We have 20 mil Australians, so 10 million women, out of which we can assume 30% can be assumed to be above 40 and 40% of those women can be from upper and middle income groups which give us 1.2 million people. Assuming 10% of that are interested and 60 % of them actually get it, we have 72,000 customers. How much market share we are expecting and what is the cost of our alternative.**

We are expecting a 50% market share and the cost is around $1000 and you can expect 30% profit.

**So, we have 36,000 customers, revenues of 36 million and profits of 11 million**

That sounds about right.

**Okay, we can also look at the potential growth drivers such as rising disposable income, reducing cost of cosmetics, adoption of Botox by younger people and lifestyle changes leading to more wrinkled faces.**

Okay

**When it comes to different risks and synergies, we can tap new customers in and increase volume Sales, growth in market share. But this acquisition will cannibalize the Korean drug and customers might perceive it to be an inferior product because of the low price.**

Okay, So what are your recommendation?

**Don't invest in the cosmetic chain due to possible cannibalization & reduced profits in future. The client can do a Close Study of Korean Market to understand drug response & launch drug in global markets, launch Korean drug into different markets to gain profits from drug. The client must evaluate other business segment (Hair Removal) as well. Evaluate the scenario & reactions in Korean Market to understand possibilities in Australia – Drug made money in Korea but the cosmetic chains crashed.**

Yes, these recommendations sound good.

# PE Cosmetic Chain

M&A | Hard | BCG

**Your client is a PE firm looking to invest in large chain of cosmetic stores in Australia. Figure out whether they should go ahead or not.**

## Case Facts & Notes

- Investments in Pharma Co. in Korea
- Pharma Co has a new drug, Botox substitute at 20% price
- Target customers are mid & High Income Group, mostly middle aged women
- Objectives, 20-25% RoR, high growth, turn around time ~ 5 years
- 50% Market Share in Cosmetic Clinics with Company, 20% MS with ASC & 15% with CSC, rest with small players
- Cosmetic clinics provide laser hair removal and Botox implants (anti-wrinkle injections)

## Approach

**Investment Analysis**

**Customer Study**
- Customers rely on Doctor's recommendations
- No specific brand is preferred
- Customers will adopt Botox if price is slashed by 50%

**Financial Analysis**

Revenue: Market Size* Mar. Share =120M *60% * 50%=$36M

Costs: 70% Operating Cost

**Profit = 30% * $36M = ~ $11M**

**Growth Drivers**
- Rising Disposable Incomes
- Reducing Cost of Cosmetics
- Adoption of Botox by younger population
- Lifestyle changes leading to more wrinkled faces

**Risks & Synergies**
- Cannibalization of new Korean drug in Australian market
- Perception of bad quality due to low price
- Benefit – New customers can be tapped in
- Volume Sales in focus, growth in market share

**Distribution Channels**
- Dermatologists (40%) - Fragmented
- Cosmetic Chain Clinics (60%) – 50% Market Share with co.
  - Doctors on call
  - Doctors prescribe implant & nurses administer

**Pricing**
- 4 shots in 1st year - $800 each
- One shot post 1st year - $200 each

**Korean Drug**
- Perfect Replacement/Substitute
- Lowered price, 20% of Botox, No side effects

**Market Sizing (Botox in AUS)**

Pop. of AUS= 20M
# of households = 5M

- Females (50%) — 10M
  - Age<40 (70%)
  - Age>40 (30%) — 3M
    - LIG (60%)
    - HIG/MIG (40%) — 1.2M
      - No interest (90%)
      - +ve Interest (10%) — 120K
- Males (50%)

**Total Size =120K*1000 =$120M**

## Recommendations

- Don't invest in the cosmetic chain due to possible cannibalization & reduced profits in future.
- Close Study of Korean Market to understand drug response & launch drug in global markets, launch Korean drug into different markets to gain profits from drug.
- Must evaluate other business segment (Hair Removal) as well.
- Evaluate other business segment (Hair Removal), Competition (crash). Volume sales increase not enough to offset decrease in revenue due to price point fall.
- Evaluate the scenario & reactions in Korean Market to understand possibilities in Australia – Drug made money in Korea but Cosmetic chains crashed.

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# Metro Investment in Dubai



**Your client is a private equity firm headquartered in USA looking to invest in an infra-asset in Dubai.**

**Just to re-iterate the problem statement, our client is a PE firm headquartered in USA looking to invest in an infra-asset in Dubai. Is my understanding correct?**

Yes, that's correct, please proceed.

**I'd like to clarify what is the infra-asset referred to in the case?**

The asset is a metro-line between the city centre and the city airport with no stops in between.

**I'd also like to understand more about our client. What does their current investment portfolio look like? What would be our client's objective for this investment and what is the initial investment?**

Our client has a well-balanced portfolio consisting of different sized investments. They do specialized projects in infrastructure globally (especially in airports, rails.) but they are planning to invest in Dubai for the first time. Our client's objective is to earn at least 15% RoI and initial investment is $1.4B.

