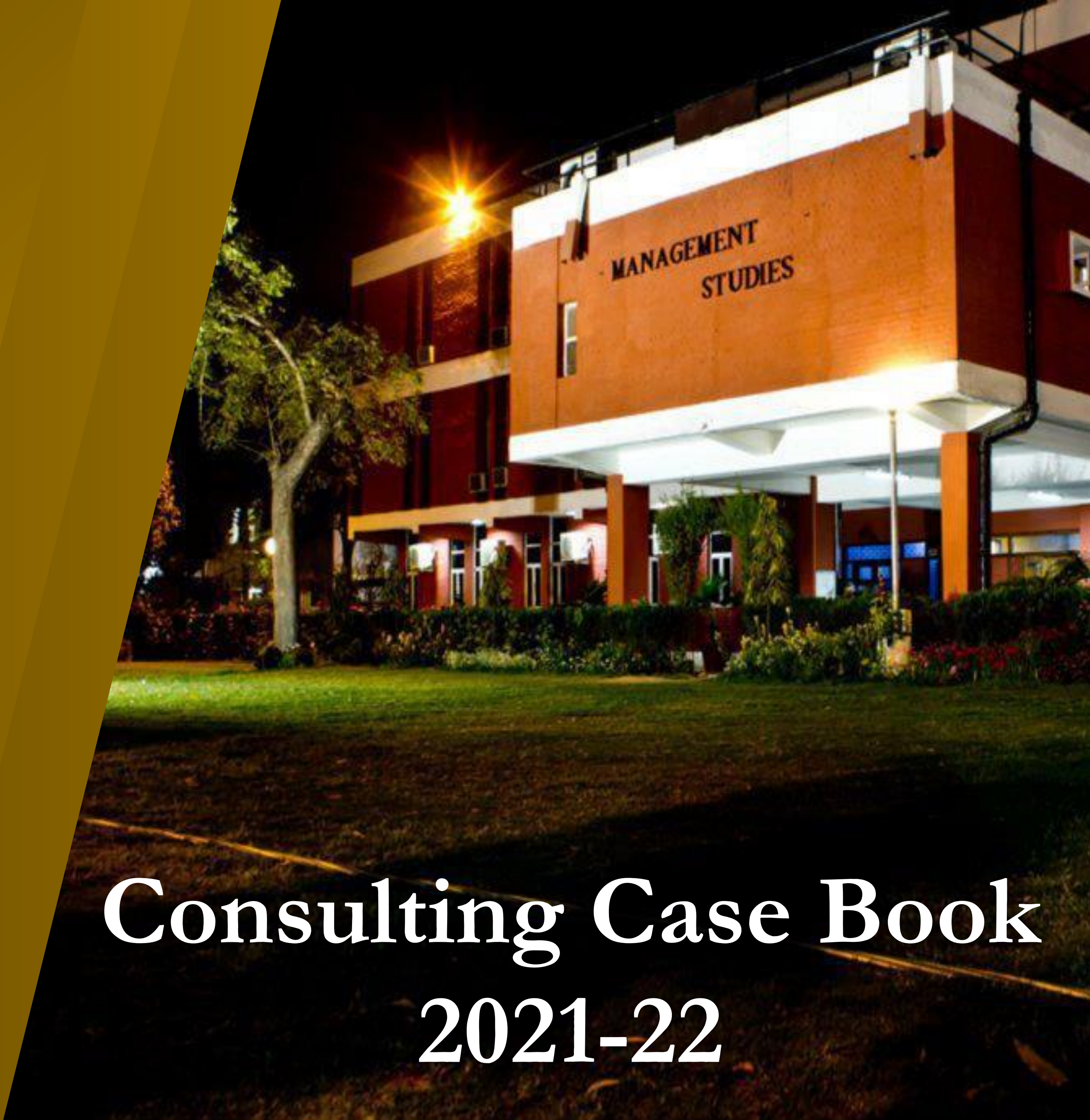
FMS

The Consulting Club

Faculty of Management Studies
University of Delhi



Consulting Case Book
2021-22

Foreword

The FMS Casebook issue of December 2021 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 2021-22
The Consulting Club, FMS Delhi

Issue 3
December 2021

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.

The President’s Desk

The team is very delighted to share The FMS Consulting Casebook for the academic year 2021-22 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 revised to increase the industry overviews and case studies from recent interview processes while a new appendix section 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!

Karan Singhal

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The Consulting Club

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Part A - About Consulting

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

McKinsey & Company	BCG The Boston Consulting Group	BAIN & COMPANY
Revenue = $ 10.5 billion	Revenue = $ 8.6 billion	Revenue = $ 4.5 billion
KEARNEY	accenture strategy	EY Building a better working world
Revenue = $ 1.4 billion	Revenue = $ 50.5 billion	Revenue = $ 40 billion
GEP	Alvarez & Marsal	Oliver Wyman
Revenue = $ 1.2 billion	Revenue = $ 1.19 billion	Revenue = $ 2.1 billion

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**

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

3C's

Government

Industry

Company

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

Customer

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

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
- Product segments

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 etc.

Porter's Five Forces

Bargaining Power of Buyers increases with:
- Concentration of buyers – lesser 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 Buyers

Industry Rivalry

Bargaining Power of Suppliers

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

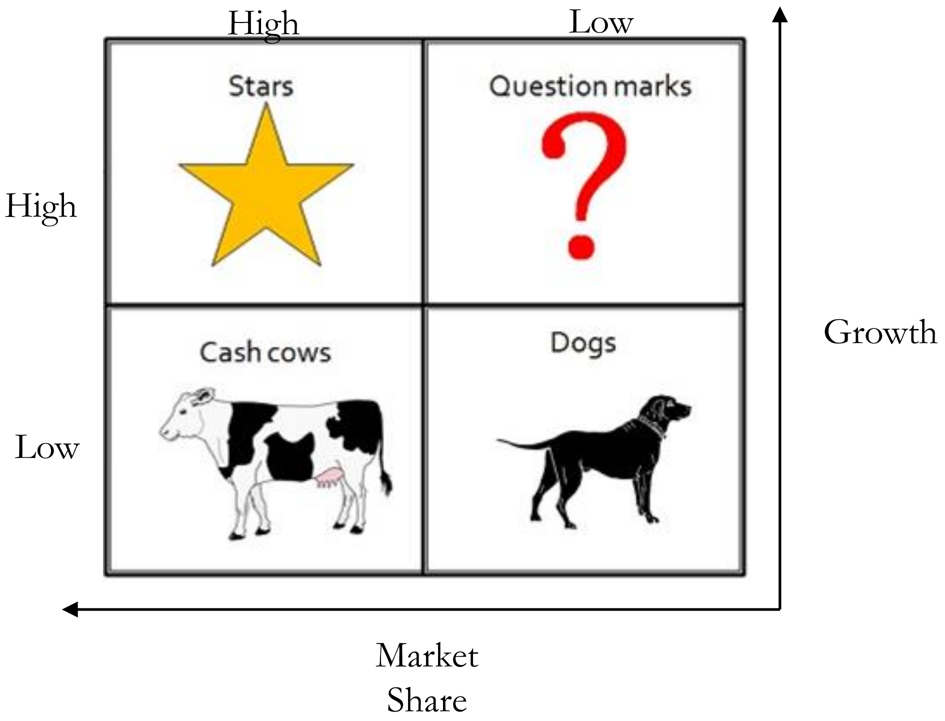
Threat of Substitutes increases with:
- Relative performance of Substitutes
- Lower Switching Costs
- Higher Buyer Propensity to Substitute

Threat of Substitutes

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

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

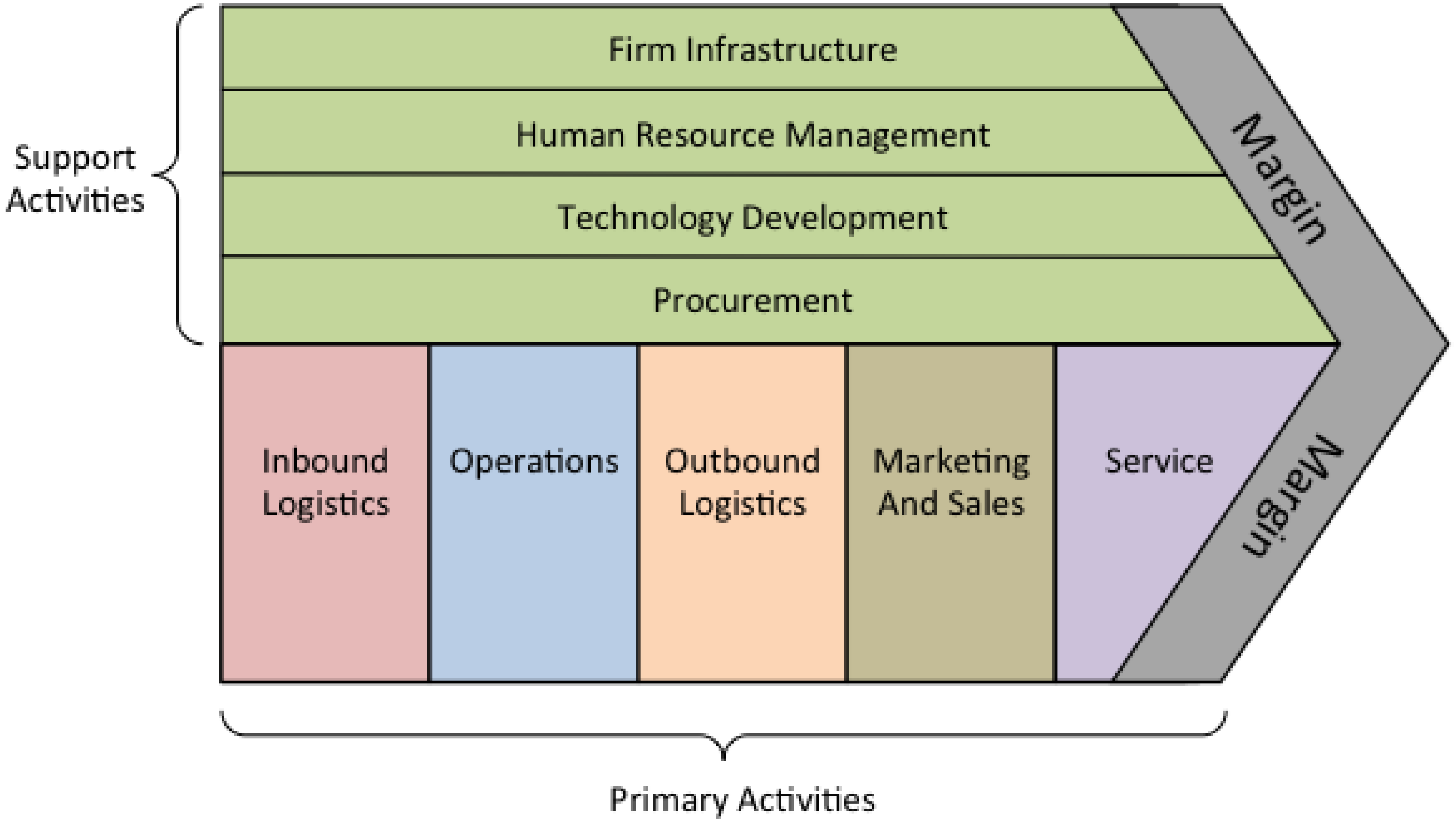
BCG Matrix



Dogs	They are weak in markets and difficult to make profits
Question Marks	Confused state as they are not clear about decisions on opportunities
Stars	Monopolies and first-to-market products
Cash cows	Doing well with no growth with limited opportunities

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

Value Chain/Process Mapping



Useful for portfolio analysis, investment decisions, growth strategies.

Value Chain/Process Mapping

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				

Useful for cost analysis.

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 etc.

Ansoff Matrix Example: Coca Cola

Market

Product	Existing	New	
Existing	**Market Penetration** 	**Market Development** 	
New	**Product Development** 	**Related Diversification** 	**Unrelated Diversification** 

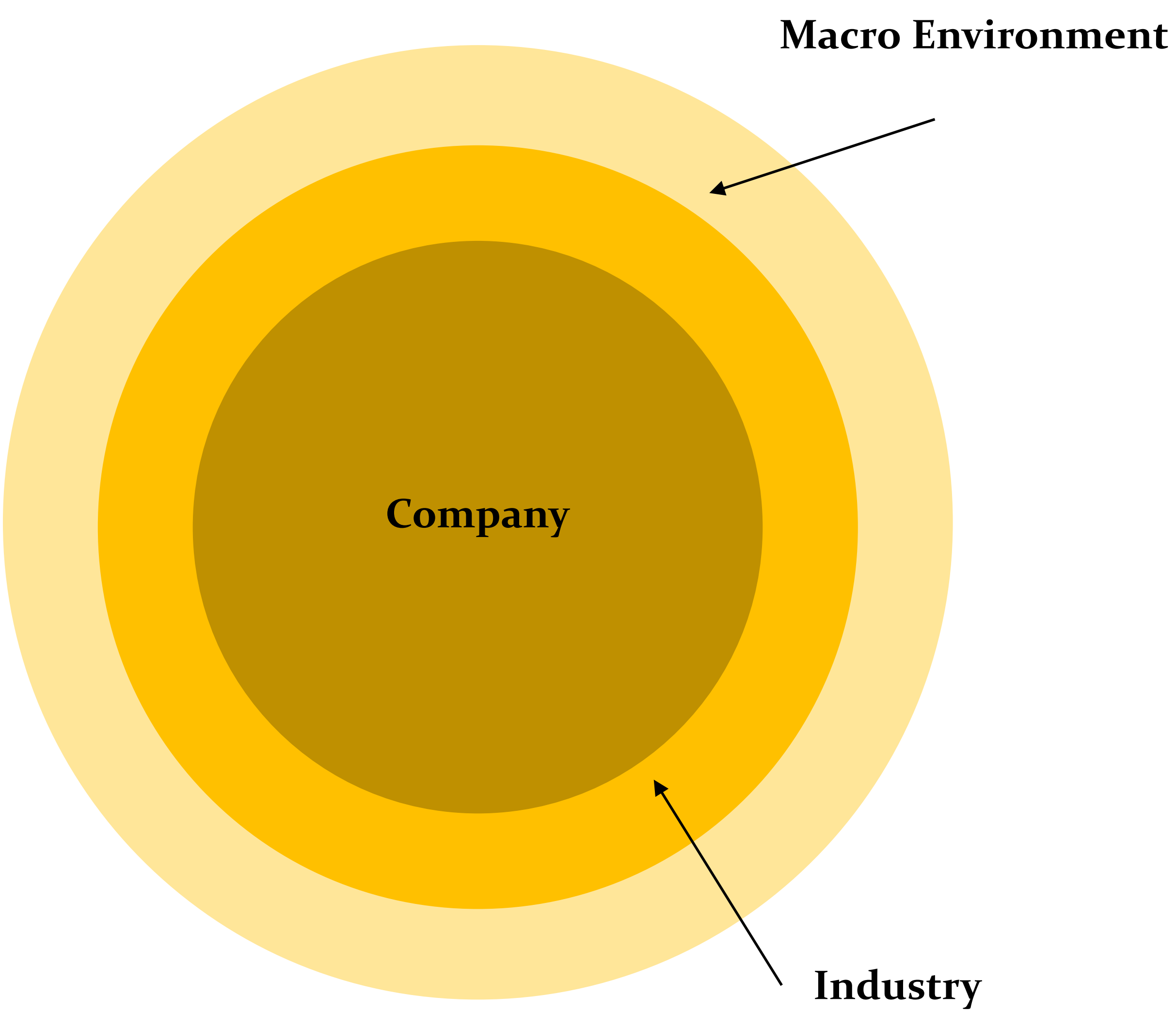
The Company Environment

A good strategy aligns a business' internal attributes, things like its mission, vision, capabilities in organization with its external environment.

Every company operates within a matrix of natural, social, and institutional structures. It acts on these external structures and entities and they in turn have an effect on the company.

A useful way to think about the relationship between a company and its environment is that it is nested in multiple layers.

1. In the outermost layer, furthest from the company itself, is the macro environment, consisting of societal institutions and trends in the broadest sense which businesses need to take into account.
2. The middle layer is the entire industry to which a company belongs to.
3. The inner most layer is the company.

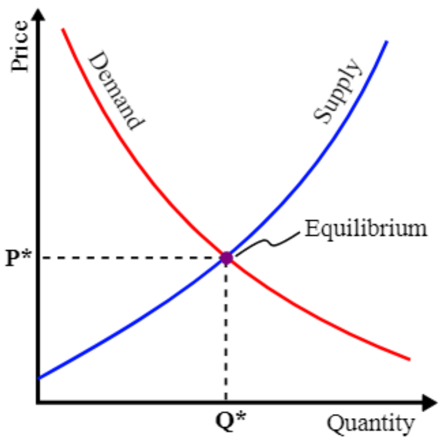


PESTEL

Best suitable for market entry cases for macro analysis etc.

Basics of Economics

Supply-Demand



Price Elasticities

Sensitivity of demand to price changes

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

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 Finance

Essential	Useful	Optional
Profit & Loss Statement	Ratios	Discounted Cash Flow
Balance Sheet Terms	Time Value of Money	Trading Multiples
	Capital Budgeting	Transaction Multiples
	Annuity	
	Perpetuity	

$$\frac{Cash\ Flow}{Discount\ Rate}$$

Part C – Basic of Guesstimates and Case Solving

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.