**I wanted to understand what is the sell-side vs. buy-side dynamics that we are looking at. Are we looking at an asset which is merged with another entity or is it a standalone one? What is the investment timeline we are looking at?**

The sell-side partner of this deal is the government who owns the asset and has 2 deals on the table. The first is a 5-year deal wherein there is no subsidy provided. Second is a 20-year deal wherein the government would invest 40% initially. Also, this is a standalone asset with no synergies, and this is a non-competitive bid.

**What would the exit process look like?**

The exit process will be determined by the government depending on the deal we are opting for. Moreover, we will own and operate the asset for the entire investment timeline. The government will buy the asset once the deal is over at 40% discounted price.

**Since RoI is an important factor to consider whether we should invest or not. First, we should look at the RoI and then second, the risks associated (i.e. with respect to the macro-environment or the project itself). Do you want me to focus on RoI or risks first?**

Let's explore RoI first. How will you analyse which of the two deals is better?

**For RoI, first I'd like to look at the revenue generated and identify the costs and then we can calculate the RoI.**

Sure, let's proceed.

**First I'll explore the revenues; this would include ticket revenue, revenue through advertisements and other additional sources such as stalls, art galleries, etc. Should I consider each of these revenue heads or focus on just one?**

Let's just look at the ticket revenue.

**Revenue/day from tickets would be # of passengers/day * ticket price. I'd assume that passengers would be people travelling to-and-fro from the airport and the city. Is this assumption fine?**

Yes, this is fine. What will you do next?

**Since our passengers are restricted to people travelling in flights, we can consider airport traffic as a proxy to arrive at the revenue figure excluding the airport/airline staff. Is this fine?**

Okay, sure.

**May I know about the # of runways in the airport? Also, is the airport operational 24x7? Do we have any information about the frequency of take-offs and landings?**

Airport is operational 24x7. There are 2 runways, and the planes take off and land every 5 minutes.

**So, that would mean in every 5 minutes, we have 2 airplanes using the runway (take-off & landing) which means, by my calculation, that would be 576 airplanes in a day.**

Okay, what else would you consider?

**Assuming that the capacity of international and domestic flights would be different, do we have any information regarding the break-up of the same?**

20% of the flights are domestic. Rest are international. The capacity of domestic flights is 150 and international is twice of that.

**Do we have the occupancy rate for both types of flights?**

It's 90% for both.

**I'd like to find out # of flight passengers/day. My calculations shows that this would be 140k. Now, considering that not all passengers would be travelling to the airport solely by metro-line, we should calculate the % of passengers who would be travelling by metro. Do we have any figure?**

No, could you try to estimate the number for this?

# Metro Investment in Dubai



**Your client is a private equity firm headquartered in USA looking to invest in an infra-asset in Dubai.**

**I believe that the people coming out of flights can use 4 modes of transport; taxis, private vehicles, metro and some other public transport. Do we have an approximate distribution for this?**

We don't have the exact numbers for these, but we do know that 30% of the flight passengers will continue to use taxis, but the passengers using private vehicles will continue using the same. So, can you now estimate the # of passengers using metro?

**Since we don't have information about the people using private vehicles, let me try to estimate this number. Assuming all private vehicles need to be parked, we can look at the # of parking slots in order to find out the passengers using private vehicles.**

How would you estimate that?

**I'll just take a few moments to gather my thoughts.**
**We can use this formula:**
**# of parking slots * [total time i.e. 24 hours / time per slot] * (% of slots filled) * (# of passengers / car). I'd also include the assumption that we are not considering time value of money for ease of calculation**

you can assume that there are 20 levels in the parking area and at each level there are 50 cars. Each car is parked for 20 mins. Occupancy rate of the parking slot is 90%. Assume that the # of passengers/car is 1.1.

**Okay. This gives me around 72k passengers. The expected number of people travelling via metro per day would be (140k) – 72k – 42k = 26k / day. Then 9.36M passengers would be travelling / year.**

Okay, this is great! You can continue.

**In order to get to the revenue, we'll have to know the price of the ticket. Do we have this data available?**

Could you do the deal analysis to find the ticket price?

**So going back to the objective, the RoI should not be less than 15%, which gives us the following formula: 1.15 = [( Revenue – Costs ) * time + Sell value] / Initial investment.**
**Let me calculate the sell value first. Sell value is 60% of our initial investment as government purchases it at a 40% discount which gives us $840M. Revenue for one year, as calculated before is 9.36 * x where x is the selling price, which we need to calculate. But we will be needing the value for costs, do we have that number with us?**

Okay, sure. The operational cost is expected to be $ 90 M per year. What would you do next?

**Calculating the selling price for 5 years, it's ~ $26/ticket and for 20 years, it is ~$10/ticket.**

Now that you've calculated the selling price, could you tell me which of the 2 deals is better?

**Sure. In order to choose the better deal may I know the average taxi fare incurred by a flight passenger, since taxi users more likely to switch to the metro. This will only happen if there is some added benefit to make make that switch which is cheaper fare than taxi or some value addition such as less time.**

Great. The average fare for a taxi from the city to the airport is around $15.