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

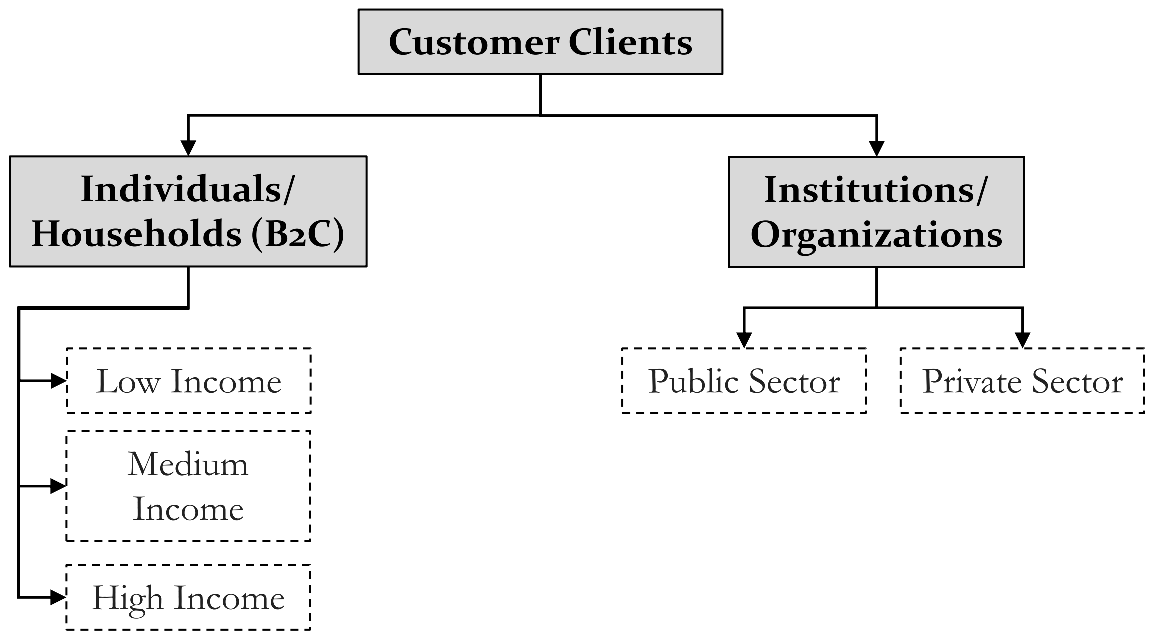
Can be further segmented based on:
- Geography (Regional/Country Wise)
- Customer Segments (Income/B2B/B2C)
- Revenue Streams (Ads/Distribution)
- Distribution Channel (Online/Retail)

Costs

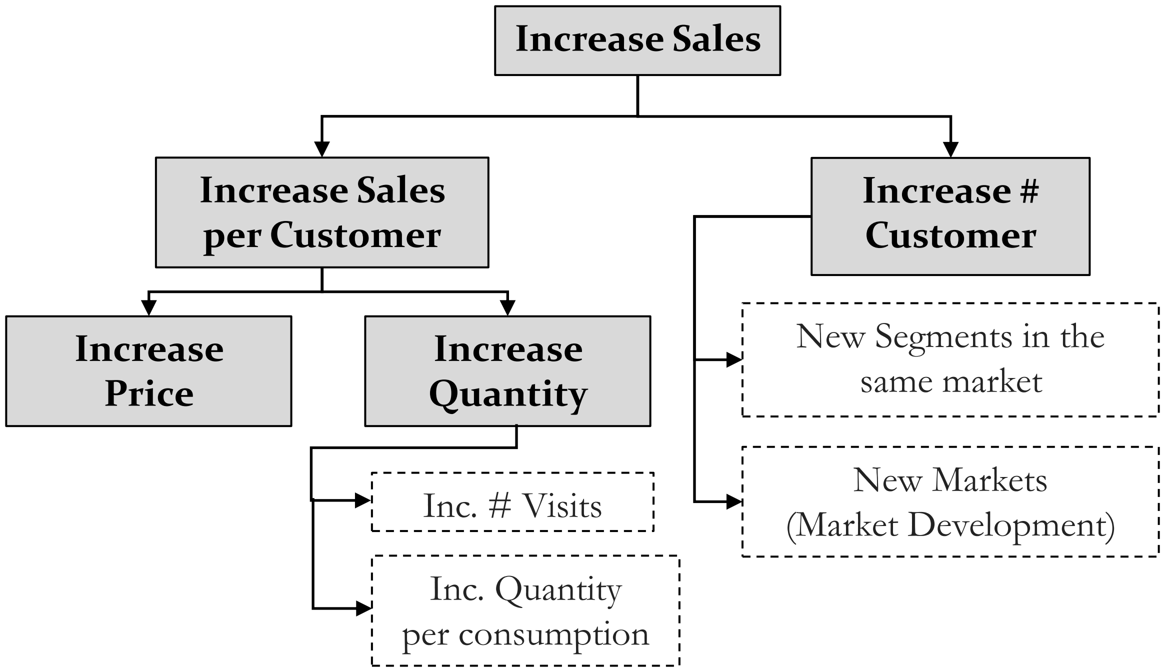
Can be further segmented based on:
- Fixed Costs/Variable Costs
- Costs across the Value Chain

MECE Segmentation

Example 3: Customer Segmentation



Example 4: Increasing Sales



The MECE principle suggests that to understand and fix 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.

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

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 etc.

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 A1**, **Segment A2**, **Segment A3**

Segment B — **Segment A2**, **Segment A3**

Guesstimate = A1 + A2 + B1 + B2 +B3

- Segments:
- Demographics (age, sex, income)
- Psychographics(attitudes, behaviors, values etc.)
- Geography (city/country, urban vs. rural etc.)
- 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.

Case Interview Process

Flow of a Consulting Interview

General Discussion	Behavioural Questions	Guesstimate	Cases	Wrap up
1-2 min	5-15 min	10-15 min	20-40 min	3-5 min

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

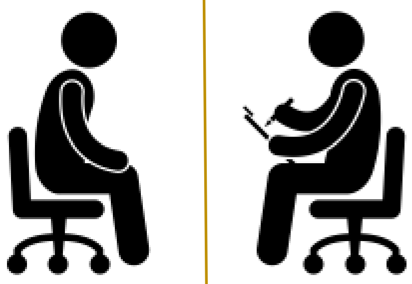
It's not about being right. It's about being right in an *client friendly* way. How you are *right* matters a lot.

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 an 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

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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

Market Entry Framework

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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?

New Market
- Scale and Growth
- Major Players
- Market Share
- Advantages/Disadvantages

Product
- Product differentiation
- Positioning Plans
- Price/Features
- Other attributes

Customers
- Target segment
- Customer Habits
- Segmentation

Capabilities
- Manufacturing
- Financials
- Sales and Distribution

Regulations
- Government Norms
- Resources Availability

Yes/No → **Why No? Suggestions**

If Yes How?

Entry Options
- Start on own
- Acquire
- Joint Venture

Operational Decisions
- Raw Materials, Workforce
- Manufacturing
- Distribution Channels

Marketing
- Promotion Strategies

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

Conclusion

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? Current Performance? Competitive Benchmarking? Growth Targets? Capabilities? Bottlenecks?

Growth Strategies

Existing Market
- Customer Satisfaction
- Marketing
- New distribution Channels
- Pricing

Geographic Expansion
- Domestic expansion
- Global expansion
- Rural expansion

Portfolio Expansion
- New Product line
- Additional services

In-Organic Growth
- Acquire competitors
- Acquire in new geographies

Business Integration
- Outsourcing
- Backward/Forward Integration

Summary

Proposed growth path, Potential growth prospects, Threats & Challenges etc.

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

Price based Costing
- How much is customer willing to pay

Go To Market Strategy/New Product Launch

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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

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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

Company business? Current Performance? Target Company ? Past M&A history in similar space ? Industry Trend ?

Deal Rationale

What is the firm's objective?
- Target?
- New Markets/Channels
- Cost reduction
- Market Share/Competition
- Investment

Business Benefits

How the Target fits for Objective?
- Business Synergies?
- Market Reach (New/Existing)
- Competition/Survival
- Cost Savings/Tax Benefits
- Portfolio Expansion

Deal Price

Fair Price?
- Valuation
- Is it fair? Can we afford?
- Transaction Type
- Post M&A costs

Potential Risks

Challenges/ Risk in M&A
- Synergy realization
- Integration
- Cultural Aspects
- Macro-economic risks

Due Diligence

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

Implementation

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

Exit Strategies

How, When, why to exit?
- How long to Hold on?
- Strategic Options?
- Very important in Private Equity

Case Framework Cheat Sheet-When Nothing Works

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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
Volatility? Analytics & Forecasting?	Price? Wastage? Suppliers? Contracts? Discounts? Substitutes?	Transportation Costs? Modes? Network Optimization? Efficiency?	Direct Costs? Machines? Tech? Overheads? Benchmarking? Outsourcing?	Capacity Constraints? SKUs? Technology? Inventory?	Transportation Costs? Modes? Network Optimization? Efficiency?	Channels? Share & Penetration? Marketing Strategy? B2B? B2C?	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
SEO? Ads? Social Media? Emails?	Navigation? Products/page Description? Options?	Product Page? Reviews? Use? Graphics? Bundling?	Cart options? Wishlist? Payment Modes?	Sellers? Shipping Dates? Experience?	Condition of Package? Breakage?	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) / X-Ray Exam (5mins/unit) → Dentist (8mins/unit)

Part E – Sector Overview

Industry Analysis: Table of Contents

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University of Delhi

Understanding Indian Automotive Industry

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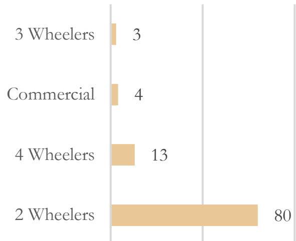
Industry

5th Largest Car Manufacturer
7th in Commercial Vehicles
Industry Size – 7.1% of GDP
Jobs – 35 million jobs
CAGR – 2.36% (2016-20)
Target – US$ 251.4-282.4bn) by 2026

Product Types

2 Wheeler – 81.2%(units)
Passenger Vehicle – 14.6%
Commercial – 3.1%
Three Wheeler – 1.2%
Automotive Parts

Market Share & Major Players



Tata Motors
Maruti Suzuki
M & M
Hero MotoCorp
Bajaj Auto
Ashok Leyland
TVS, Eicher

KPI

Average Prodn. Downtime.
Inventory Turnover,
Utilization Rate

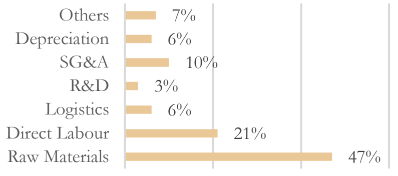
Largest Importers

United States
Turkey
Bangladesh
Brazil
Germany

Growth Factors

- Favorable demographic trends
- Continued government support to the industry
- Develop India as manufacturing hub
- The potential of EV

Cost Factors



Value Chain

Inbound log	Raw materials, warehousing handling
Operations	Machining, Assembling, Testing product
Outbound log	Warehousing and distribution
Marketing & Sales	Advertising, pricing and promotion
Service	Installation and repair parts

Factors impacting value chain

Suppliers	Change in vehicle tech, discontinuation
Trade	After sales, sales & service discontinue
Legislation	New standards, autonomous driving
Fin. service	Funding required for transportation
Manufacturer	Collaboration, Change in drive systems
Insurance	New tariff structures, Autonomous cars

SWOT Analysis

Strength

- Large domestic market
- Increase in the exports level
- Sustainable labor cost
- Competitive auto component vendor base
- Govt. incentives in manufacturing
- Upcoming bases for R&D
- Growth IT Capability in design, development and simulation
- Market proximity

Weakness

- Low labor productivity
- High interest rate and overheads
- Various forms of taxes
- Inadequate investment in R&D
- Supply Chain infrastructure bottlenecks
- Lack of Economies of Scale

Opportunities

- Commercial Vehicle Segment
- Increase in income level
- Cut in excise duties
- Rising demands in rural areas
- Export projected to grow at 30% p.a.
- NATRIP – US$ 388.5mn
- FAME for EV

Threats

- Rising Input costs of raw materials
- Rising interest rates
- Cut-throat competition
- Increase in fuel prices
- Import of components from ASEAN and China

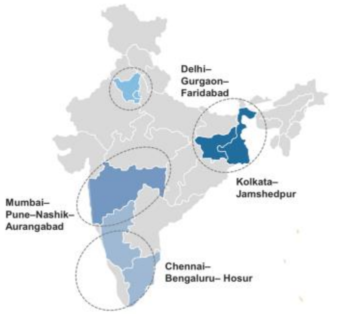
Barriers to Entry

- Economies of Scale
- Product Differentiation
- Capital Expenditure
- Access to Distribution
- Govt. Guidelines
- Dynamic Environment
- Jockeying for Position
- Lack of Substitutes

Current Trends

- Deep diving sales – due to increasing fuel cost & liquidity tightening post ILFS crisis
- Recent Job losses
- Recent tax cut
- Add. tax reduction, on loans for EV
- Shift to BS-VI

Production Clusters



Future Trends

- Changing consumer mobility
- Electric Mobility
- Digital Marketing
- Ride pooling
- Autonomous Vehicles

Understanding Indian Aviation Industry

The Consulting Club

Industry Overview

Revenue : USD 72 Billion
India currently has 464 Airports and airstrips; 125 owned by AAI
Currently 3rd largest civil aviation market
Predicted to be the 3rd largest passenger volume market by 2024
Fastest growing domestic market @18%

Services

Insurance, Finance, Distribution, Telecomm, Maintenance repair & overhaul (MRO), Fuel

Suppliers

Aircraft, Engines, Electronics, Computer, Chemicals

Stakeholders

Firm Infrastructure: Finance., Accounting, Legal Compliance
HRM: Flight route, yield analyst, pilot, safety, baggage handling, in-flight and agent training
Tech Development: Reservation, in-flight and yield management system
IT Communications

Market share

Market share of major players (2021)

IndiGo: 57%
SpiceJet: 8.7%
Air India: 20.3%
Go Air: 6.8%
Air Asia: 5.2%
Vistara: 8.3%

Major Constraints

- Dynamic Labour Situation
- High taxes, fee, regulatory costs
- Inadequate future plans for air & ground infra
- Restriction on airline consolidation & foreign investment
- Volatility in ATF rates making profitability uncertain for airlines

Value Chain

Inbound log	Route Selection; Passenger Service; Yield Management system; Fuel; Scheduling; Crew Scheduling
Operations	Ticket Counter operations; gate operations; Aircraft operations; On Board Service; Ticket operations; Baggage handling
Outbound log	Baggage System; Flight Connections; Rental Car and Hotel reservation system
Marketing & Sales	Promotion; Advertising; Advantage Program; Travel Agent Program; Group Sales
Service	Lost Baggage service; Complaint follow up

The Indian Advantage

Robust Demand

- Expected demand boost from rising middle class with more disposable income
- No of airports to expand to 250 by 2030
- Freight traffic also to increase for trade

Opportunities in MRO

- Growth in services mainly for MRO
- Expenditure: 13-15% of revenue: Second highest after fuel
- By 2020 MRO industry likely to triple its revenue to USD 1.5 Bn

Increasing Investments

- USD 12.1 Bn invested in from 2012 to 2017: USD 9.3Bn in private sector
- Growing private sector participation through the Public - Private Partnership (PPP) route; Also promotion of FDI

Policy Support

- Encouragement of Pvt. Sector by Govt.
- Foreign investment (~49%) allowed under automatic route in scheduled, regional & domestic scheduled passenger airline.

Cost Drivers

- As 2/3rd of the costs of flying an airplane are fixed, so changes in fuel costs can swing a flight from profit to loss depending on how many people are on the flight as it costs around 10-12%. But labor accounts for approximately 35% of the total of airlines' operating expenses.
- Other expenses include maintenance, parts and labor, handling luggage, airport fees, taxes, marketing, promotions, travel agent commissions and passenger expenses etc.

New Revenue Streams

Airline passengers represent a huge potential market for food, insurance, package tours, and other products that are adjacent to the core product of a seat. Carriers in search of high-margin growth can cultivate this market by building awareness, generating traffic, closing transactions, and filling the "shopping basket".

Understanding Global Aerospace Industry

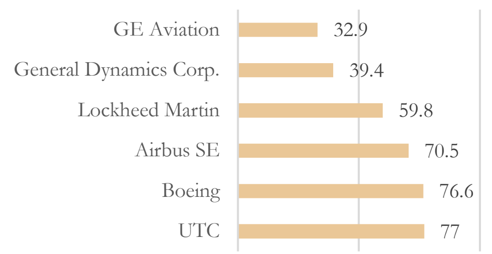
Industry

- Manufacturing of civil and military aerospace vehicles
- Services – 100+
- Total Revenue – $760 Bi. (2018)
- CAGR – 9-11% (2014-18)
- Players – 20+
- Big Players - 8

Product Types

- Civil Aircrafts - Small and large vehicles
- Helicopters
- Military Aircrafts and Fighter jets
- Parts and additional support systems

Major Players & Revenue in $Bn USD (2019)



KPI

- Total Revenue by Category(Military/Civil)
- Average Monthly Aircraft Production Rate
- Monthly Delivery Value
- Value of Backlogs
- Annual R&D Spending

Distribution

Full aviation vehicles manufactured and distributed by a handful of large key players.

Other smaller players across regions to manufacture and sell parts.

Biggest Airline Fleets(# of Planes) - 2019

- **American Airlines** – 1317
- **Delta Airlines** – 1069
- **China Southern Air.**– 809
- **Lufthansa** – 783
- **United Airlines** – 758
- **Southwest Airlines** – 719
- **China Eastern Airlines** – 697

Value Chain

Design	Conceptual Design, Preliminary Design, Detailed Design
Component Production	Airframe/Structural Components, Onboard Avionics Components, Propulsion System Components
Subassembly	Airframe/Structural Subsystems, Onboard Avionics Subsystems, Propulsion Subsystems
Final Assembly	Airframe Assembly, Onboard Avionics Integration, Propulsion System Integration
Post Production Services	Installation and repair parts

Major Aerospace Deals in 2019

- Raytheon Co. – United Technologies Corp. - **$52 Bi**
- Guangzhou Shipyard International Co. Ltd – China CSSC Holdings - **$8.6 Bi**
- Cobham PLC – Al Convoy Bidco Ltd. - **$4.9 Bi**
- Keppel Corp. Ltd. – Kyanite Investment Holdings Pte Ltd. - **$3 Bi**
- Mitsubishi Hitachi Power Systems – Mitsubishi Heavy Industries Ltd. - **$2.3 Bi**
- Daewood Shipbuilding and Marine Engg. – Hyundai Heavy Industries - **$2 Bi**
- Exotic Metals Forming Co. LLC – Parker Hannifin Corp. - **$1.7 Bi**
- Dynetics Inc. – Leidos Holdings Inc. - **$1.7 Bi**
- Ontic Engg. And Manufacturing Inc. – CVC Capital Partners VII LP - **$1.4 Bi**

Key Growth Drivers

- GDP Growth of emerging market economies
- Replacement Demand (Based on age of fleet)
- Global Aviation Fuel Prices
- Global Defence Budgets

- Air Traffic Growth Rate
- Changing Dynamics of Air Travel (Private vs Civil)
- Rising Geopolitical Concerns
- Growth of allied industries (Hospitality, Tech.)

Current Trends in the Industry

- Improvements in operating efficiency, advanced avionics, impressive interior cabin designs and noise reduction capabilities are driving increased consumer demand.
- Customers are now focused on replacing their older fleets. Over next 20 years, it is estimated that around 40% of aircraft deliveries will be for replacement purposes.
- Lower oil prices since 2014 have led to an increase in demand for civil aviation, which has caused for airlines to buy more aircrafts, and this trend is expected to continue with oil production being ramped up.
- The current imbalance in demand and supply will shift as analysts expect Boeing and Airbus cut back build rates to match with the demand in the sector.