**In that case the 20-year deal is better because because there is a steep difference between the prices and hence the passenger is more likely to switch to taking the metro in order to save money as compared to the 5-year deal where the metro is more expensive, and we are less likely to capture the consumers who prefer taking taxis.**

Yes absolutely. I think this analysis is extremely thorough. I think we can wrap up this case.

# Metro Investment in Dubai



Your client is a private equity firm headquartered in USA looking to invest in an infra-asset in Dubai.

## Case Facts & Notes

- **Objective** – earn at least 15% RoI on initial investment $1.4B.
- **Company** – US based PE firm, specialize in infra projects, first project in Dubai
- **Deals** – 1) 5 years with no subsidy, 20 years with 40% subsidy by the gov. (Standalone), Gov to buy the infra at 40% discount
- **Customers**- People going to the airport from the city
- **Competitors**- Non-competitive bid

- **Airport –** 2 Runways,24X7, Landings/Takeoffs every 5 mins, 20% Domestic flits – 150 seats, 80% International flights – 300 seats, 90% occupancy rate
- **Taxis –** 30% travelers take taxis
- **Parking Slots –** 20 floors with 50 slots each, average parking time is 20 mins, 90% occupancy
- Skip risk analysis
- Assume share of Other public transport is negligible

## Approach

Deal Analysis → Risk Analysis

Deal Analysis → Financial Feasibility → Metro Revenue

Metro Revenue → Advertisement | Tickets | Other

Tickets → # of passengers/day | Ticket price

# of passengers/day → Airport traffic (Proxy)

Total Flights =
#runways * frequency of takeoff/landing
= 2 * ((60/5) * 24) = 576

Domestic Passengers
= Domestic flights * Occupancy * No of seats
= (0.2 * 576)*(0.9 * 150)
= 15,552

Domestic Passengers
= Domestic flights * Occupancy * No of seats
= 0.8 * 0.9 * 300 * 576
= 1,24,416

Total Passengers at the airport in a day
= 1,39,968. ~ 140000

## How do passengers commute to and fro from the airport?

Taxis | Private Vehicles | Metro | Other Public Transport

Taxis:
0.3 * 140K
= 42 K

Private Vehicles → Parking Slots (Proxy)

Private Vehicles Arriving at the airport
= # of parking slots * [total time = 24 hours / time per slot] * (% of slots filled) * (# of passengers / car).
= (50*20) * ((24*60)/20) * 0.9 * 1.1
= 71,280 ~ 72000

Metro:

Expected no of people travelling by the metro
= (140k) – 72k – 42k = 26k / day

Expected no of people travelling by the metro annually
= 9.36 M

# Metro Investment in Dubai

M&A | Very Challenging

The Consulting Club

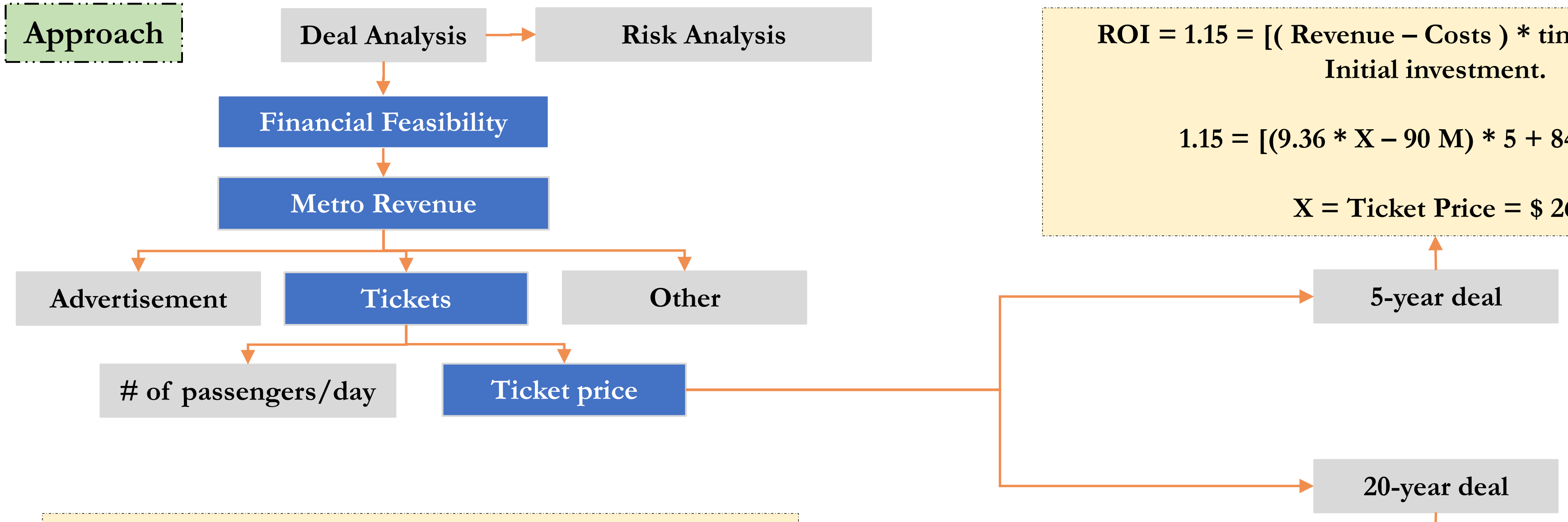
**Your client is a private equity firm headquartered in USA looking to invest in an infra-asset in Dubai.**