Understanding Indian Banking Industry

The Consulting Club

Industry

12 public sector banks
22 private sector banks
46 foreign banks
56 regional rural banks
1,485 urban cooperative banks
96,000 rural cooperative banks

Trends

Total credit extended by commercial banks in FY20 ~ US$1.7 tn,
Deposits - US$ 1.93 tn (Grew at 13.93% CAGR)
Public Secor Bank Asset – US$ 1.52 tn.
Bank credit – US$ 1.47 tn

Type of Banks

Scheduled Banks – Accounted for in RBI Act and governed by the general rules like CRR requirements etc.
Non-Scheduled Banks – Banks that do not have to comply with any RBI regulations.
Small Finance - Banks aimed to provide financial inclusion to weaker sections of the society.
Payments Banks – A new model of bank that is allowed to accept a restricted deposit.
NBFC – A company registered under the Companies Act, 2013 engaged in the business of loans and advances, acquisition of shares, stock, bonds, hire-purchase ins. business.

Liabilities

Current Accounts
Savings Accounts
Fixed Deposits

Assets / Revenues

Loan
Overdraft Fees, ATM Fees, other charges.

Regulator

RBI for all banks except non-scheduled.
SEBI for Mutual Funds and Capital Markets

Value Chain

Marketing	Advertising, Branding, Sales Support
Sales	Acquisition, Offering, Multitech Mgmt.
Funding	Deposits, Securitization, Credits
Investments	Credits, Securities, Products, Invest.
Services	Account & Asset Mgmt, IPO, M&A
Transactions	Payment, Trading, Settlement, Cust.

Porter 5 Forces Analysis

Suppliers Power	Liquidity is controlled by the RBI.
Demand	Rising incomes, rural inclusion
Barriers to Entry	Licensing requirement, investment in tech & branch network, cap. & regulatory req.
Competition	High. Public, private, NBFC etc
Bargaining Power, buyers	For good creditworthy borrowers bargaining power is high.

Key Players

- PNB
- ICICI
- HDFC
- SBI
- Canara Bank
- Axis Bank
- IDBI
- Deutsche Bank
- Yes Bank
- RBS
- HSBC
- Citi Bank

KPIs

Loan growth rate indicates ease of venture into attractive new markets or a low-cost capital base

Deposit growth rate gives investors a sense of how much lending a bank can do.

Loan-Deposit Ratio helps assess a bank's liquidity, and hence, its aggressiveness.

Efficiency ratio measures how much the bank pays operating expenses

CASA ratio is the ratio of deposits in current and saving accounts to total deposits.

Capital Ratio is degree to which the bank is vulnerable to an unexpected increase in bad loans

Net Interest Income (NII) is the income earned due to difference in interest rate

Net Interest Margin is NII when calculated as a percentage of the average loan book.

If a bank's **Credit Quality** is in decline because of non-performing loans and assets and/or charge-offs increases, the bank's earnings are risked.

Innovations

- Hyper-personalisation
- Open banking
- Phygital Delivery
- Predictive Banking
- Robotic Automation
- Instant Payments
- Blockchain/IoT

COVID Impact

- Increased reliance on digital channels
- Financial loss
- Lower recoveries
- Reduced cash-inflows
- Board procedure
- Cyber fraud

Advantage India

- Demand will increase as working population and disposable income increase.
- Services like mobile and internet banking will lead to better operational efficiency.
- Rising fee income will improve the bank revenue mix.
- RBI policies lead to stability.

Government Initiatives

- Launch of e-RUPI digital payments solution.
- Linking digital payment systems of Central Banks of India and Singapore for low cost fund transfers.
- Government proposed fully automated GST refund module eliminating need for e-way bills.

Understanding Global Cloud Industry

The Consulting Club

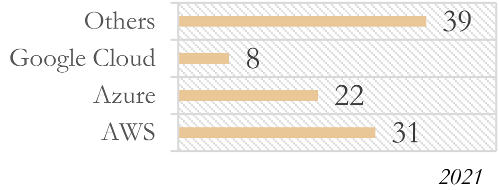
Industry

On Demand Cloud IaaS (Infrastructure as a Service)
Services – 100+
Industry Size – $440+ Billion (2021), CAGR – 16.3% (2021-26), 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

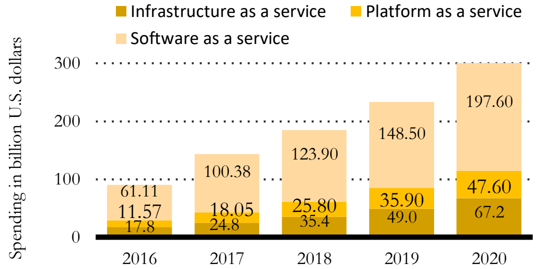
Distribution

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

Growth Factors

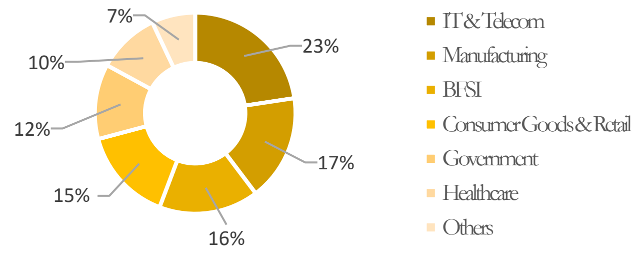
Marginality & Scalability
Network Effect
Demand for Remote Desktops
Start-up Ecosystem
Increased Data Consumption

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

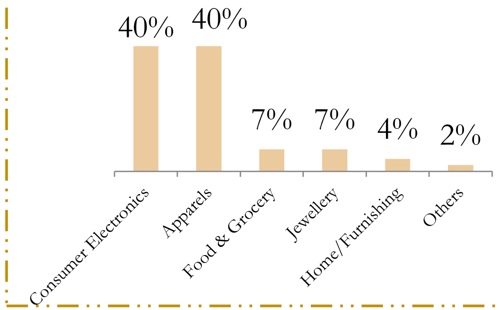
Understanding Indian E-Commerce Industry

The Consulting Club
Faculty of Management Studies
University of Delhi

Industry

- Indian E-Commerce market expected to reach US$99 billion by end of 2024
- Online shoppers expected to reach 220 million in 2025
- Sales growth expected - 27% CAGR (2019-2024)
- 100% FDI allowed in B2B E-Commerce
- Online penetration of retail is expected to reach 10.7% by 2024, versus 4.7% in 2019
- Grocery and fashion/apparel category to be key drivers of incremental growth

Product Types



Major Players

Key Success Factors

- Wide & diversified product portfolio
- Multi-channel marketing
- Conversion rate
- Efficient supply chain management
- Low acquisition costs

Cost Factors

- Technology costs
- Software costs
- Marketing costs
- Management costs
- Logistics costs

Value Chain

Inbound logistics	Receiving, Warehousing & Inventory control of input
Operations	Inventory handling, warehouse management, packaging of products
Outbound logistics	Order handling, Dispatch, Delivery, Invoicing
Marketing & Sales	Customer mgt, payment methods, promotion, sales analysis
Service	Handling, defect, products, returns, queries

Competitive Advantage

Low fixed costs, innovation based, mass reach

Key Performance Indicator

Sales KPI

- Total sales
- Average Order Size
- Conversion rate
- Shopping cart abandonment rate
- New Customer orders v/s returning orders
- Revenue per visit
- Churn Rate

Marketing KPI

- Time on site
- Bounce Rate
- Page views per visit
- Average session duration
- Traffic source
- Mobile site traffic
- Day part monitoring
- Average Click through rate

Customer Service KPI

- Customer satisfaction score
- Net promoter score
- Hit rate
- First response time

Project MGT KPI

- Budget
- Return on investment
- Cost performance index

Latest Developments

- E-commerce conglomerate Amazon opened its first Digital Kendra - physical resource centres for MSMEs to learn about the advantages of e-commerce, in Surat, Gujarat
- In April 2021, Flipkart announced to acquire Cleartrip, an online travel technology firm
- In June 2021, Grofers, the grocery delivery start-up, reportedly entered the unicorn club, after raising US$ 120 million from Zomato, the food delivery platform.

Production Clusters

- Performance based marketing efforts to boom
- Wallets & payment channels to grow manifold
- Introduction of new categories apart from fashion & electronics
- Use of AI for providing virtual shopping experiences

Government Initiatives

Digital India

Digital Udaan

Start Up India

Understanding Indian Ed-tech Industry

The Consulting Club

Industry

Currently $ 1 Billion
45 million users
Expected to grow to $3.5 Billion and 90 million users by 2022.
Second highest # of EdTech startups in the World – 4500

Product Types

Offline Coaching and Systems
Integrated Classroom Tech.
Primary & Secondary Tuition
Skill Development
Entrance Exam Prep
Review Sites
MOOCs

Major Players

Byjus	InterviewBit
Unacademy	Vedantu
EduComp	Toppr
UpGrad	Edx
Testbook	Udemy
Simpl Learn	Pesto
White Hat Jr	MeritNation

Distribution

Mobile Apps and Website

B2B
B2B2C
B2C

Growth Factors

- Technical Talent
- Large Domestic User Base
- English as a Language
- Fastest Rising Consumer Spend on Education
- 850 M mobile phone users
- COVID Boost

Strategic Levers

Pricing
Offering
Coverage
Delivery
Offline support elements
Teacher training

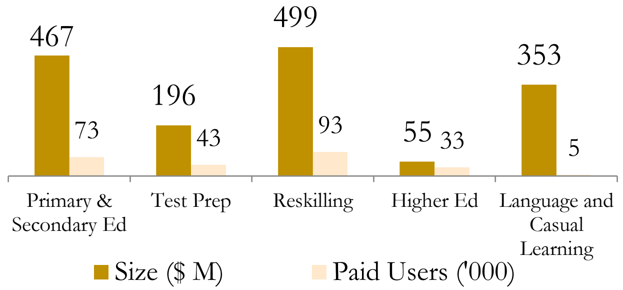
Porter's Analysis

Supplier's Power	High, Good quality teachers are hard to find.
Buyer's Power	High, too many options available to choose from and low switching cost.
Competition	Very High, new industry, seeing a lot of new players.
Barrier to Entry	Low, No regulations at the moment. Low capital requirement to setup a ed-tech company.
Substitute	Moderate, physical coaching have their own market and is a big player.

Important KPIs

- Time-on-app
- Engagement level: MAU/DAU
- Revenue Growth
- Activation Range
- Churn Rate
- Client Acquisition Cost
- ARPU
- CLV
- Students served as a % of potential customers

Market Segment & Size



Division as per Type

Age Group	B2B Infra	B2B2C Platform	B2C Content
Upskilling	Simpl Learn	upGrad	Pesto
Higher Ed	Moodle	Interviewbit	edX
Competitive	TCS Ion	Unacademy	Testbook
K12	Educomp	Vedantu	Byju

Latest Developments

- COVID has a positive impact on the industry. VC funding in the segment has grown about ten times—from $245m in 2016 to $2.3b in 2020.
- Byju's acquired Great Learning, Toppr, Epic, Tynker and others.
- 95% of higher secondary students take private tuitions. 11% of household expenditure in India is on private tuitions.
- The share of video consumption to total internet traffic is expected to rise from 58% in 2017 to 77% in 2022.
- Indian EdTech startups have raised about $4 billion since 2020.

Trends

- Personalization of learning and Content.
- AI/ML technology is making learning sessions interactive and allow for real-time customized Q&A.
- Automated Doubt Solving – Doubtnut and Brainly
- Subscription based models.

Government Initiatives

- Programmes such as Skill India Mission, SWAYAM (Study Webs of Active Learning for Young Aspiring Minds), NDL (National Digital Library).
- Digitization of classrooms of government schools
- Online conduction of exams

Understanding Indian FMCG Industry

The Consulting Club

Industry Overview

4th Largest Sector in India
Market Size: 110 bn USD (2020)
220 bn USD (2025E)
Growth rate : 14.9% (2021)
Key growth drivers: Growing awareness, easier access and changing lifestyles
India's Global Consumption %: 5.8 (2020E)
FDI: 18.59bn USD (2000-2021)

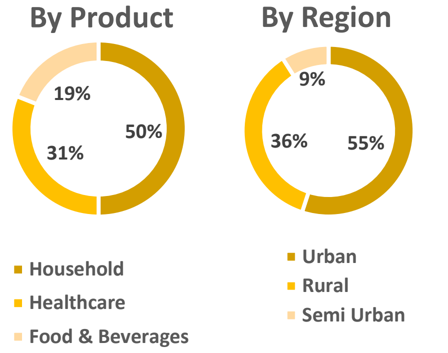
KPIs

- Out of Stock Rate
- Delivered On-Time & In-Full
- Average Time To Sell
- Sold Products Within Freshness Date
- Cash-to-Cash Cycle Time
- Supply Chain Costs
- Supply Chain Costs vs Sales
- Carrying Cost of Inventory
- On-Shelf Availability
- Margin by Product Category

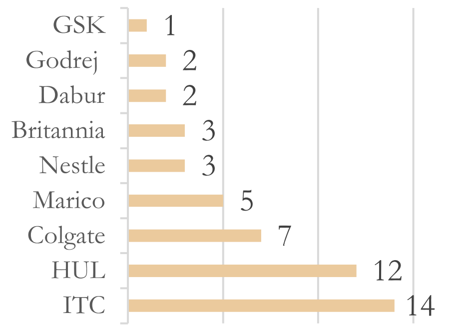
Major Players & Market Share

Toothpaste – Colgate(48%), Pepsodent (16%), Close Up, Patanjali
Chocolate and Milk Products – Nestle(14%), Mondelez (65%)
Soft Drink – Pepsi (25%), Coca Cola (55%)
Detergents, Soaps & Shampoos – HUL(Dove, Axe, Tresemme), P&G (Head & Shoulders, Old Spice, Olay)

Sector Composition



Market Share by Revenue



Value Chain Analytical Framework

Marketing/Sales

Digital Analytics, Brand Analysis, Marketing Mix ROI, Pricing Strategy, Trade promotion & effectiveness, Competitor Intelligence

Manufacturing

Production Forecasting, Production Efficiency, Asset Analytics, Workforce Safety, Production Planning, Quality Assurance, Compliance and Analytics

Logistics

Location Analytics, Inventory Diagnostics, Resource & Route Optimization, Supply Chain Diagnostics, Fulfillment, Reverse Logistics

Business Management & Support

Workforce analytics, sustainability analytics, finance analytics, business process analytics

The Indian Advantage

Healthcare Brands and Products

- New premium product companies like Too Yum, Epigamia, Yoga Bar, Raw Pressery are brands specifically focussing on health conscious consumers and are gaining traction
- Currently in Tier-1 cities. Channel is generally e-commerce.

Rural Demand

- Rural segment is growing at a rapid pace and accounted for a revenue share of 45% in the overall revenues recorded by FMCG sector in India.
- FMCG products account for 50 % of total rural spending. Thus, FMCG industry depend a lot upon monsoon.

Modern Trade and Ecommerce

- Growing smartphone penetration, increased data consumption, and efforts by large companies to make their products available online have increase sales of through modern trade and e-commerce.

Policy Support

- Government's introduction of Relaxation of license rules and approval of 100% FDI in single-brand retail stores and 51% in the multi-brands stores are some of the investing opportunities for global companies to establish their base in India.

Porter 5 Forces Analysis

- **Substitutes: High**, Narrow Product Differentiation
- **Supplier's Power: Low,** Big FMCG dictate prices.
- **New Entrant: Moderate,** High Capital investment, Setting up distribution is costly and time consuming; high advertisement costs
- **Competition: High,** highly fragmented with multiple MNCs and Indian giants.
- **Consumer's Power: High,** low switching costs

Current Trends

- Use of technology to create hyper segmentation and target groups for advertisements.
- Increasing % of modern trade and e-commerce.
- Exclusive trade deals with e-commerce giants for exclusivity.
- Subscription based revenue model type companies coming up. E.g. Dollar Shave Club

Understanding Indian IT Industry

Industry

The IT-BPM sector in India stood at US$191 billion in 2020
Estimated size of the industry to be US$ 350 billion by 2025
YoY 6% growth rate
Low cost advantage (about 5-6 times less expensive than US)

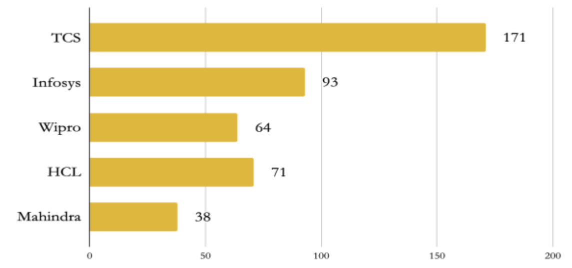
Product Types and Services

- IT Software: Software for documentation, banking services, security etc.
- ITeS Business Process Outsourcing – Back office operations which are outsourced elsewhere than done in house
- IT Hardware & Peripherals – Tangible components like laptop, desktop etc.
- IT Education – Training and certification courses

KPIs

- Average Handle Time
- Number of Critical Bugs
- Server Downtime
- Estimates accuracy
- IT ROI
- Mean time to Repair

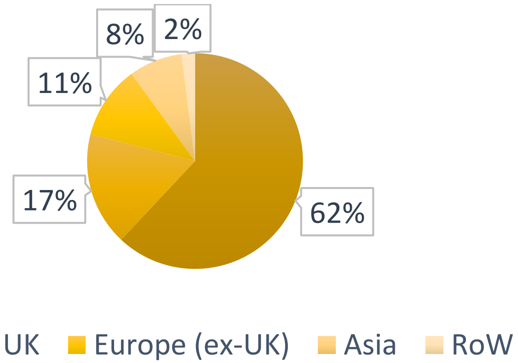
Major Players & Revenue in Rs'000 Cr (2019)



NASSCOM's Digital India for trillion-dollar economy

- Digital Payments – Digital transactions expected to increase to 20%(FY 2027) from (5% FY 2017)
- Digital Skilling – Swayam, IT Platform
- Digital Business – E-Way Bill, etc.
- Digital Infrastructure- 4th largest apps economy

Geographic breakup of IT export revenue in FY19 (%)



Key Emerging Tech Growth Categories :

- IoT Software, IoT Hardware
- SaaS+PaaS+IaaS
- IoT Connectivity
- Robotic/Drones
- AR/VR
- AI Platforms/Applications/Big Data Analytics
- Enterprise Social Software
- Next Gen Security

Value Chain

Strategy to Portfolio	Drive IT Portfolio to business innovation
Requirement to Display	Build what the business needs, when it needs it
Request to Fulfill	Catalog, fulfill & manage services usage
Detect to Correct	Anticipate & resolve production issues

Key Growth Drivers

- Low cost of operation and tax advantages
- Supportive government policies, Government established SEZs
- Availability of technically skilled manpower
- Rapid introduction of IT Technologies in major sectors such as Telecom, BFSI, and more
- Strong Growth in Export Demand
- Adoption of new technologies like cloud computing, AI/ML

Industry Trends

1. Artificial Intelligence: 40 Million+ jobs by 2023
2. Machine Learning : Market expected to grow to $8.81 billion by 2022.
3. Robotic Process Automation: The average RPA Salary is within the top 10 percent earning over $141,000 annually
4. Edge Computing: By 2022, the global edge computing market is expected to reach $6.72 billion
5. Virtual Reality: Major players like Google, Samsung, Oculus and plenty of startups expanding
6. Cybersecurity: Predicted that we will have 3.5 million unfilled cybersecurity jobs by 2021
7. Blockchain: Blockchain is the second fastest growing category in terms of employment
8. Internet of Things: The number of IoT Devices reached 8.4 billion in 2017, expected to reach 30 billion devices by 2020 and in need of 20,000 more IT Workers

Understanding Google as an Industry

The Consulting Club
Faculty of Management Studies
University of Delhi

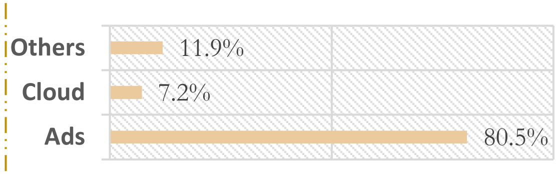
Overview

Market Cap - $1.5 Trillion
Revenues – $182 Bn (2020)
Net Income - $40 Bn (2020)
Google India's Revenue-$56 Bn
Processes 3.5 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



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 – **2.8 billion monthly active users**
- **# Apps – 3.5 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 etc.

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 – 36%**
- 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 etc.
- **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 Indian Hospitality & Tourism Industry

The Consulting Club

Industry Overview

Number of Foreign Tourist arrivals (FTA) in 2020 : 2.68mn (-75.5 % YoY)
FTA (Jan'21-Apr'21) : 376,083
Market Size: US$ 268bn (2019)
US$ 512bn (expected in 2029)
Number of Jobs :
39 mn (2020) (8% of total jobs)
53 mn (expected in 2029)
Hotel chains : 50% of industry (expected in 2022)

KPIs

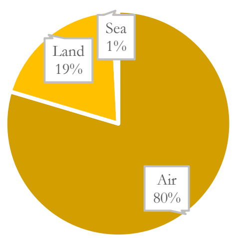
- Foreign Tourist Arrivals (FTAs)
- International Tourist Arrivals (ITAs)
- Foreign Exchange Earnings (FEEs)
- # of Domestic Tourist Visits
- # of Tour Operators
- International Tourism Receipts
- # of approved Hotel & rooms
- Revenue Per available room
- Average daily Hotel Rate
- Hotel Occupancy Rate

India at a Glance

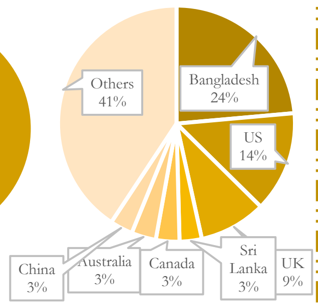
- India ranked 3rd by WTCC in terms of Tourism contribution to GDP
- India ranked 34th by WEF in Travel & Tourism Competitiveness
- India is 3rd in terms of investment in Tourism & hospitality sector
- International Hotel chains presence in India: 47% share (2020)
- 37 world heritage sites, 10 biogeographic zones in India

Sector Composition

Mode of Tourist arrivals

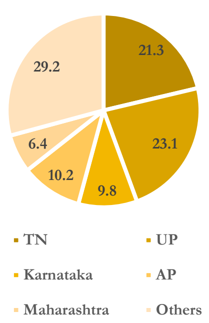


Top Source Markets

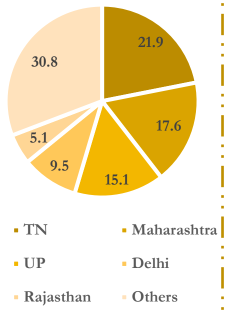


Popular States (Tourist Visits)

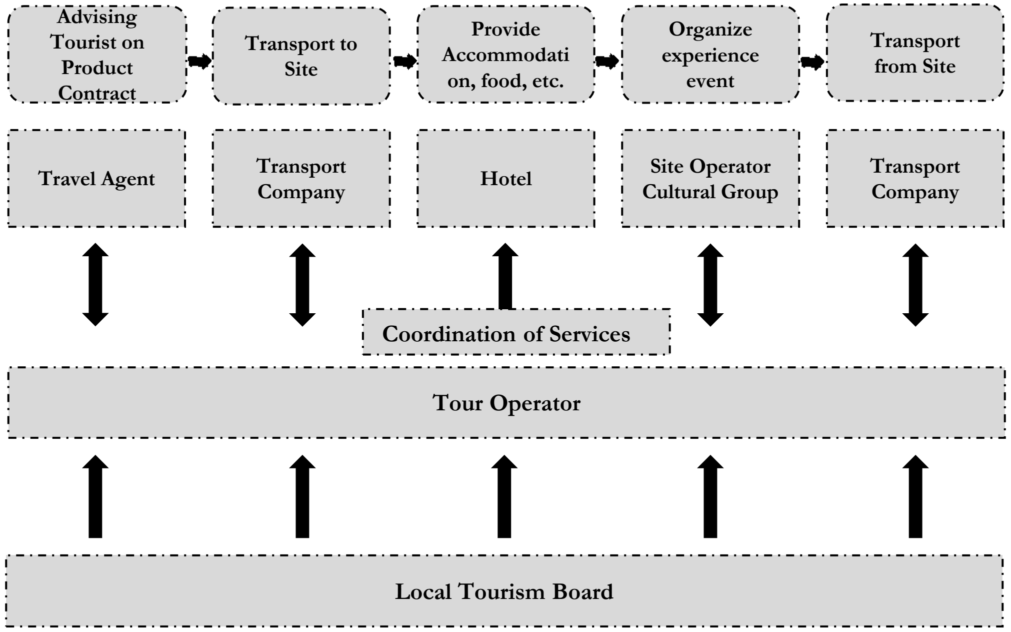
Domestic Tourists



Foreign Tourists



Value Chain Framework



The Indian Advantage

Diversity

- Diverse niche tourism products- cruise, adventure, medical, wellness, sport, eco, film & religious tourism
- Diverse attractions- 37 World Heritage sites, 10 bio-geographic zones
- Big Coastline dotted with attractive beaches

Demand Drivers

- By 2029, sector expected to grow 6.7% to reach Rs.35tr (9.2% of GDP)
- By 2028, International Tourists arrival expected to reach 30.5mn

Increasing Investments

- In 2018, India was 3rd globally in terms of investment in this sector with inflow of US$ 45.7bn
- Hotel & Tourism sector received cumulative FDI inflow of US$ 15.28bn between March,2020 & April,2020.

Policy Support

- GOI to develop 17 iconic tourist sites into world class destinations as per Budget 2019-20
- Campaigns like *Swadesh Darshan* launched to support the industry

Porter's 5 Forces Analysis

Substitutes: High, Large availability of attractions & Packages
Supplier's Power: Low, Large # of service providers, Demand-driven industry
New Entrant: High, Less barriers to entry, investment needed depends upon location & services .
Competition: **High,** Large # of Tour operators, agents, Hotels, Transporters, etc.
Consumer's Power: High, Demand driven

Current Trends

- Catering to millennials: Eco-Tourism, Sport tourism & Film tourism
- Tech explosion increasing coordination among industry stakeholders.
- Influx of International visitors & emphasis on heath & well-being

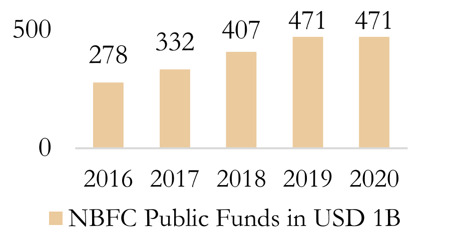
Understanding Indian NBFC Industry

About the Institution

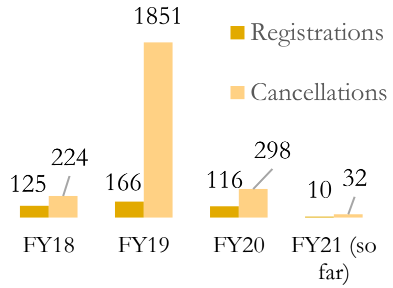
- NBFCs are financial institutions that offer banking services without a banking license
- They cannot demand deposits
- They do not form a part of the payment and settlement system and cannot issue cheques drawn on itself
- Unlike banks, they don't have a deposit insurance facility from the Deposit insurance and Guarantor organization

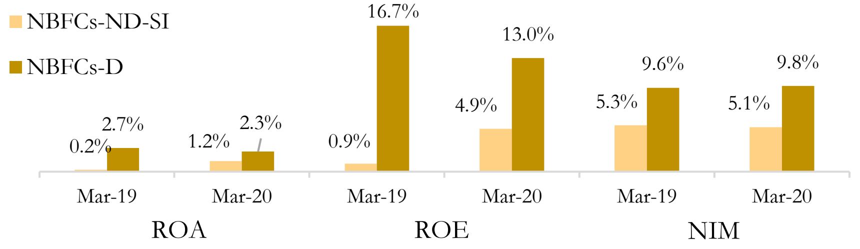
Key Statistics over the years

NBFC Public Funds in USD 1B



# of NBFC Banks in India





Profitability Ratio of NBFCs

Growth Drivers

- Stress on PSUs
- Latent Credit Demand
- Digital Disruption, especially in MSMEs & SMEs
- Increased Consumption
- Distribution reach & sectors where banks don't lend

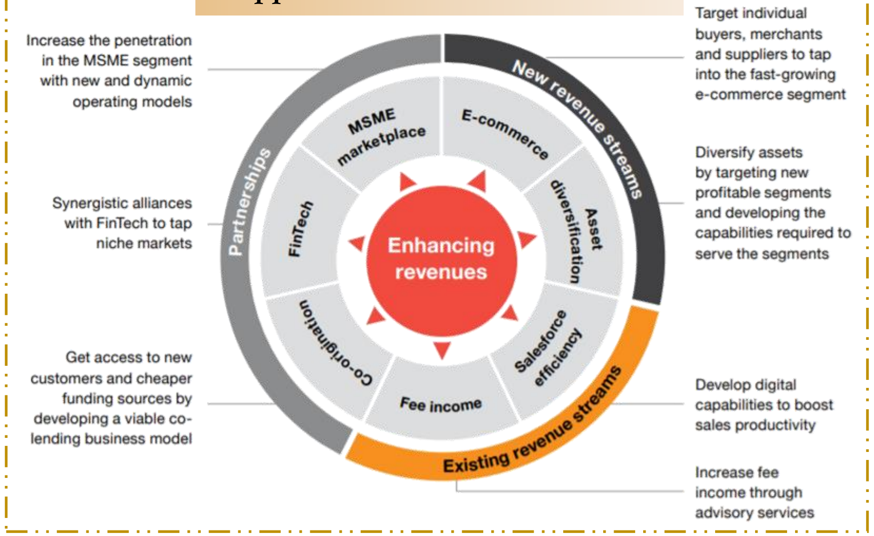
Governance & Risk Mgmt

- Asset Liability Mgmt
- Liquidity Coverage Raito
- Arm's length transaction
- Reporting Standards
- Concentration Risk
- Audit & Compliance

KPI

- RoA vs RoE
- Price to Book Ratio (P/B)
- Spread
- Opex as % of AuM growth
- Gross NPAs

Opportunities to boost revenue



Growing in Prominence

- Rapidly gaining prominence as intermediaries in the retail finance space. NBFCs finance more than 80% of equipment leasing and hire purchase activities in India.
- There were **9,425 NBFCs** registered with the RBI as of January 22, 2021.
- **December 2020** - RBI proposed that NBFCs should have at least 15% CRAR for the last 3 years.
- **July 2021** - Rajya Sabha approved the Factoring Regulation (Amendment) Bill in 2020, enabling ~9,000 NBFCs to participate in the factoring market.
- **September 2021** - RBI communicated that the applicable average base rate to be charged by NBFC-MFIs to their borrowers will be 7.95%. SBI announced an agreement with three NBFC-MFIs for co-lending to joint liability groups (JLGs).

Cause of NBFC Collapses

- Asset liability mismatch, resulting from short-term market borrowings & long-term loan tenures
- Absence of robust governance controls and due-diligence mechanisms to match aggressive credit build-up
- Low corporate governance and risk standards, resulting in slip-ups like intra-group lending
- Lower regulatory supervision compared to the banking sector

Emerging Tech. in NBFC Governance

- **Analytics** – Stress testing and Simulations for better understanding of liquidity risks
- **AI** – Rules Based Engines for data driven decision making and fraud management
- **Mobility** – Convenient on demand dashboard for risk management
- **Cloud** – Always-on environment with real time data access

Understanding Indian Petrochemical Industry

The Consulting Club
Faculty of Management Studies
University of Delhi

Industry

Upstream	Downstream
Searching, drilling and producing oil from wells Crude oil production in FY 2018-19 34.20 MMT Natural gas production in FY2018-19 13,163 MMSC	Refining, processing and purifying Oil & Gas Refinery Crude Output in FY 2018-19 252 MMT Light/Middle/Heavy splits: 30/46/24%

Value Chain

Upstream

EXPLORATION
- Geophysical Evaluation & Design
- Field Development
- Drilling Operations

PRODUCTION
- Further development of fields
- Bringing oil to the surface

Middle-stream

TRANSPORTATION
- Storage of oil
- Transportation of oil through pipelines, trucks, tankers etc.
- Maintenance of tankers, pipes etc.

Downstream

REFINING
- Refining of crude oil into petroleum products
- Product Blending

MARKETING
- Retailing
- Trading

Growth Drivers

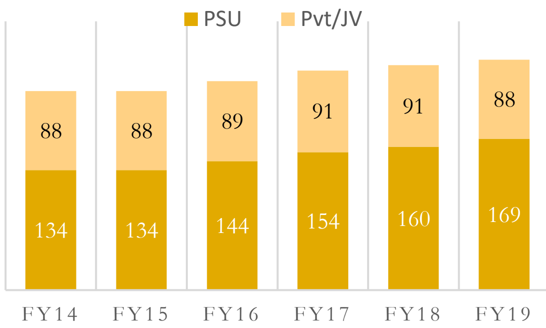
Growing Demand	Expansion
World's 3rd lar. energy consumer, demand to 3X by '35 to 1516 MT Diesel demand to 2X (163 MT) by '30 Demand for nat. gas to 4X in 10 years	To attract US$25 Billion investments in exploration and production by 2022 Refining capacity to increase to 667 MTPA by 2040.

FDI	Policy Support
1. 100% FDI in upstream and private sector refining projects 2. FDI limit for PSU Refining projects raised to 49 % without any disinvestment	1. Policies such as the OALP and CBM policy to encourage investments 2. Incentives for technologies to improve oil field recovery worth Rs. 50 lakh Cr.

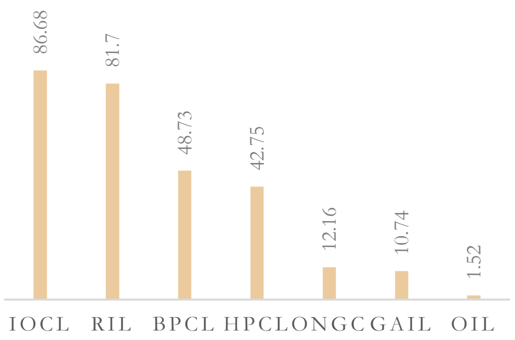
Notable Trends

1. **Coal Bed Methane**: For development of clean & renewable energy, designed to be liberal and investor friendly, production in 2018-19 stood at 596 mil cubic mt.
2. **Underground Coal Gasification**: For harnessing energy from deep uninable coal seams economically in an eco-friendly manner, reduces expenses by 20-25%
3. **Gas hydrates and biofuels:** For mapping gas hydrates for use as an alternate source of energy, Bio-fuels as alternate sources of energy having lower emissions
4. **Open Acreage Licensing Policy:** (OALP) allows an explorer to study data available and bid for blocks to increase foreign participation,

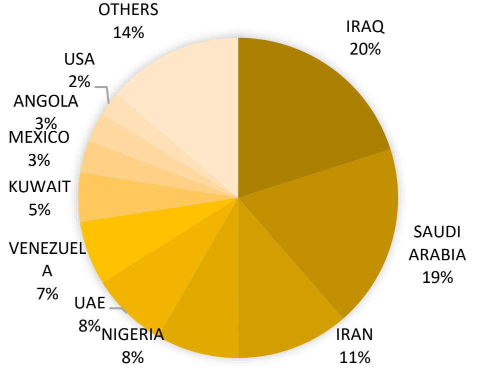
REFINERY THROUGHPUT (MMT)



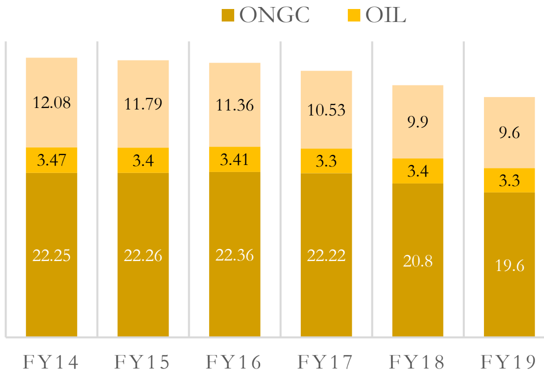
KEY DOMESTIC COMPANIES
REVENUE BY OPERATIONS (US$ BN)



IMPORTS BY COUNTRY



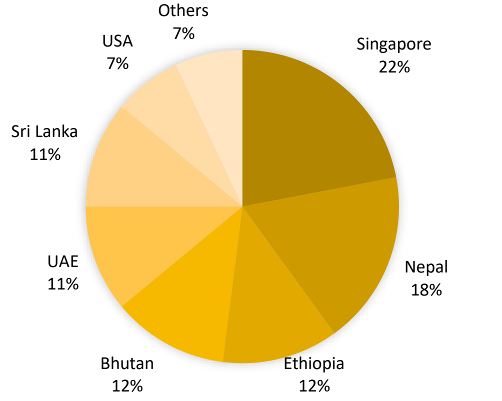
CRUDE OIL PRODUCTION (MMT)



Opportunities

1. New fields for exploration, 78% of sedimentary area yet to be explored
2. Expansion in the transmission network of gas pipelines and Development of City Gas 3. Distribution (CGD) networks similar to Delhi and Mumbai's
4. Expansion of the country's petroleum product distribution network
5. Recoverable shale gas resources of nearly 96 tcf.