## Case Facts & Notes

- **Objective** – earn at least 15% RoI on initial investment $1.4B.
- **Company** – US based PE firm, specialize in infra projects, first project in Dubai
- **Deals** – 1) 5 years with no subsidy, 20 years with 40% subsidy by the gov. (Standalone), Gov to buy the infra at 40% discount
- **Customers**- People going to the airport from the city
- **Competitors**- Non-competitive bid

- Revenue = 9.36 * price per ticket
- Operational cost = $ 90 M
- Sell Value = 40% of Investment = $ 840 M
- Average taxi fare to the airport is $ 20

## Approach




**ROI = 1.15 = [( Revenue – Costs ) * time + Sell value] / Initial investment.**

**1.15 = [(9.36 * X – 90 M) * 5 + 840] / 1.4 B**

**X = Ticket Price = $ 26**

**Compare the ticket price with the avg taxi fare to the airport in order to determine which deal is better in terms of capturing the taxi taking customers**

**Avg price of taxi = $ 20**

**ROI = 1.15 = [( Revenue – Costs ) * time + Sell value] / Initial investment.**

**1.15 = [(9.36 * X – 90 M) * 20 + 840] / 840 B**

**X = Ticket Price = $ 10 / ticket**

## Recommendations

- 20-year deal is better because because there is a steep difference between the prices ($ 20 Vs $ 10) and hence the passenger is more likely to switch to taking the metro in order to save money as compared to the 5-year deal where the metro is more expensive, and we are less likely to capture the consumers who are taking taxis currently.

# Due Diligence

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# Coffee Shop



**Your friend is selling his coffee shop in Delhi, for Rs. 10 lakh as he is not able to meet his ends meet due to COVID situation. Will you buy it?**

**I would like to clarify a few things before I start analyzing the case**

Sure

**Can you tell me the size and locality of coffee shop? Are there any competitors nearby. What kind of products it sells. Do we provide deliver services? Who are our common customers?**

The coffee shop is just outside a college campus in a decently busy area and hence sees a lot of college students as its major customers. There are no competitors nearby. It sells hot coffee, pastries and mineral water bottles. We only provide dine-in facilities with limited seating capacity, just enough to accommodate maximum customers that the café sees at a time.

**Alright. So, when we talk about buying the coffee shop, what all are we actually buying? Is it just the café business or will we also own the shop and some other fixed assets like table, chairs, coffee machines?**

Your friend does not own the shop. However, you will own the other fixed assets, everything that is required to run a coffee shop. You are buying the business and the brand name.

**Thank You Sir. According to my understanding the reason for my friend not being able to make his ends meet is decline in customer due to lockdown and social distancing. So, is it safe to assume that we will be able to earn revenues only after 2-3 months after we buy the shop. Also, will the business return back to its normal form post covid?**

Yes, you are right in assuming the business will return back to its normal form that was pre-covid times.

**Lastly I would like to know my source of capital given that I am currently a college student and I would be broke majority of the time.**

You will have to take a loan to invest 10 lakh in this business.

**Thank You Sir. In order to analyze if I should be buy the business, I would like to analyze the financial capability, operational feasibility and certain other associated risks. In financial capability I would like to calculate the revenue, cost and profit and hence calculate the break-even period. In operational feasibility I would like to assess the value chain of the business. Risks are some possible situations that can occur which will hamper our business.**

I would like you to concentrate on financial capability first and then go ahead with calculating the potential risks with the business.

**Ok Sir. In order to calculate the break even period I would like to know the revenue that the business was earning pre-covid times in terms of number of customers, number of units sold per customer and price of each of the different units.**

| Hours of the day | # Operating Hours | | # Customers (per hour) |
|---|---|---|---|
| | Mon-Fri | Sat | |
| Peak | 4 | 12 | 20 |
| Non-Peak | 8 | 0 | 10 |

| Products | Perc of Customers | Price per unit |
|---|---|---|
| Hot Coffee | 60% | 40 |
| Pastries | 30% | 30 |
| Water Bottle | 10% | 20 |

**Thank you for the information. Now I would like to know the cost incurred by the company in terms of variable cost that is the cost incurred per unit of a product and fixed cost like Rent, Workers Salaries, Utilities, Maintenance and any other cost.**

Rent is 5000 per month. There are 2 workers, combined salaries for whom is 11,520 per week. Variable cost incurred per unit is 50% selling price per unit. Consider utilities and maintenance to be covered in rent itself.