EXPORTS BY COUNTRY



Understanding Indian Pharma Industry

The Consulting Club

Overview
- Valuation: Estimated US $42 Bn (2021)
- Projected: US $ 65 Bn (2024)
- 3rd largest in Volume, 14th largest in Value
- Exports: $20.70B in FY20

Products
- Bulk drugs
- Intermediates
- Drug formulation
- OTC drugs

Key Segments
- API Manufacturer/Traders
- Formulation Manufacturer
- Contractual Research
- Manufacturing Service
- Biotechnological Co.

Key Drivers
- Knowledge
- Skill & Infrastructure
- Low production cost
- Quality
- Huge Market

Value Chain
API/Bulk Drug; Chemicals/ Excipient; Packaging Material → Manufacturer (API/Formulation) → Drugs/Medicine → C&F Agent; Distributor; Chemist; Exports

Component	Cost incurred	Value Added
Manufacture of drugs	R&D Manufacturing Costs Import Duties Promotion/Education	Innovation Regulatory Quality Assurance Education
Distribution	Medicine Acquisition Handling & Delivery Obsolescence Cost Capital Cost Promotion/Education	Ensuring supply Waste Management Order Processing Education
Dispensing	Medicine Acquisition Labour, facilities Medicine Wastage Capital Cost	Medicine Availability Pharmacist advice Patient Convenience Additional services

Pricing Factors

Manufacturer Selling Price	Insurance, freight	Importer Margin	Import tariff and charges
Taxes	Retailer Mgn.	Distributor Mgn.	Promotion

Porter 5 Forces Analysis

Suppliers	Moderate	Certain chemicals are rare, some are generic
Substitute	Low	Biotech, Ayurvedic, Homeopathic
Entry Barrier	High	R&D costs, regulation, distribution network
Competition	High	Many Small players
Buyers	Low	Brand identity governed by doctors, low price sensitive

Key players
- Sun Pharma
- Dr. Reddy
- Cipla
- Zydus
- Pfizer
- GSK
- Sanofi
- Merck
- J&J
- Amgen
- Novartis
- Roche
- BM Squibb
- Wyeth
- Eli Lilly
- Schering-Plough
- Abbott
- Takeda

RORC	(Gross Profit of current year)/(R&D expense of previous year)
Profitability ratios	Operating Margin & Net Margin
Liquidity & Debt coverage ratios	Adequate liquidity and manage debt well

Trends
- Increase in turnover spend on R&D
- New drug discovery focus
- Exports increase in generic drug space
- FDI and collaborations
- Tapping new international market like Africa
- Strategic M&A
- Advanced Analytics
- Specialty drug business model
- Health spending focus of govt.

Future Trends
- Evolving regulatory landscape
- Tech-enabled healthcare and engagement with doctors
- Increased patient involvement in healthcare choices
- Rise of the role of pharmacy

Understanding Indian Power Industry

The Consulting Club

Industry Overview

- Indian power sector is growing at a CAGR of 5.69% during FY10-FY18
- With –ve growth in Covid, it is expected to grow at 15% in FY22
- India's Power sector has generated 1252.61 BU of electricity in FY21.
- Total installed capacity of power stations in India stood at 390 Gigawatt (GW) as on March, 2021.
- Per Capita power cons. – 1208kWh

KPIs

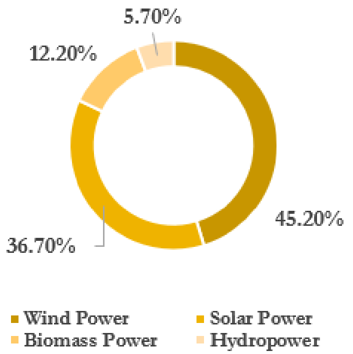
Guaranteed Returns: Govt. guarantees a certain RoCE on generation.

Maintenance Cost: Expenses incurred, efficiency indicator, Per capita power consumption, Total energy consumption, Renewable energy consp. %, Power Cuts & Average Duration, Energy Production Distribution, NAV

Capacity & Consumption

- India is the world's third largest producer and third largest
- Consumer of electricity - 383.37 GW
- Non Renewable – 75%
- Renewable – 25%
- Residential Consumption – 25%
- Industrial Consumption – 43%
- Agricultural Consumption – 18%
- Commercial Consumption – 8%

% Capacity (Renewable)



Cost Factors

- Raw Material availability and cost. (Coal/renewable energy)
- Transmission Losses (21% in India, World – 8%)
- Government Regulations
- Demand and cost of unit
- Weather Forecasts
- Transmission Costs
- Capital Costs, including waste disposal

Value Chain

Power Generation

70% share of PSUs.
Thermal based generation predominant (60%).
High gestation period, capital intensive.

Power Transmission

200kV and 400kV transmission lines-40%.
250k+ circuit kilometers in grid.
High commission period (6-7 years), less upgradation in technology

Power Distribution

Major bottleneck - loss making PSUs
T&D losses> 20% of power generation; 2.5X of global average

Power Trading

10% of power generated is traded.
Lack of long term power contracts

The Indian Advantage

Robust Demand

- 100% electricity produced is consumed.
- Huge demand expected in near future.
- 100% electrification opens up new avenues for distribution companies.

Demand Drivers

- Rapidly growing economy, rising exports, improving infrastructure and increasing household incomes.
- India pledged to increase its share of renewable energy to 40% in Paris Climate agreement.

Increasing Investments

- The industry attracted US$ 15.36 billion in FDI (2000-2021)
- Growing private sector participation through the Public - Private Partnership (PPP) route; Also promotion of FDI .

Policy Support

- Encouragement of Pvt. Sector by Govt. 46% of distribution is now private.
- *Deen Dayal Upadhyaya Gram Jyoti Yojana* (DDUGJY) with the objective of 100% rural electrification.

Porter 5 Forces Analysis

Supplier's Power	**High,** COAL India is the only supplier.
Substitutes	**High** dependence on Coal for energy
Barriers to Entry	**High** Capital investment, distribution and transmission dominated by PSU, high red-tapeism.
Competition	**Low,** all power generated is used up.
Bargaining Power, buyers	**Low,** limited distributors

Current Trends

The per capita consumption has been increasing at an average of 6% every year.
Direct Benefit Transfer (DBT) scheme in the electricity sector for better targeting of subsidies.
GoI Roadmap to achieve 175 GW capacity by 2022, 100 GW of solar power & 60 GW wind.

Understanding Indian Telecom Industry

The Consulting Club

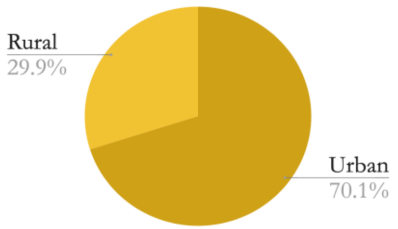
Industry

- 2nd Largest Telecom Market
- 1.2 Bn subscriber base – 2.7% CAGR growth (2016-19)
- Industry Size – US$17.4bn with 2nd largest market of internet users
- Tele-density of 83.4%
- Wireless segment - 98.3%
- Average Data Usage = 11 GB/person in FY20

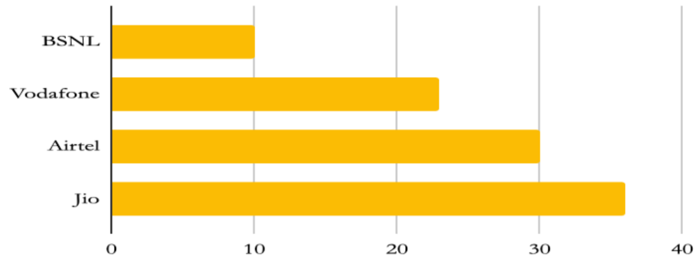
Product Types

Mobile (wireless)
Fixed line (wireline)
Internet Services

Urban and Rural Tele-Density



Market Share in Terms of Subscribers (Sept 2021)



KPIs

- Average Revenue per user (ARPU)
- Subscriber Acquisition Cost
- Churn
- Network Operating Cost
- Minutes of usage
- Tele-density

Value Chain

Telecom Infrastructure	Network equipment, towers, test equipment
Network/Service Provider	Network owners, also provide services to end customer
Content Provider	Provides content to the user to view/use
Technology	Provides software, spectrums, chipsets, technology (4G/5G)
Devices	Mobile, handset, router manufactures

Growth Factors

- Growing demand
- Higher income
- Increasing minute of usage & data usage
- Reducing license fee
- Relaxed FDI norms
- Increasing rural penetration

SWOT Analysis

Strength

- Robust and huge demand
- Highest data usage per mobile phone
- Good telecom infrastructure
- Relaxed FDI norms
- Strong government support
- Growing tele density

Weakness

- Cutthroat competition
- Increasing debt and financing cost
- Late adoption of 5G technologies
- Low switching cost
- Equipment become obsolete quickly

Opportunities

- Untapped rural market
- Drastic growth in internet subscribers
- Growing subscriber base
- Increasing mobile banking and cashless transaction
- Growth in MVAS & cloud computing

Threats

- Reducing tariffs & narrow margins
- Spectrum Auction
- Zero interconnection charges

Barriers to Entry

- Economies of Scale
- Huge capital investment
- Government policies and regulations
- Specialized equipment are needed
- Low tariffs
- Established players

Current Trends

- Reducing tariffs
- Expansion to rural markets
- Mobile banking
- Emergence of BWA technologies
- Investment in optical fibre network
- Consolidation in industry
- Increasing FDI

Government Initiatives

- National Digital Communications Policy 2018
- Phased Manufacturing Programme (PMP)
- 100% FDI
- Digital India Program

Future Trends

- Internet of things
- Growing number of mobile application
- Cashless transaction
- Internet of things
- Increase in data usage/mobile

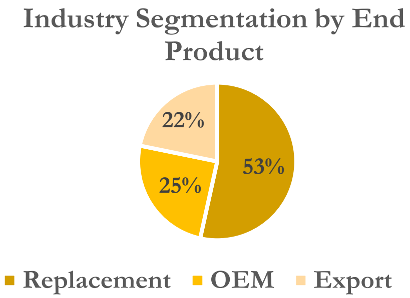
Understanding Indian Tyre Industry

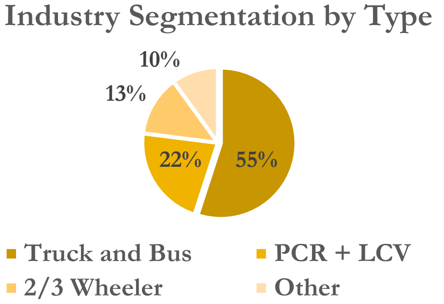
The Consulting Club
Faculty of Management Studies
University of Delhi

Key Industry Statistics

- 4th largest in the world after China, Europe and USA (in no. of units produced annually)
- No. produced in FY2020 – 177 Million Units
- ~3% Manufacturing GDP of India & ~0.5% of total GDP
- Export Volume is also on the rise.
- CAGR – 7-9% (2022-25)
- Market Size ~$8.5 Billion (2019-20)

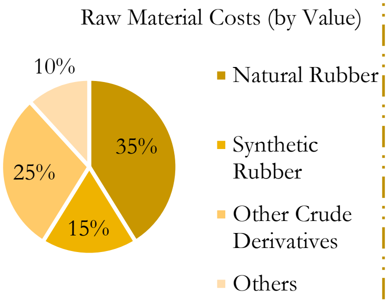
Market Segmentation



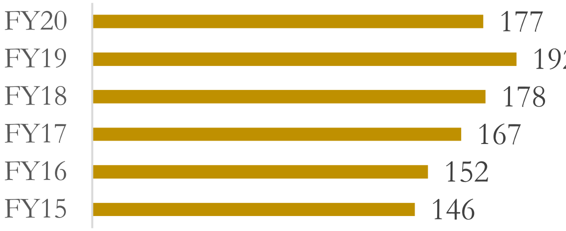


Cost Drivers

- Highly Capital Intensive
- **Raw Materials cost 60-65%** of revenues
- **SG&A – 6-12%**
- **Employee Costs – 7-14%**
- Negative correlation with Crude Oil prices as raw material like carbon black are derivatives.



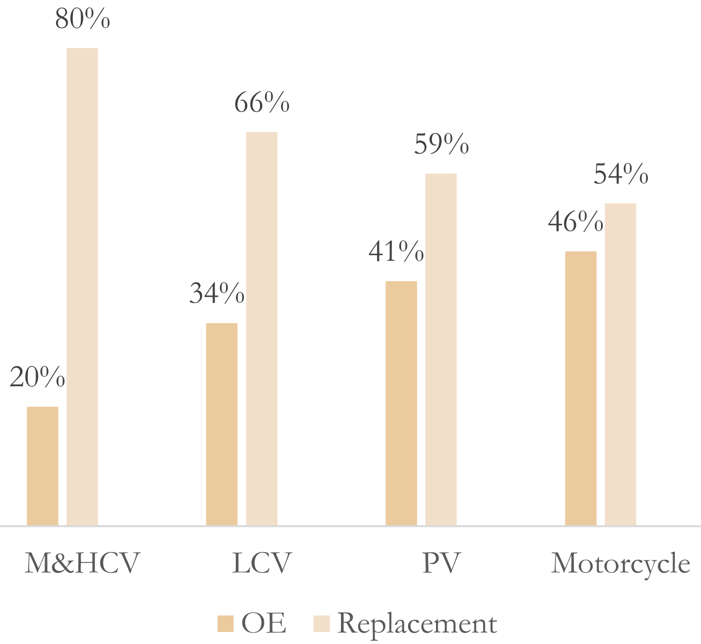
Tyre Production Trends (in Mns)



Key Growth Drivers

- **Increasing radialization of tyres, especially in buses and trucks:**
  - Most technologically superior design
  - Provide better mileage and improved driving
  - Now being introduces in buses, trucks and Light Consumer Vehicles
  - Therefore, increasing demand for new tyres and boosting growth
- **Growing consumer base**
  - No. of consumers increasing
  - As no. of produced automobiles is increasing

Original Equipment(OE) vs Replacement Demand Comparison (2019-20)



Factors impacting value chain

Suppliers	Δ veh. platforms, Δ tech., discontinuation
Trade	After sales, Sales, service discontinue
Legislation	New standards, autonomous driving
Fin. service	Funding req. for transportation
Manufacturer	Collaboration, Chang. Drive systems
Insurance	New Tariff structures, Autonomous cars

Recent Developments & Future Outlook

- Vehicle production levels are currently at multiyear lows declining by over 13% during 11m FY2020 and this has sharply affected the original equipment (OE) tyre demand
- BS-vi enforcement – Compliant vehicles will be more expensive, may keep buyers away for some time
- According to ICRA, the India tyre demand is estimated to grow by 13-15% in Y21-22

Understanding Indian Cement Industry

The Consulting Club

Industry Overview

Revenue: USD 9.05 Billion in FY20. Currently 2nd largest cement producer

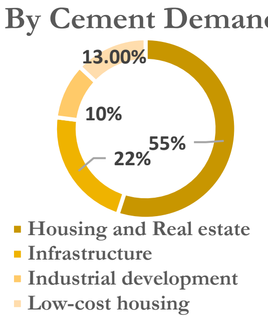
Current production capacity of 545 million tonnes, accounts for 8% global capacity

Demand expected to grow at 5.68% CAGR till FY22. Export of cement increased by 1.68% CAGR

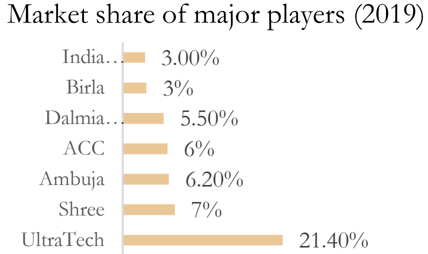
KPIs

- Capacity Utilization
- Cement Factor
- Clinker Factor
- EBITDA/ton
- Carrying cost of inventory
- Supply chain costs vs Sales
- Cash-to-Cash cycle time
- Inventory turnover
- Average production downtime

Sector Composition



Market share



Major Constraints

- Coal price variation
- Fleet utilization and route selection
- Efficiency of manufacturing plant
- Cash discounts and debtors performance
- High cost of transportation and impact of fuel costs
- Volatility due to geographical and regulatory constraints

Value Chain

Raw Materials: Long-term leasing contracts of limestone quarries, partnership with coal, gypsum suppliers

Inbound log: Mostly railways and road based logistics, has smaller value since the production unit is close to the quarry.

Operations: Production of Limestone □ Clinker □ Cement. Operations are highly automated and leads to waste generation too.

Outbound log: Mix of rail and road, presence of warehouses and direct deliveries to bigger clients. Major component of cost.

Service: Distributor-dealer network for post sales follow up

The Indian Advantage

Robust Demand

- High demand to be driven by government's focus on infrastructure and housing for all by 2022.
- Demand expected to grow at 5.68% CAGR between FY16 and FY22.

Opportunities

- Growth opportunities available in areas such as housing, dedicated freight corridors, ports and other infrastructure projects.
- Construction of 100 smart cities will further increase the demand.

Increasing Investments

- FDI inflow in industry related to manufacturing of cement and gypsum products reached USD $5.28 billion between April 2000 and March 2020.
- Major players investing in new manufacturing units across India.

Long-term Potential

- Oligopoly market
- Long-term cement growth is estimated at 1.2 times of GDP growth rate.
- Decarbonization and zero emissions to be practiced by 2050.

Revenue and Cost Drivers

- Freight cost accounts for approximately 38% of the total of cement company's operating expenses.
- Power and fuel account for 25% of the cost and raw materials account for 19% of the costs for a manufacturing unit. Maintenance cost for the machinery is about 5% and the rest is accounted by packing related expenses.
- Revenue stream is dominated by sales (98% of the total revenue) and the rest 2% is associated with interest income.

Recent Trends

India expected to be the largest exporter of clinker and cement to Middle-east, Africa and Asian countries in the upcoming 10 years. Zero carbon cement to be the way forward in accordance with regulatory measures. Eastern India to be the epicentre of major construction activities and demand expected to rise there.

Understanding Indian EV Industry

Industry

5th Largest Automobile market
2.36 lakh E-vehicles sold in 2020-21.
90% of the sold vehicles are 2 wheelers, aim is to increase the demand to 10 lakhs
Rs. 50,000 crore billion opportunity by 2025.

Product Types

2 Wheeler – 90%(units)
Three Wheeler – 7%
Passenger Vehicle – 2%
Commercial ~ 1%
Automotive Parts
Batteries and Charging infrastructure

Major Players

Tata Motors – Nexon EV, Tigor, Electric Bus
Mahindra – E20, eVerito, eKUV100
Hyundai – Kona Electric SUV
Hero Electric – Photon, Flash la, Nyx
Kia Motors – KIA e-soul, Niro EV
Ashok Leyland – iBus, HYBUS, Euro 6 Truck
MG Hector
Revolt

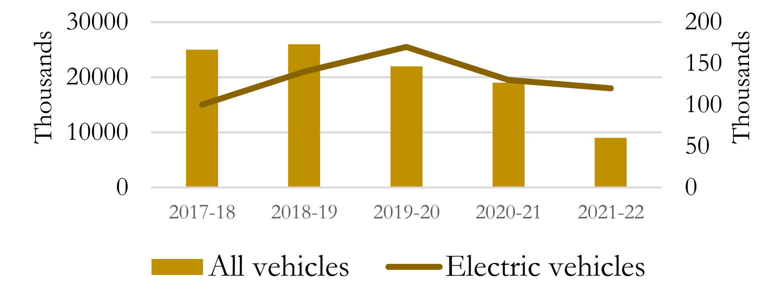
KPI

Average Prodn.. Downtime. Inventory Turnover, Utilization Rate

Indian Startups

Okinawa	Revolt
Ola Electric	BattRE
Tork motors	Ather Energy

Electric Vehicle Sales as % of Total Sales



Value Chain

Inbound log	Raw materials, warehousing handling
Operations	Machining, Assembling, Testing prod
Outbound log	Warehousing and distribution
Marketing & Sales	Advertising, pricing and promotion
Service	Installation and repair parts

Government Initiatives

- National Electric Mobility Mission Plan, 2015 aimed to increase the sales of electric vehicles by 2020 through an initial investment of Rs 20000 Crores.
- FAME-1, 2015 set aside Rs 15000 Crores for technological development, demand creation, pilot projects and Charging infrastructure
- FAME-2, 2019 allocated Rs 10000 Crores for 3 years with 86% of it focused towards demand creation and infrastructural development

SWOT Analysis

Strengths

- Eco-friendly
- Low cost of ownership
- Cheaper to run
- Less Noise
- R&D being done by Indian startups
- Govt. incentives in manufacturing
- Upcoming bases for R&D
- Growth IT Capability in design, development and simulation
- Market proximity

Weakness

- Costlier vehicles
- Time taken for recharging
- Lack of charging infrastructure
- Lack of electric power
- Li-ion is costly and imported from China
- Inadequate and low inv. in R&D
- Adoption shown only in 2-wheeler and 3-wheeler

Opportunities

- Increase in income level
- Lower taxes
- Government subsidies
- Increasing petrol and diesel prices
- Rising concern for pollution caused
- FAME Act by GOI

Threats

- Competition from electric hybrids, hydrogen-powered cars and alternative fuel
- Electricity Cost
- Availability of Li-ion batteries

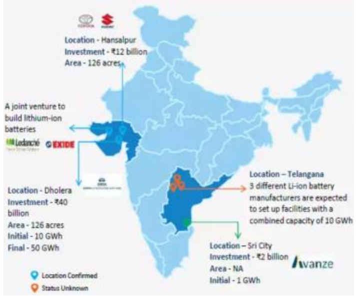
Barriers to Entry

- Charging infrastructure
- Cost compared to traditional substitutes
- Import of batteries from China
- Heavy R&D cost
- Electricity Prices
- Rigid consumer behaviour
- High cost of Li-ion battery

Current Trends

- Nascent market stage
- Active balancing of batteries
- Grid easy fast charging
- R&D for alternatives to Li-ion batteries
- E-rickshaws found to be most receptive in the Indian market

Li-ion Production Clusters



Future Trends

- India expected to be the 4th largest market for EV vehicles in 20 years.
- 9%-16% penetration expected in 2-wheeler market for EV
- Cheaper and indigenous vehicles to be available by 2025.

Understanding Indian Healthcare Industry

The Consulting Club

Industry Overview

- Healthcare sector expected to reach USD 372 billion by 2022
- Government's expenditure on Healthcare is 1.6% of GDP.
- In Union Budget 2021, the government allocated Rs. 35,000 crore (US$ 4.80 billion) for COVID-19 vaccines in 2021-22.

Services

Primary Care, Secondary Care (General or Speciality) and Tertiary Care (Single or Multi-Speciality)

KPIs

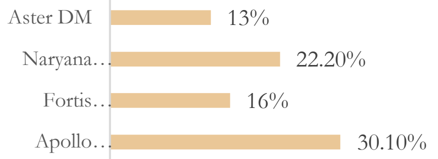
Average Revenue per Occupied Bed, Average length of stay, Bed Occupancy Rate, Staff available per patient, Recovery rate

Government Initiatives

- Rs 69000 Crore invested in PMJAY scheme by GOI.
- Rs 9046 crore invested in National Nutrition Mission for 3 years.
- Rs 1299 crore invested in new AIIMS set up at Rewari, Haryana
- GOI partnered with Serum Institute for development and manufacturing of COVID vaccine.

Market share

Market share of major players (2021)
(No. of beds in organized sector)



Major Constraints

- High capital expenditure needed for setting up medical services.
- Lack of infrastructure and awareness in rural areas
- Insufficient manpower owing to the rising population of the country.
- High attrition rate for government doctors and regulatory concerns.

Value Chain

Consulting	Person with illness approaches the doctor or hospital as per their awareness or accessibility.
Diagnostics	Pathological tests, genetic history, medical screening, contact history and past records are assessed.
Admission	OPD, General Ward, ICU, Emergency Section based on level of care needed and type of disease, Availability of beds.
Treatment	Quality of doctors and procedure. Equipment needed, medicines and regular check on vitals, information sharing, 24*7 assistance.
Post-Treatment	Payment processing, commissions, insurance claims, regular follow-ups, redressal of queries.

The Indian Advantage

Robust Demand

- Healthcare market expected to reach USD 372 billion by 2022 owing to increased awareness, lifestyle changes and increasing access to insurance.
- Sector expected to generate 2.7M new jobs between 2017 and 2022

Increasing Manpower

- 16085 hospitals enrolled in Ayushman Bharat Scheme for treatment.
- Number of medical colleges increased to 558 in July 2021.
- India had 1.27 million registered allopathic doctors in July 2021.

Increasing Investments

- Government plans to increase the spending on healthcare to 3% of GDP by 2022.
- Indian medical tourism market was valued at US$ 2.89 billion in 2020 and is expected to reach US$ 13.42 billion by 2026

Policy Support

- World's largest government funded healthcare scheme, Ayushman Bharat was launched in Sept. 2018.
- National Commission for Allied, Healthcare Professions Bill 2021- aims to create a body to regulate service standards for healthcare professionals.

Cost Drivers

- Salaries of doctors and hospital staff account for 30% of the total cost for hospitals.
- Raw materials in terms of beds, equipment, infrastructure cover the remaining 30% of the costs.
- Power and backup accounts for the remaining 30% of the costs.
- Research and Development in new avenues like Tele-medicine, AI applications and medical tourism cover the remaining costs

Revenue Streams

- Healthcare services cover 45% of the revenue stream.
- Diagnostic services account for 30% of the revenues.
- Drug sales and medicines provide the remaining 25% of the revenue for healthcare industry.
- New revenue streams developing in Medical tourism, drug development and diagnostic services.

Understanding Indian Defence Manufacturing Industry

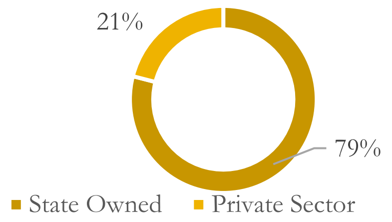
The Consulting Club

Key Industry Statistics

- Defence production target at US$ 25.00 billion by 2025
- 100% FDI allowed, 74% under automatic route and beyond 74% through government route
- CAGR of 3.9% between 2016 and 2020
- Top importers of defence equipment
- Government approved US$ 130.00 billion on military modernisation and US$ 67.00 million budgetary support for R&D

Market Segmentation

Defence Production in India by Sector



Products and Services

- Armored and Defence Logistics Vehicles
- Arms and Ammunitions
- Electronics and Communication Systems
- Shipbuilding

Key Players

- Hindustan Aeronautics Limited (HAL)
- Bharat Electronics (BEL)
- Bharat Earth Movers Limited (BEML)
- Bharat Dynamics Ltd. (BDL)

Value Chain

R&D	Conceptual Design, Design of subassemblies, Detailed design, Testing, Validation
Component Manufacturing	Software, Electronic Component, Mechanical component, Composite components, wiring
Assembly & Integration	Assembling structural and system components together
Marketing & Sales	Export, Cross-sector opportunity, Technical publications
Post Sales Service	Maintenance, Repair and Customer Service
End of Life	Storage, Decommissioning & Disassembly, Recycling, Disposal.

Opportunities and The Indian Advantage

Make in India

- Emphasis on 'Make in India' initiative in the Defence sector
- Foreign players to invest and capitalise on the opportunity
- Self-reliance in defence manufacturing under the Aatmanirbhar Bharat Scheme

Government Policy

- 74% FDI in defence manufacturing
- 'Import embargo' on 101 military items
- Defence Production and Export Promotion Policy 2020
- DRDO Procurement Manual' 20

Self-reliance Target

- The Defence Ministry has set a target of 70% self-reliance in weaponry by 2027
- Indian military's technological modernisation via public private partnership with the Indian IT companies such as Tech Mahindra, TCS

Start-up India

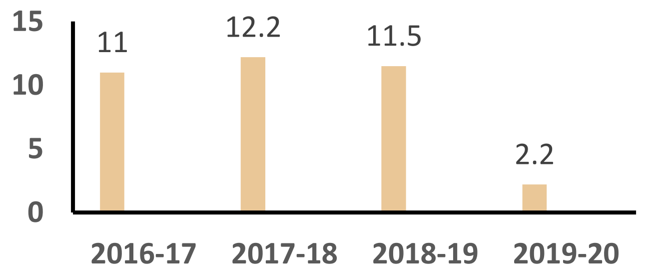
- Indian government push for start-ups in India
- Collaborations to develop innovative solutions
- Potential growth opportunity for the defence production in terms of operational capabilities

Key Growth Drivers

- Ongoing territorial disputes with Pakistan and China.
- External dependence for defence procurement
- Favourable FDI climate
- 'Import embargo' on 101 military items.
- High budgetary allocation to the defence sector.
- Expanding production and distribution facilities in India.
- Increased R&D activities

Defence Production

Indian Defence Production (US$ Billion)



Understanding Indian Food Delivery Industry

The Consulting Club

Industry Overview

- Industry size- US$ 4.35 Billion in 2020
- CAGR of 30.1% expected during 2021-2026
- Expected to reach US$ 13 Billion by 2025
- Industry Size: less than 1% of Gross Domestic Product

Cost Drivers

- Vehicle/delivery transportation cost
- Cardboard boxes, bags etc. for packaging
- Gas, mileage and cost of hiring driver/delivery person
- R&D for delivery platform design & maintenance

Revenue Streams

- Listing Services
- Third party advertisements on the food delivery application
- Delivery Fee charged from customers
- Paid subscriptions and loyalty programs for additional services
- Commissions charged from partners per order

Major Players

- Zomato, Swiggy, Domino's Pizza, Faasos, KFC, Pizza Hut among major players.
- Swiggy and Zomato are dominating the food delivery market with almost 90% of the market share. In January 2021, they recorded orders in volume of 1.8-2 million per day

Key Performance Indicators

- Average number of deliveries
- Average Order delivery time
- Total Amount per order
- %of driver idle time
- No. of support tickets raised by restaurants and delivery agents
- Churn Ratio
- Customer Lifetime Value
- Ratings given by customers

Value Chain

Research & Development	Planning & forecasting, Design, Establish online presence, Menu & promotion
Logistics & Supply Chain	Suppliers value chain, Raw materials for preparing meals
Ordering & Delivery	Ordering Platform, Delivery arrangements, Payment, CRM management
Other Services & feedback	Additional Services to improve performance, Complaints & Queries, Customer ratings

Latest in the industry

- Zomato has taken the company public with the first round of the IPO
- Amazon started food delivery service – Amazon Foods
- Swiggy has introduced the Swiggy genie and Swiggy COVID care package along with grocery delivery services

Porter's 5 Forces Analysis

Suppliers Pow.	Low- Standardization is the key objective while enrolling suppliers, Main resource i.e. technology that is not always developed internally
Bargaining Power, buyers	High- Customers request lower prices and higher quality Very little room for differentiation Absence of switching costs for customers
Threat from new entrants	High- Tier 3, 4 & 5 cities are yet to be tapped Opportunity for inorganic growth through private brands from their own cloud kitchens, partnering with food joints
Substitutes	High- The main substitute are deliveries performed by restaurants directly which is slowly fading due to the ongoing pandemic and latest trends in the industry
Competition	High- Because of the high bargaining power of buyers and low product differentiation, the rivalry between existing competitors is high

Growth Drivers

- Growing working population & inflating income levels
- Introduction of contactless delivery services due to COVID-19 and new safety standards- better quality
- Vendors targeting smaller cities including Tier 3 and 4
- Rising trend of ready-to-eat (RTE) and quick home delivery
- Increasing access to high-speed internet facilities

Market Segmentation

Single-brand Cloud Kitchens	Delivery Aggregators (Full Stack)
Key offering- Quality food in particular cuisine	Key offering- On time delivery of food
Market size- Limited for any single brand	Market size- Large as a lot of brands
Gross Margins- High to moderate	Gross Margins- Moderate to low
Order frequency- Moderate to low	Order frequency- Very high

Part F – Practice Guesstimates

Practice Guesstimates: Table of Contents

The Consulting Club

Toll Plaza

Estimate daily revenues of Delhi-Gurgaon toll plaza

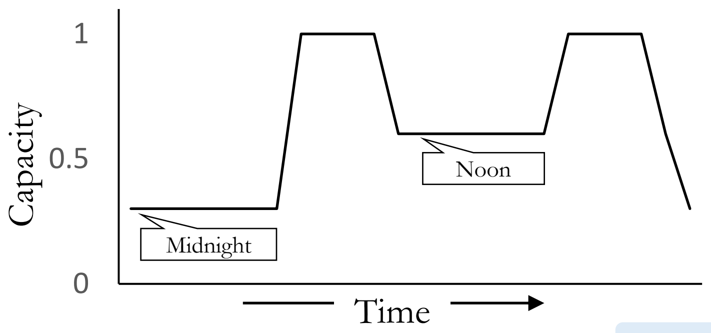
Assumptions

- 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

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

Fare per vehicle

- 4 wheelers: 70% of daily traffic, Fare – INR 30
- > 4 wheelers (trucks): 30% of daily traffic, Fare – INR 70

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

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

TOI Revenues

The Consulting Club

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

The Consulting Club

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	Age Spread		Penetration
Rural	Middle Income: 0.30*91cr = 27.3cr	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*5.46c r = 0.0055cr
Rural	High Income: 0.10*91cr = 9.1cr	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: 0.30*39cr = 11.7cr	0-25	0.50*11.7cr = 5.85cr	0.01*5.85cr = 0.0585cr
Urban	Middle Income	25-50	0.30*11.7c r = 3.51cr	0.1*3.51cr = 0.351cr
Urban	Middle Income	50+	0.20*11.7c r = 2.34cr	0.005*2.34cr = 0.0117cr
Urban	High Income: 0.10*39cr = 3.9cr	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

Toothbrushes

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: 400 million
  - Penetration: 0.9
- **Rural**
  - #Population: 900 million
  - Penetration: 0.8

No of toothbrushes in households = 360+720=1.08 billion
Total Number of toothbrushes = 2.16 billion

E-Rickshaw

The Consulting Club

Revenue of a typical e-rickshaw driver per day

Assumptions

- Driver operate on full capacity
- They operate on fixed routes and fare
- Fare is the only revenue source
- Traffic across trips is uniform

Methodology

- For each round trip the e-rickshaw travels a fixed distance- Ex -between Metro and Mallkaganj
- Average time per round trip = 30 mins with a waiting time of 5 minutes on each side of trip
- For further segmentation-can assume different waiting period for peak and non-peak hours, though average round trip time can be assumed constant assuming normal traffic

Daily Revenue

Round trips | **2 * Fare/trip**

10 hours/day 100% capacity × 1.5 round trips/hr × Rs. 40/trip

Daily revenue = 10*1.5*40*2 = Rs. 1200

Smokers in India

The Consulting Club

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

The Consulting Club

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

The Consulting Club

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

The Consulting Club

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

- **# of TT balls**: 14208
  - # of matches/day: 71040
    - Commercial: 14800 x 4 = 59200
      - # of table hours: 14800*
      - Matches/ hour: 60/15 = 4
        - Time/match: 14 mins
        - Idle time: 1 min
    - Private: 59200 x 0.2 = 11840
  - # of balls/match: 1/5
    - Average life of ball: 5 matches

*Refer to the next Slide for calculations

Cont. on next slide:-

TT Balls

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

The Consulting Club

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

The Consulting Club

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

The Consulting Club

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

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

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

Hours of the day

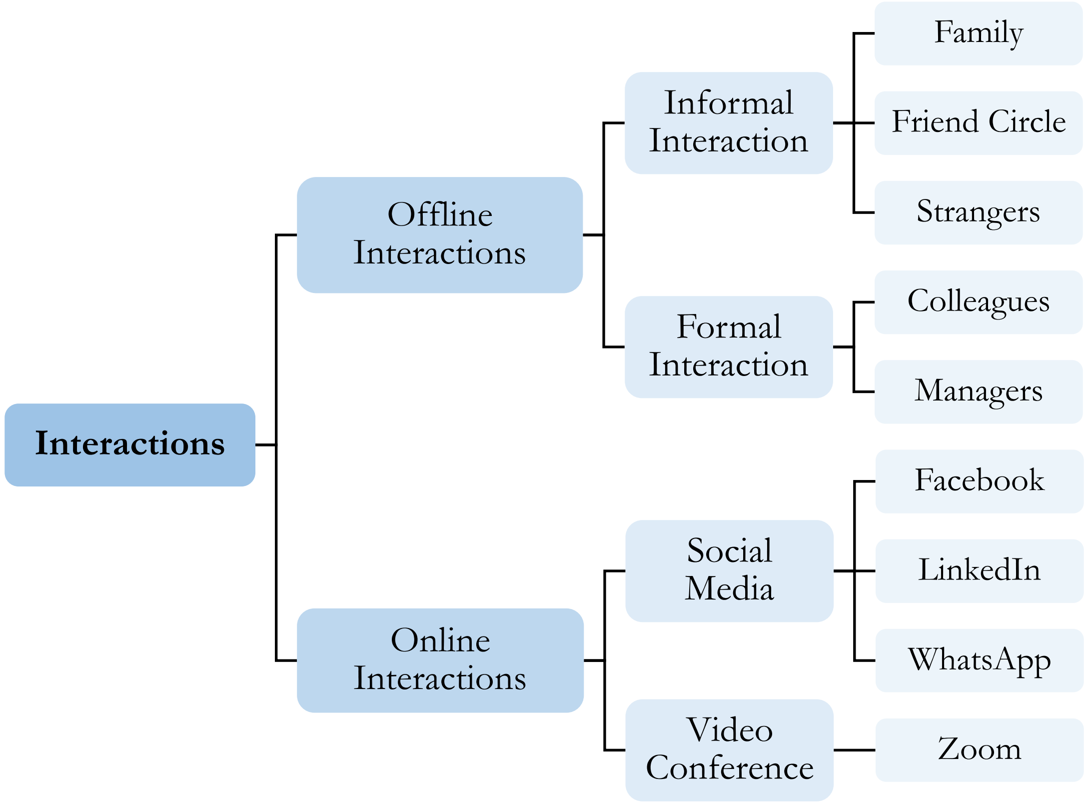
Domestic Flight Rush	6:00am – 9:00 am	9:00am – 6:00 pm	6:00pm – 9:00 pm	9:00pm – 12:00 am	12:00am – 6:00 am
	100%	60%	100%	60%	20%

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

People you met

Estimate the number of people you interacted with over the last year



Total People	Probability of Interaction	People interacted with
10 (Family)	1.0	10 * 1.0 = 10
50 (Friends)	0.9	50 * 0.9 = 45
250 (Strangers)	1.0	250 * 1.0 = 250
200 (Colleagues)	0.75	200 * 0.75 = 150
10 (Managers)	1.0	10 * 1.0 = 10
500 (Facebook)	0.1	500 * 0.1 = 50
200 (LinkedIn)	0.2	200 * 0.2 = 40
250 (WhatsApp)	0.8	250 * 0.8 = 200
50 (Zoom)	1.0	50 * 1.0 = 50

Total people interacted with = 10 + 45 + 250 + 150 + 10 + 50 + 40 + 200 + 50 = 805 ~ 800
However, there would be potential overlaps, e.g. Friends and Colleagues, Facebook friends and LinkedIn connections, So we can introduce a normalizing factor, of let's say 0.75 to discount the potential overlaps.