**Alright. Now that I have all the information I would first calculate the revenue, cost and profit per week and then calculate the time period in which I will be able to break even my investment. Let me know if you would like me to consider the NPV of the cash flow to calculate B.E.P. Also, since I am only considering Gross profit, the period that I calculate will be lesser than the actual time taken to break even the investment. Hence, I will need the information on the value of fixed assets, depreciation amount per year and interest on the loan of 10 lakh rupees to calculate PBT.**

You can ignore NPV for the simplicity of calculation. Value of fixed assets is Rs. 1,00,000 with a depreciation of 10%. Consider interest of 12% on the loan..

# Coffee Shop



**Your friend is selling his coffee shop in Delhi, for Rs. 10 lakh as he is not able to meet his ends meet due to COVID situation. Will you buy it?**

**Sure Sir. Now, I am done with my calculation. I got revenue per week as Rs. 36,400, cost as Rs. 30,970/week and hence gross profit of Rs. 5,430/week. Depreciation per year is equal to 10,000 which equals to Rs. 192 per week. The interest on loans is equal to 1.2 lakh per annum and Rs. 2,310 per week. Deducting depreciation and interest we get PBT as Rs. 2,928/week. Calculating BEP on Profit Before Tax we get ~341 weeks and ~6.5 years in which we will be able to break even our investment.**

Good. Now analyze this break even period and other risks that the business will face and tell me if you would buy the business.

**I would like to list few potential risks in the business. First one is the customer behavior Post-Covid times, which is most probable to change against the concept of dining out. Second is the threat of new entrant. Given the break even period is large we can expect new competitions to open in nearby areas. Third is the limited seating capacity, which restricts the expansion of café in terms of number of customers. At this stage I would suggest that we don't buy the coffee shop.**

Sounds Good. Let us assume you really want to help your friend and decided to buy the shop. How will you make sure that you reduce your break even period.

**We can reduce the break even period by increasing the revenues or decreasing the cost.**
**To increase revenue – 1. Start online ordering and delivery services to attract more customers, 2. Increase product portfolio like snacks, chips, cold beverage 3. Open café on Sunday only during the peak hour, 4. Offer credit facilities given college students are usually broke, 5. Improve customer experience by including music, quirky quotes, games like Jhenga, Rubix cubes. To decrease cost – 1. Renegotiate worker's salaries, 2. Negotiate with suppliers to give discounts on materials required for coffee and other products.**

Okay. We can wrap up the case now. Thank you.

# Coffee Shop





**Your friend is selling his coffee shop in Delhi, for Rs. 10 lakh as he is not able to meet his ends meet due to COVID situation. Will you buy it?**

## Case Facts & Notes

- **Coffee shop–** Small with Limited seating capacity, No competition nearby.
- **Customer**– College Student
- **Product –** Hot coffee, Pastries and Water Bottle
- **Source of Capital –** Loan at 10% interest rate.
- **Value of Fixed Assets –** 1,00,000 at 10% depreciation
- Business will resume back to normal Post –Covid

## Approach

Profits
- Financial Capability (B.E.P)
  - Revenue per week
    - # Customers
    - Revenue per customer
  - Cost per week
    - Fixed
      - Rent + Utilities + Maintenance
      - Salary
    - Variable
- Operational feasibility
- Potential Risks

| Hour | Mon-Fri | Sat |
|---|---|---|
| Peak | =4*20 = 80 | = 12*20 = 240 |
| Non-Peak | =8*10 = 80 | 0 |

Revenue per customer = 60% * 40 +30% * 30 + 10% * 20 = 35

Rent + Utilities + Maintenance: 5000/month = 1250/week

Salary: 11,520/week

Variable: 50% of Selling Price
Total Variable Cost =Total Revenue/2 = 18,200

Potential Risks:
- Customer behavior Post-Covid times
- Threat of new entrant
- Limited seating capacity

**Total Revenue =** 35* (240+5*(80+80)) **= 36,400**

**Total Cost =** 1,250+11,520+18,200 **= 30,970**

## Recommendations

- I **will not buy** the coffee shop due to long B.E.P and the potential risks that business can face
- In case we have to buy the shop we can do the following to reduce the break even period
- **Increase Revenue** - Start online ordering and delivery services to attract more customers, Increase product portfolio, Open café on Sunday, Offer credit facilities, Improve customer experience
- **Decrease Cost** - Renegotiate worker's salaries, Negotiate with suppliers

| Particulars | Amount |
|---|---|
| **Gross Profit** | 5,430 |
| **Less Depreciation** | - 192 |
| **Less Interest** | -2,310 |
| **PBT (per week)** | 2,928 |

**Break Even Period =** 10,00,000/2928 = 341 weeks **~ 6.5 years**

# Fantasy Sports App



**Our client is a VC firm and wants to conduct due diligence of a fantasy sports company. They want your help in doing the same.**

**So our client is a Venture Capital firm that wants our help with conducting the due diligence of a fantasy sports game? Does the client also want us to determine how much they should invest?**

No, the client doesn't require us to determine how much to invest.