Hence normalized value for people interacted with = 800 * 0.75 = 600

Tractors in India

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

- Population of India
  - Urban (30%)
    - 10% of rural area figure
  - Rural (70%)

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

- Rural (70%)
  - Secondary Sector (20%)
  - Primary Sector (80%)
    - **Other primary occupations (20%)**
    - **Farming (80%)**
      - **Farm Owners (20%)**
        - **Financially capable of owning tractor & tractable farming area (20%)**
          - **Limited/No access to markets (20%)**
          - **Access to markets (80%)**
        - **Poor Finances and/or non-tractable farm area (80%)**
      - **Wage Earners (80%)**

Cont. on next slide:-

Tractors in India

The Consulting Club

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.

Tier 1 Cities

Population – 90 million
#families ~ 20 million

Income Spread and product lifecycle factor

- **Poor**
  - Population = 60%
  - #families = 12 million
  - Car buyers = 0
- **Middle Class**
  - Population = 38%
  - #families = 7.6 million
  - Car buyers ~ 50%
  - Lifecycle ~ 7 years
- **Uber Rich**
  - Population = 2%
  - #families = 400,000
  - Car buyers ~ 100%
  - All Premium
  - Lifecycle ~ 5 years

Penetration Factors/Acceptability Factor

- Middle Class – **Normal Cars**
  - #families ~ 440,000
  - Average Price = Rs. 6,00,000
  - Penetration - 5%
- Middle Class – **Premium Cars**
  - #families ~ 110,000
  - Average Price = Rs. 22,00,000
  - Penetration – 5%
- Uber Rich – **Normal Cars**
- Uber Rich – **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

DTC Bus

Estimate the number of DTC buses in Delhi

Assumptions

1. Only Working population uses buses in consideration.
2. Only buses that are operating are counted.
3. Calculation on the basis of buses running on a normal weekday morning.
4. No. of people per bus = 50
5. High Income people do not use buses and include upper middle and high class.

Methodology

1. Population of Delhi ~ 3 Cr
2. Dividing by age, income group and preference of transport.
3. In Middle Income group, Metro and Motor Cycle are comparatively affordable and thus lesser people use buses.
4. Total no. of buses = No. of people using buses on a busy morning simultaneously/50
5. At any given time only, 10% people will be able to use the buses.
6. DTC buses = 70% of total buses plying i.e. 30% private.

Number of people using buses in Delhi

- **Children (0-15 yrs)**
- **Working Pop. (16-65) yrs**
  - Low Income (40%)
    - Cycle (20%)
    - Bus (60%)
    - Metro (20%)
  - Middle Income (40%)
    - 2 Wheelers (30%)
    - Bus (30%)
    - Metro (40%)
  - High Income (20%)
- **Geriatric (65 and above)**

No. of people using buses regularly = ((0.4 X 0.6) + (0.4 X 0.3)) X 0.4 X 3 Cr = 43,20,000

At peak hour, considering 10% in buses at any given time = 0.1 X 43,20,000 = 4,32,000

No. of Buses = 4,32,000/50 = 8,640

DTC : PRIVATE = 70 : 30

=> No. of DTC Buses in Delhi = 0.7 X 8,640 = 6,048

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	No. of Households	No. of TV/Household
	20% of Total Cost = $1000	60% of Total Cost = $600	20% of Total Cost = $200	25 million 3 member/family ~ 8 million	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

The Consulting Club

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

The Consulting Club

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

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

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

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.

Daily Revenue of 24x7 Retail Store Chain

Estimate the daily revenue of 24x7 chain of Retail Store

Assumptions

- Currently the brand has around 50 stores in Delhi NCR out of which only 20(40%) are in NCR
- Considering a normal working day
- Here we are considering both online and offline stores
- 3 counters in each store with an average footfall of 60 (peak hour)

Methodology

- Peak can be 12 hours from 8 PM to 8AM for offline stores; when other convenience stores are not operating
- Non Peak hours report a sales of 50% compared to peak hours
- Online order are almost 50% of offline in NCR
- Three broad product categories present.

Note: The stores in Gurgaon and other NCR areas have an online presence and can deliver using Zomato/ Swiggy Stores, hence we need to account for them as well

During Peak hours:

1 billing every 6 mins/counter :30 orders per hour

Hence total revenue per store(offline during peak hour)

= (0.3*300+0.5*250+0.2*200)*30 = 6810

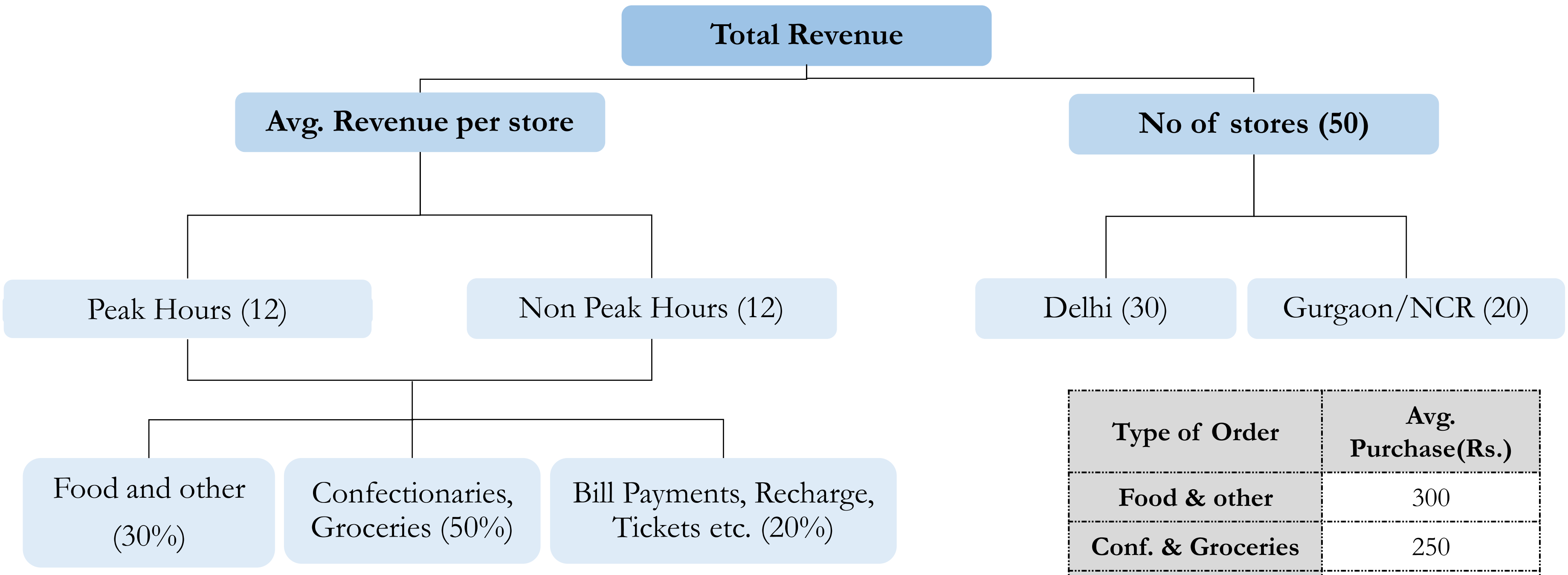
Extending this to daily revenue :

18X6810= ₹ 1,22,580

Now we include the online and offline sales over the complete Delhi NCR region

Total Revenue = (50+20*0.5) *122580

= ₹ 73,54,800



Type of Order	Avg. Purchase(Rs.)
Food & other	300
Conf. & Groceries	250
Bill Payment etc.	200

Hence, the daily revenue of 24X7 chain of retail stores is ₹ 73,54,800

Automobile Tire Market

The Consulting Club

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%)**
    - **Lower Income (40%)**
    - **Middle Income (40%)** — 70% drink alcohol
    - **High Income (20%)** — 90% drink alcohol
  - **Older population (65yrs+) (10%)**

#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
  - Total Tourists in India
    - Age Group: 18-50 yrs (65% of 1.4bn)
  - # Tourist Spots
    - 15
- Foreign Tourists

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)

The Consulting Club

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

3, 4 & 5 Star & Mall restaurant

People who dine out daily

Avg. Daily Capacity

Total = 0.3*0.5*20million/14 + 0.3*0.5*20 million/7 + 5million*0.5*4/30 ~ 980K

Seating capacity * occupancy rate * working hours = 40*0.4*8 = 96

Total # 3,4, 5 star & Mall restaurant = 0.5*10.2K = 5.1K

Total # 1 & 2 star restaurant = 980k/96 = 10,200K

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 Delhi University

The Consulting Club

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

Part G – Practice Cases

Practice Cases: Table of Contents

The Consulting Club

Practice Cases: Table of Contents

The Consulting Club

Apple Orchard Farmer

Profitability | Easy | Bain & Co.

The Consulting Club

Your client is a farmer who owns an apple orchard. He has seen a reduction in profit in the past year. Find the reasons and recommend solutions.

Ma'am, if I understand correctly, our client is a farmer who owns an apple orchard. He has seen reduction in profit in the past year and I have been approached to find the reasons behind this.

Yes, you are right. Please go ahead!

I would like to know more about the farmer and product to understand the business in detail. Where is he operating? How much land does he own or rent? And is he following any parallel source of revenue?

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

Profitability | Easy | Bain & Co.

The Consulting Club

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

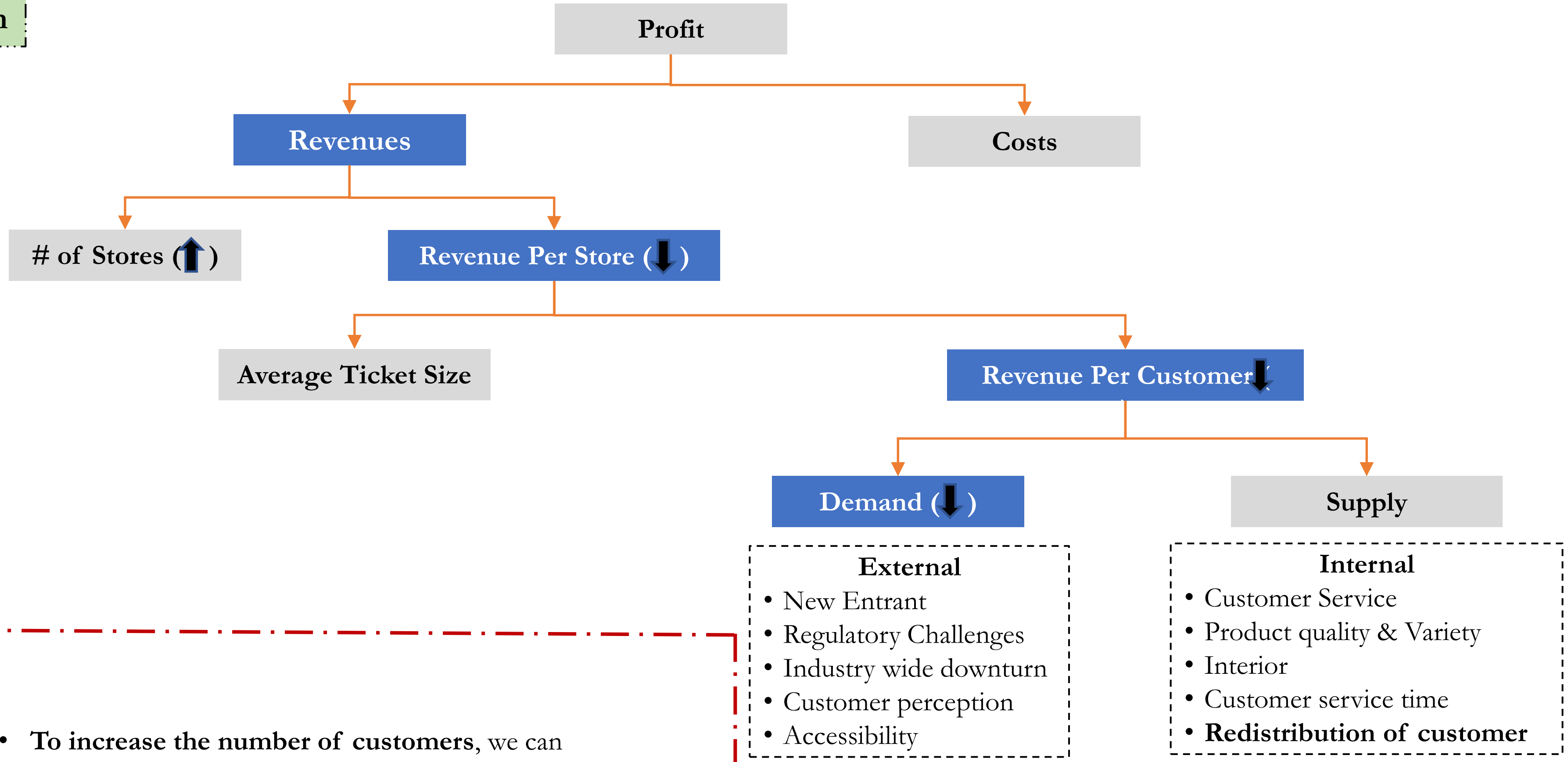
Profitability | Easy | Bain & Co.

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



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.

Steel Manufacturer Declining Profits

Profitability | Moderate | BCG

The Consulting Club

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 Declining Profits

Profitability | Moderate | BCG

The Consulting Club

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
- 3-4 Major suppliers
- Raw Materials: Coal, Iron Ore, Limestone
- Contractual Relationship
- Declining inputs
- Declining reputation among suppliers
- Moved from credit based to advance based payment system

Inbound Logistics
- Smooth Flow
- Optimized
- Increasing fuel costs

Production
- Capacity: 5.4 MT
- No bottlenecks
- Under-production
- Increasing per unit production costs
- Low capacity utilization

Outbound Logistics
- Smooth Flow
- Optimized
- Increasing fuel costs

Customer Pull
- Down to 3.2MT from 4.3MT
- Approx. 25% decline in demand
- Reputation on decline
- Credit payment (1 month cycle)

Competitor Benchmarking

Bigger players have their own mines

Lower production costs for competition due to economies of scale

Pharmaceutical Profit Analysis

Profitability | Moderate | Kearney

The Consulting Club

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 Profit Analysis

Profitability | Moderate | Kearney

The Consulting Club

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 Declining Profits

Profitability | Moderate | BCG

The Consulting Club

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 Declining Profits

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 Declining Profits

Profitability | Moderate | BCG

The Consulting Club

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

2024 Olympic TV Rights

Profitability | Hard | McKinsey

The Consulting Club

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

Profitability | Hard | McKinsey

The Consulting Club

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, etc.
  - **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

Automobile Company Declining 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

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 Declining Sales

Revenues | Easy | Bain & Co.

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

- Sales ↓
    - Quantity ↓
        - Supply Side issue
        - Demand Side
            - Marketing
            - Customer Pull
                - Visibility
                - Likability
                - Affordability
                - Feasibility
                    - Regulations
    - Price

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

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.

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 upto 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 etc.
- **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

Revenues | Easy | Kearney

The Consulting Club

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 etc.

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

Revenues | Easy | Kearney

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 etc.

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.

Shopping Mall in South Delhi

Revenues | Moderate | BCG

The Consulting Club

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, etc) & external spaces (Parking lots, rooftops, etc.)

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, etc.

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 etc. 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

The Consulting Club

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, etc.
- **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 = $\sum_{\text{Categories}}$ 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 etc.
- **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 etc.
    - Foot-maps, Signboards etc.
- **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 etc.

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 etc. (Better collection of data is essential)
Competitive Benchmarking with similar businesses e.g. Gaming Arcades
Understanding Elasticities basis operational experience

Cost Reduction for 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.

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 etc.

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 etc. 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.

Cost Reduction for 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 etc.
- 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 etc.) 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

Cost Reduction | Easy | Kearney

The Consulting Club

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

The Consulting Club

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.

Food Manufacturer Case

Cost Reduction | Moderate | BCG

The Consulting Club

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!

Food Manufacturer Case

Cost Reduction | Moderate | BCG

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.

IT Services Client

Cost Reduction | Moderate | Kearney

The Consulting Club

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

Cost Reduction | Moderate | Kearney

The Consulting Club

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 High Costs

Cost Reduction | Moderate | BCG

The Consulting Club

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 High Costs

Cost Reduction | Moderate | BCG

The Consulting Club

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 Retail Chain

Cost Reduction | Moderate | Bain & Co.

The Consulting Club

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, etc. 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 Retail Chain

Cost Reduction | Moderate | Bain & Co.

The Consulting Club

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 and 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.

Golf Course

Pricing | Moderate | McKinsey

The Consulting Club

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

Pricing | Moderate | McKinsey

The Consulting Club

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

Pricing | Moderate | Kearney

The Consulting Club

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

The Consulting Club

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

Hepatitis-B Drug

Pricing | Hard | McKinsey

The Consulting Club

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

On Demand Truck Platform

The Consulting Club

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 etc 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 (eg 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

The Consulting Club

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 etc 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

Ride hailing Helicopter Cab Service

Pricing | Hard | Kearney

The Consulting Club

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 saftey 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

Pricing | Hard | Kearney

The Consulting Club

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
- **Target Audience**
  - Middle Class target
  - Business heads don't pay out of their pocket. Convenience & experience more of a concern for corporates.
- **Pricing**
  - Benchmark with trains
  - Price to be less than flight but more than train

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.