**Okay before I dive into the analysis, I'd like to enquire about the fantasy sports company – their services, their business model, previous funding, operating locations and about the VC firm – their pre existing portfolio, their intention with this investment.**

Sure, go ahead!

**For the fantasy sports company, I am assuming it is an app which allows users to make their own imaginary teams. Which sports does the app include and is it available to global users?**

Your understanding of fantasy sports is right. Currently the app only has cricket and while users across the globe can access it, the main target is the Indian market.

**Okay, how long has the app been in the market and what is its current business model?**

The company has been around for the past 4-5 years, and is now in its growth phase. It has a freemium model, so it earns via the paid users and via advertisements.

**May I know what is the number of free & paid users and also if any other firms have previously invested in the company?**

Around 90% of the 5cr users are on the free model. The company has previously received early stage funding.

**Now I'd like to know about out client. What type of previous investments have they made and is this investment likely to cannibalise market share? I'd also like to know whether our client intends on selling their stake in the company at a later stage or just be an equity partner?**

Our client has made investments in some entertainment companies, including a score checking app but don't expect this fantasy sports app to eat into the market share.
They plan on selling their stake at a later stage but till then they want to maximise the profit and the company is also willing to let our client to make changes for this.

**I'm planning on first analysing the industry and the growth potential for the company in the same, followed by analysing how this investment aligns with other investments of our client, then look at ways to maximise profit followed by looking at the exit options. Is that fair?**

You can leave out the exit options.

**First I'd like to calculate the current size of the industry, considering only the Indian market. From my understanding this app would mostly have users in the 18-35 age demographic. I'll consider about 80% of this population has access to internet/smartphone.**
**Taking into consideration the gender split and percentage penetration in each gender, the market size comes out to be around 12cr users. Given that the app's current user base is 5cr and the same users may download multiple apps, there is quite some room for growth. Moreover the penetration rate of each segment can also be increased, indicating a greater potential**

Anything else that you'd like to analyse for the industry?

**I'd also like to understand the competitor scenario, and if there are any laws or regulations that may inhibit growth of this industry?**

There are a few competitors, but this company is a leading player right now. There aren't any regulations against fantasy apps but many are questioning its legality – whether it is gambling or not.

**Okay, so that seems like a major risk factor. Other than that, the industry seems lucrative, with the size likely to increase as market penetration increases. Since cost of entry is low, it is likely to see some more competitors entering in the market.**
**Should I now go ahead with analysing our current portfolio and how this company aligns with it?**

Why do you feel the need to analyse this?

**We've ruled out cannibalisation, but I'd still like to see if there are any benefits or losses the rest of our portfolio is likely to face from the fantasy sports company.**

You can go ahead then.

**The fantasy sports company is not likely to have much effect on most entertainment companies, but if there are other online games in the portfolio they might be affected. We can also work towards**

# Fantasy Sports App



**Our client is a VC firm and wants to conduct due diligence of a fantasy sports company. They want your help in doing the same.**

**leveraging the fantasy sports app to increase our score checking app usage and vice versa.**

Okay what else?

**I'd like to next move onto seeing how we can maximise the profits for the company. We can do this by working on either of the two lever – revenue and costs. I'd like to proceed with revenues first as it is a growing market and potential for revenue increase would be high. Is that okay?**

Sure, go ahead!

**Okay, looking into revenues we can either increase number of users or ARPU (average revenue per user). I'd like to look into number of users first. I can think of 4 broad ways to do so – app related changes, promotions, acquisitions of other players and diversification into new geographies, other games.**

Currently the fantasy sports platform is not in the capacity for acquisitions. Diversification would also strain the financials, moreover the company wants to focus on its core operations as of now.

**Now it makes more sense to look into the first two alternatives only. For app related changes we could either make UI/UX changes or provide more/better features than the competitors like easier transfer of winnings, in-app purchases.**
**They could also increase promotion activities – get cricketers to promote the app, become partners for cricket tournaments, have experience centres (kiosks) in stadiums, malls.**
**We could also create a linkage between this app and the score checking app that the client has invested in. The users of score checking app can be given advertisements for the fantasy sports app and vice versa, increasing user base for both.**

Okay, can you now analyse how we can shift our users from the free model to the paid model?

**Yes, the other way to increase revenue would be to try to shift users to paid model. We should also try to restrict paid customers from shifting back to the free model.**
**To do the former we could try to either increase benefits in the paid model or restrict usage in the free model. Benefits of paid content could include allowing changing of teams, no restriction to number of games played, access to premium content. We could also try to put restriction on the winnings, games, player changes in the free model to encourage shift to the paid model. At the same time, something extra would have to be provided in the paid model to minimise**
**shifting back to the free model. For this, a loyalty programme could be introduced or the aforementioned benefits provided.**

A major reason for switching back to free model is the fact that users lose money even though they are paying for the services. How can we counter this?

**We could devise a system in which even if a user is not winning they are given rewards, say on the basis of number of games they play, the score they make. This would ensure their likeliness of getting benefits.**

Okay, anything else we can do for profit maximization?

**We can also look into the costs, which according to me would be divided into 3 components – app maintenance and development costs, supports costs (e.g. customer support) and promotional costs.**
**As the company tries to increase its revenues it is likely to see an increase in these costs. We can however look to optimize the costs. When user base grows large enough, customer support staff can be replaced by chatbot services. Another thing, the company could look into having its promotion targeted to a specific audience only – reducing channels, hence reducing costs.**

Okay that seems fair. Can you summarize your entire analysis and give your top 3 recommendations to increase profits.

**We were asked by our client to do the due diligence of a fantasy sports company. In doing so we realized that the industry has a huge growth potential, has certain legal risks but due to ease of entry is likely to see an increase in competition. This investment will be complementary to our client's past investments and hence on the basis of these parameters we conclude that it might be good for the client to invest in the fantasy sports company.**
**We also looked into ways to maximize profitability for the company, and to me the top 3 ways seem to be – increase number of customers via promotional activities (getting cricketers onboard for advertisements and promoting cricketing events) and by increasing the conversion from free to premium users by providing added benefits in the paid version.**

# Fantasy Sports App

Due Diligence | Challenging | Kearney



**Our client is a VC firm and wants to conduct due diligence of a fantasy sports company. They want your help in doing the same.**

## Case Facts & Notes

- VC firm past investments in entertainment companies including score checking app
- Fantasy sports company – app where users make imaginary team and win on basis of their real life performance
- Current target market: India
- Sport: Cricket
- Launched 5-6 years ago
- Freemium model. 90% of 5 cr users on free model

## Recommendations

- Good potential to grow, however competition likely to increase, some legal issues
- To increase profits primary focus should be on rev increase via increasing user base (growing mkt)
- Increase promotion & improve app; simultaneously focus on increasing paid base

## Approach

### Due Diligence

**Industry Growth Potential**
- Current ind. size: 12 cr
- Competitors: few; likely to increase with ↑ing mkt penetration & ease of entry.
  Co. one of the largest players
- Legality in question (gambling?)

**Alignment with past investments**
- Past investments in ent co.'s , including score checking app
- Investments would be complimentary

**Profit maximization**
- Increase rev or dec costs
- Growing industry, better to inc rev
- Inc no. of users or %age of paid users

**Exit options**
- Barriers to exit
- Potential purchasers

### Industry Size (Fantasy Sports Company)

Pop. of India = 1.35B

- <18 years
- 18-35 years
  - % age of population = 40%
  - Population = 540M
  - Male: % age of pop.= 50%; Penetration = 40% → 108M
  - Female: % age of pop.= 50%; Penetration = 5% → 13.5M
  - ~ 120M
- >35 years

### Profits

**Revenues**

No. of customers
- **App related**
  - UI/UX changes
  - Features: easy transfers, customizations.
- **Promotional**
  - Have cricketers promote
  - Tie up with cricket tourn.
  - Experience kiosks
- **Acquisitions**
  - Acquire smaller comp./ company catering to diff. market
- **Diversification**
  - Entering other geog.
  - Including other sports

Revenue per user
- **Free to premium**
  - Restrict usage in free model (no. of games, winnings, customizations.
  - Special features/content only for premium players
- **Restrict to premium**
  - Main reason to switch back – not winning
  - Premium users to get more rewards (for a certain score, no. of games played etc.

**Costs**
- **App dev. & maint.**
  - Need to incur these costs to grow
  - Likely to stabilize after market becomes mature
- **Support services**
  - Customer support, admin costs
  - Replace w/chatbots
- **Promotional**
  - Targeted promotions over mass promotions
  - Reduce no. of channels

# Part J – Appendix

Main Index

# Glossary



| S.No. | Term | Definition |
|---|---|---|
| 1. | Backward integration | A form of vertical integration in which a company expands its role to fulfill tasks formerly completed by businesses up the supply chain (acquires or merges with suppliers/manufacturers). |
| 2. | Balanced Scorecard | Performance measurement framework; customer satisfaction, internal processes, employee engagement and financial outcomes |
| 3. | Benchmarking | Comparing performances between companies against best standards/practices. Ex: A company comparing its products with the market leader |
| 4. | Blue chip companies | Large, well-established, financially stable, and typically leaders in their respective industries |
| 5. | Blue Ocean Strategy | Creating new market through innovative products/services. Ex: Netflix |
| 6. | Boiling the Ocean | Undertaking an impossible task or an overly ambitious task |
| 7. | Bottomline | Company's net profits or net income after deducting expenses. It represents the final financial result of a company. |
| 8. | Brown Goods | Smaller electronic devices such as gaming consoles, smartphones. |
| 9. | Brownfield Strategy | Repurposing an existing business or project reusing existing resources. Ex: Renovating an existing property for new venture |
| 10. | Business Process Reengineering | Redesigning and re-aligning business processes within an organization to achieve improvements in efficiency, quality. |
| 11. | Change Management | Process of planning, implementing and managing organizational changes to ensure smooth changes |
| 12. | Customer Lifetime Value (CLV) | The predicted net profit from a customer over their relationship with a company. |
| 13. | Divestiture | Sale or disposal of business assets/units. |
| 14. | Due Diligence | Thorough investigation and analysis conducted before an investment/merger/acquisition/new deal. |
| 15. | Forward integration | A form of vertical integration wherein a company obtains more control over activities that occur in the later stages of the value chain, i.e. "moving downstream". |

# Glossary



| S.No. | Term | Definition |
|---|---|---|
| 16. | Greenfield Strategy | Creating a new business/project from scratch often in a new location. Ex: Entering a new country and building a brand new manufacturing facility |
| 18. | Horizontal integration | Expanding a company's operations by acquiring or merging with competitors or companies in the same industry. |
| | KPI | Key Performance Indicator; measure to evaluate effectiveness of a business in achieving objectives |
| 19. | KRAs | Key Result Areas are the most important areas for achieving strategic objectives. |
| 20. | Leveraged Buyout (LBO) | A type of acquisition where a significant portion of the purchase price is financed through debt. |
| 21. | Low-Hanging fruits | Easily attainable opportunities or solutions that requires minimal effort. |
| 22. | OEM | Original Equipment Manufacturer: Any company that manufactures products or components that are to be incorporated into end products of other companies. |
| 23. | Outsourcing | Contracting external suppliers to complete certain products/services |
| 24. | Red Ocean Strategy | Competing in existing markets where competitive rivalry is high. Ex: Cola wars |
| 25. | RFQ | Request for Quotation; a document used to solicit bids from suppliers |
| 26 | Synergy | The additional value or benefits created by the combination of two companies in an M&A. |
| 27. | TargetCo | A target company is a company that is the subject of an attempted acquisition by a potential buyer. |
| 28. | Topline | Company's revenue or gross revenue i.e. total sales from a company's primary business activities before deducting any costs or expenses |
| 29. | Vertical integration | Expanding a company's operations into different stages of the supply chain, either backward (upstream) or forward (downstream). |
| 30. | White Goods | Large appliances such as washing machines, ovens. |

# Supplementary Frameworks

*These supplementary frameworks bring depth and granularity to the case analysis and can be used to analyse sub-issues within the larger case issue tree*

| | | | |
|---|---|---|---|
| Growth | Intensive | | Market Penetration, Market Development, Product Development |
| | Integrative | | Forward integration with Customers, Backward integration with Suppliers, Horizontal Mergers, partnerships |
| | Extensive | | Diversification through Spinoffs, Acquisitions, New Ventures |
| Marketing | Awareness | | Brand awareness, Product knowledge, Persuasiveness |
| | Acceptability | | Customer expectations v/s Product performance |
| | Affordability | | Economic ability to pay, Psychological Willingness to Pay |
| | Accessibility | | Availability, Convenience |
| Merger & Acquisitions | Scope | Objective | Growth, Diversification, Competitive Response, Synergies |
| | | Industry | Size, Growth, Life Cycle, Competition, External Environment |
| | | Type | Horizontal, Forward Integration, Backward Integration, Diversification |
| | Due Diligence | Standalone | Suppliers, Products, Customers, Value Chain, Management |
| | | Merged | Cost and Revenue Synergies, Valuation |
| | Post Deal | Risks | Regulation, Competitive Response, Exit Options, Opportunity Cost |
| | | Implementation | Deal Structure, Keep v/s Sell, Financing |

Main Index

# Supplementary Frameworks

***These supplementary frameworks bring depth and granularity to the case analysis and can be used to analyse sub-issues within the larger case issue tree***

| | | | |
|---|---|---|---|
| **Barriers to Entry** | **Demand Side** | | High Switching Costs, Loyalty Programs, Network Effects |
| | **Supply Side** | | Learning Curve, Research & Development, Economies of Scale, Supplier Relations, Access of Inputs |
| | **Government** | | Ease of Opening Business, Licensing, Patents, Lobbying |
| | **Competitive** | | Build Excess Capacity, Large Cash Reserves, Reputation, No gaps in the market |
| **Process Analysis** | **People** | **Man** | Strength, Efficiency, Productivity, Skills, Operating Hours |
| | **Process** | **Method** | Processes, Operating Procedures |
| | | **Measurement** | Accuracy, Frequency, Nature |
| | **Technology** | **Machine** | Efficiency, Productivity, Capacity, Downtime |
| | | **Material** | Leakage, Quality, Wastage, Quantity |
| **Operations Optimization** | **Demand Planning** | | Made to Order v/s Made to Stock, Demand forecasting |
| | **Inventory Management** | | Just in Time v/s Safety Stock, Raw material, WIP, Finished goods, Merchandise |
| | **Production Planning** | | Capacity Utilization, efficiency, Lead Times, Down time |
| | **Production Systems** | | Job Shop, Batch production, Mass Production, Degree of Specialization |
| | **Layout Planning** | | Work study, Process Flow Design, |
| | **Automation** | | Precision, High volume efficiency v/s Cost, Customizability |
| | **Outsourcing** | | Make or Buy, Third Party providers |

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