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.

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, etc.
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

Home Automation Player

Market Entry | Hard | McKinsey

The Consulting Club

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 etc. 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 s000000000000000000000000000ounds 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 eg., 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

The Consulting Club

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 etc.
- Exclusive sales through Amazon/Flipkart
- Bundling with products like Alexa or any other home controller if possible..

Home Insurance Entry

Market Entry | Easy | BCG

The Consulting Club

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

The Consulting Club

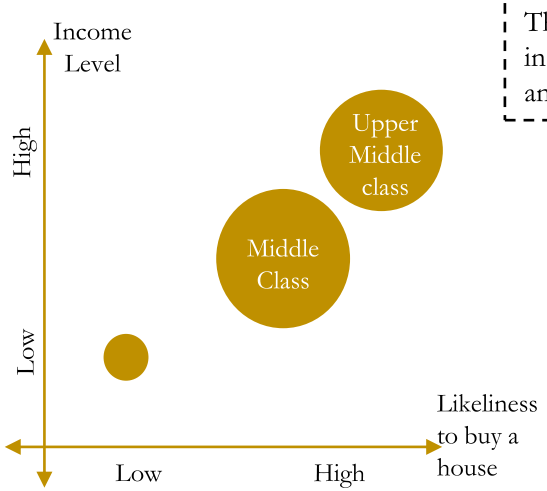
Your client is a multinational insurance company and wants to enter the home insurance segment in the Indian market. It already has presence in health and life insurance segment in the Indian markets. How should they go about it.

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.

Gold Mine in Mongolia

Market Entry | Hard | McKinsey

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.

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 418% ROI in the first year itself which is way more than our target of 25% ROI in 3 years. Also, if we choose to expand, in the first year we are making 444% ROI. In the second year, as Profit after tax is further increasing 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 should be preferred due to higher ROI.

Gold Mine in Mongolia

Market Entry | Hard | McKinsey

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	NPV	-3,46,24,343
Quantity	1,20,000	P/E ratio	Assumed 3
Revenue	21,60,00,000	Selling Price	1,15,76,29,602
Operating Costs	9,60,00,000	PV of Sales Proceeds	86,97,44,254
Fixed Costs	2,50,00,000	ROI	418%

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	11,04,00,000
Fixed Costs	2,50,00,000	2,75,00,000
Option Purchase	2,00,00,000	
Profit Per Annum (after tax)	5,25,00,000	7,98,70,000
Tax Rate	30%	
NPV	-2,62,56,950	
P/E ratio	Assumed 3	
Selling Price	1,21,62,01,352	
PV of Sales Proceeds	91,37,50,077	
ROI	444%	

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.

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 etc. 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 etc.?

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

Market Entry | Hard | Bain & Co.

The Consulting Club

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

Market Entry | Hard | Bain & Co.

The Consulting Club

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, etc.
- Close monitoring of parameters like avg increase in viewership per episode etc.
- High marketing efforts needed to make the consumers aware. YouTube and FB to be primary drivers for online marketing.

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?

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 evauate 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

Apparel Business Topline

Growth | Easy | Kearney

The Consulting Club

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 etc., 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 | Kearney

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

Appliance Distribution Company

Growth | Easy | BCG

The Consulting Club

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 etc. 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 etc. 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 etc. 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

The Consulting Club

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 etc.
- 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 etc. 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.

Gift Card Firm

Growth | Moderate | BCG

The Consulting Club

Your client is a gift card firm. They provide back-end support for gift cards to partners (like Amazon) which includes activities like code generation, checks and balances, tech support. They would like you to suggest ways in which they can grow their sales revenue.

So our client is a gift card firm and they are looking for ways to increase their revenues?

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?

They provide back-end support for gift cards to partners (like Amazon) which includes activities like code generation, checks and balances, tech support.

What is the customer base for our client and what are the features they use gift cards for?

Our clients include companies like Amazon who provide gift cards to their own customers it is profitable for them because it provides upselling, unused balance gets expired, gives interest, fulfils their working capital requirements etc.

What is the end benefit to the customers who buy these gift cards?

Gift cards are expensive than traditional gifts, but they offer flexibility while gifting.

Thank you! Just provide me a couple of minute of gather my thoughts and analyse the problem.

Sure!

If the client wants to increase the revenue they can either do it organically or inorganically by buying or partnering with other companies. Which one I should focus on?

You can look into organic growth.

Revenues are total number of customers multiplies by revenue per customer. We can increase them to increase total revenue, which one of these is our client looking to do.

You can look into how the client can increase the total number of customers.

To increase the total number of customers the client can look into ways to retain the existing customers and getting new customers.

Yes. Go Ahead!

To acquire new customers the client can look for new partners like other ecommerce firms, travel agencies etc., it can venture into different customer segments like selling directly to individuals and corporates and can come up with new use cases like specialised holiday gift cards etc.

Good Suggestion! What else can we do?

To increase customer retention the client can look into improving services like reducing complaint resolution, specialised lines for large customers etc. The client can also run special promotions for existing customers to keep them loyal.

Good Idea!

The client can also look to increase revenue per customer, this can be done by introducing new gift cars with higher values or again by introducing specialised gift cards holiday based gift cards. Are there any other avenues I should look at?

Yes, these recommendations sound good.

Gift Card Firm

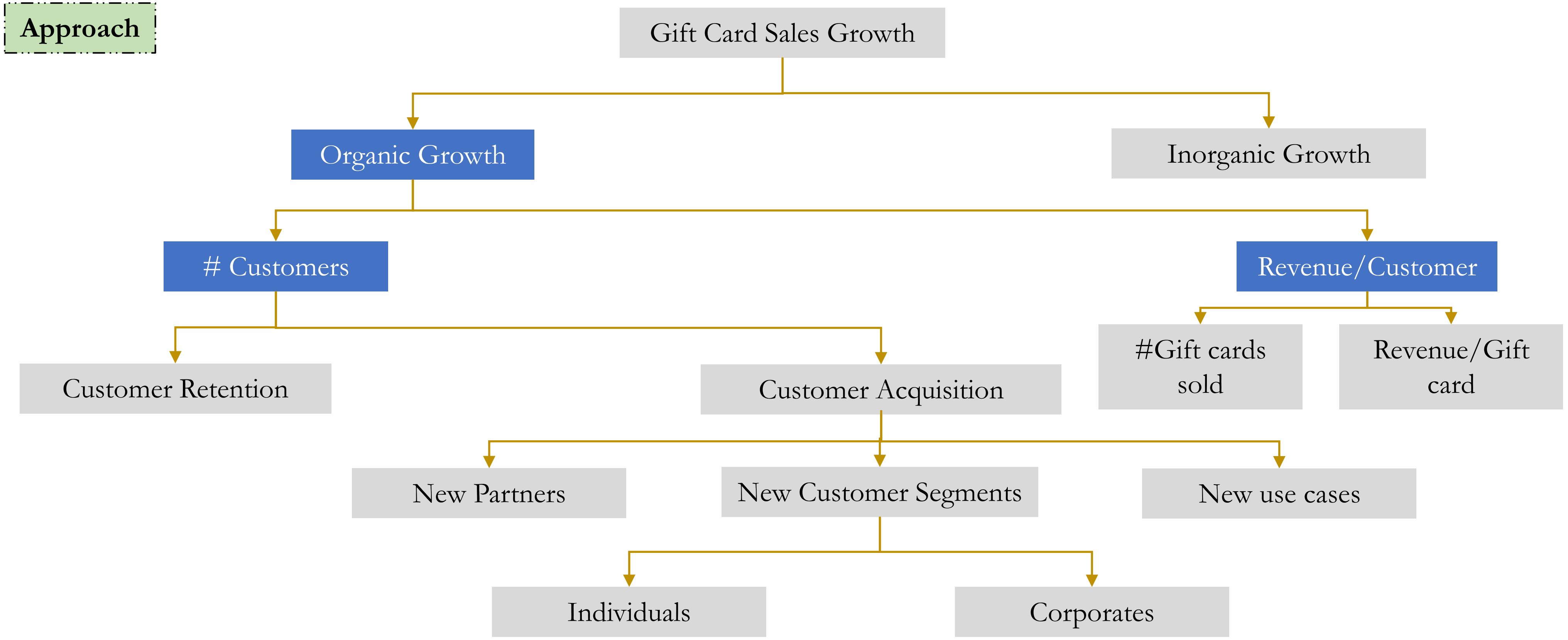
Growth | Moderate | BCG

Your client is a gift card firm. They provide back-end support for gift cards to partners (like Amazon) which includes activities like code generation, checks and balances, tech support. They would like you to suggest ways in which they can grow their sales revenue.

Case Facts & Notes

- Provide back-end support for gift cards to partners like code generation, checks and balances, tech support.
- Gift cards are expensive, but offer flexibility while gifting
- Customer experience is dependent on the partner (Amazon, Hotel service)
- Profitable for client as it provides upselling, unused balance gets expired, gives interest, working captial requirement

Approach



Recommendations

- New partnerships with E-commerce, travel, restaurants/food, hotels, spas, entertainment etc.
- New occasion based use-cases like Diwali gift cards, Anniversary or Birthday gift card.
- Better marketing, promotion to retain current customers.
- Gift cards at more price points, preferably higher price points to improve revenue per gift card.

Light Bulb Company

Customer Satisfaction | Easy | BCG

The Consulting Club

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

Customer Satisfaction | Easy | BCG

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

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

Customer Satisfaction | Moderate | Kearney

The Consulting Club

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

Customer Satisfaction | Moderate | Kearney

The Consulting Club

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?

- 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

Resolution & Post Call Service

- Call center staff capability? - above average.
- No complaint post connection to staff.
- Efficiency & motivation of staff? - Optimal

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

Airline Acquisition

M&A | Moderate | McKinsey

The Consulting Club

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 etc.

No, these recommendations look good

Airline Acquisition

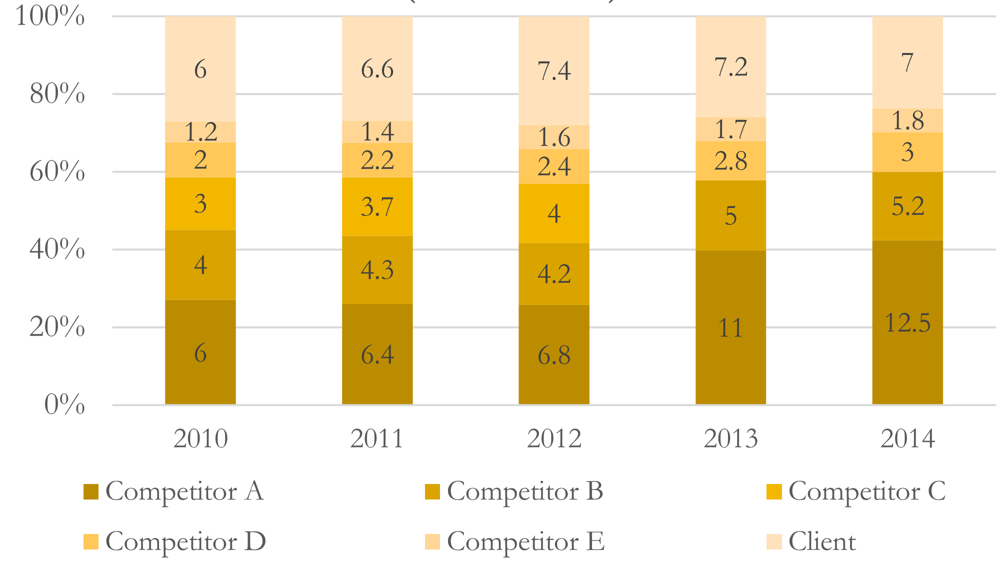
M&A | Moderate | McKinsey

The Consulting Club

A major airline operator needs advice whether they should make an acquisition to drive up their revenues, and if so, which one.

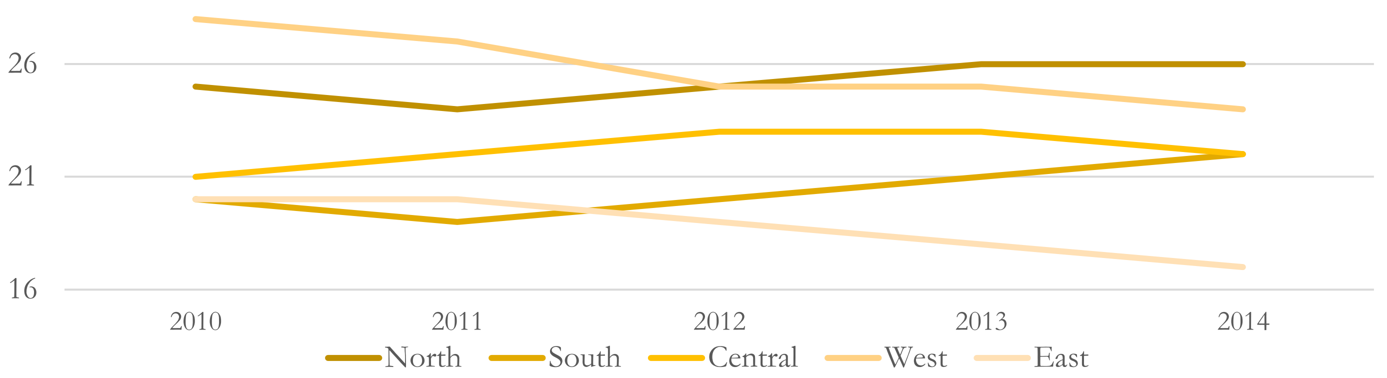
Approach — Need for acquisition → (Company + Industry) analysis → Due diligence → Valuation + Financing decisions → Exit strategies

Exhibit A: Market Share among airline carriers (in US $ billion)



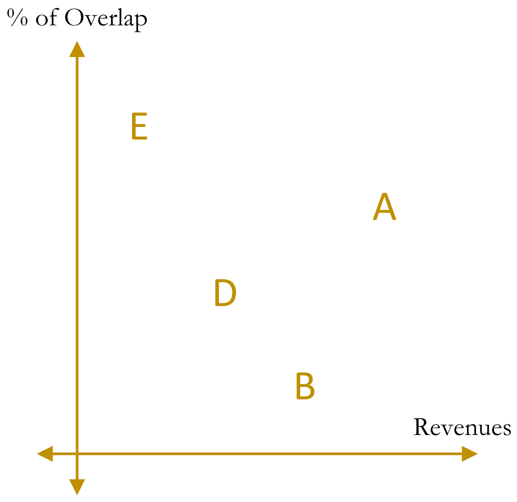
Competitor A: Major player operating routes that connects major cities across the country as well as connecting them to international destination
Competitor B: Emerging airline player operating flights in Central, West and East regions
Competitor C: Acquired by Competitor A in 2013
Competitor D: Emerging 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)



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



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.

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

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.

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.

FMS Students Falling Ill

Unconventional | Easy | BCG

The Consulting Club

Recently, the students at FMS have been falling ill. Analyze the reason and recommend solutions.

Sir, to reiterate, students are falling Ill in FMS and I have to find out the reason why it is happening.

Yes, go ahead!

I would like to ask a few clarifying questions.

Sure, go ahead!

Since when are we observing the problem and what are the symptoms?

Problem is being observed for the past 2 days. Symptoms are sore throat, nausea, fever.

This means that the disease is probably a communicable disease. How many students are impacted?

Around 30% students of FMS are impacted.

And is the illness rate uniform across different batches and gender?

Good question. Actually, No. 80% of the students impacted are first year students and 60% of the students impacted are females.

That strange. What is the male: female ratio in the college? And is any activity, event related to 1st year students going on in the college?

Good question! Female form 30% of the students. And summer placements event is going on in the college.

Are students other than FMS in other DU colleges also impacted?

No, the illness seems to be limited to FMS students

Thank you! I think that's sufficient for now. Just provide me a couple of minutes to gather my thoughts and analyse the problem.

I would like to break the problem into all the activities a student go through during summer internship project and try to analyse different sources of illness during these activities. I will break the activities home activities, commuting activities and activities in college into sources of disease can be environmental, physiological and psychological as summer placements are a high stress activity. Would you like me to deep dive into a particular source or activity.

Based on your preliminary questions, what do you think you should approach first?

Since the illness is related to FMS students only, I would like to focus on in college activities only. Also, since the illness isn't uniform across gender and batches, I would like to focus on physiological factors. Am I thinking about it in the correct way?

Yes, Go ahead.

There are 2 major activities that have high physiological impact. Consuming contaminated food during breaks and using same unhygienic washrooms. Since the female students are impact unproportionally, it would be safe to assume that the problem is related to usage of washrooms.

Good Analysis. The problem is due to infrastructural constraints at FMS all female students have to use the same washroom during placement season. So to move ahead. What can be wrong with washrooms?

The problem can be either related to improper cleaning of washrooms or less frequent cleaning. Are washroom being cleaned frequently?

Yes washrooms are being cleaned but male and female washrooms have different Sulabh workers and female workers are on leave. So the frequency of cleaning is impacted. What solutions will you recommend?

We can hire temporary staff for the same. Another solution can be open washrooms on other floors for female students or allowing access to male washroom for ladies. One solution can be to get male Sulabh workers to clean ladies room as well.

Thank You! That will be all.

FMS Students Falling Ill

Unconventional | Easy | BCG

The Consulting Club

Recently, the students at FMS have been falling ill. Analyze the reason and recommend solutions.

Case Facts & Notes

- Problem is being observed for the past 2 days.
- Symptoms – Sore throat, nausea, fever.
- 30% of the students impacted. Limited to FMS Delhi students only.
- 80% students are 1st year and 60% of the ill students are female.
- Sex ratio-M:F=7:3
- Placement started 3 days ago.
- Infrastructural Constraint Limited- # of restroom accessible during placements.
- Sulabh workers for male and female restrooms are different.

Approach

Students' Journey during the placement process

Wake up & get ready / **Commute to Campus**

Environmental Factors
- Air Pollution
- Public disease outburst
- Temperature

Gather in Hall-B

Psychological factors
- Study
- Interact with peers
- Sleep

Physiological Factors
- Air-contaminants
- Temperature

Attend Process (Interview)

Psychological factors
- Interact with peers
- Stress

Food and Refreshment

Physiological factors
- Water Contamination
- Food Contamination
- Food Infestation

Restroom Usage

Physiological factors
- Smoke Allergy
- Unhygienic Washrooms
- Unhygienic Common Areas

Go back Home

Psychological factors
- Less than usual sleep
- Stress

Unhygienic Ladies Washroom
- Not Cleaned Properly
- Not Cleaned Frequently
  - Manpower → Labour Shortage → Female Sulabh Workers on Leave
  - Resources

Recommendations

- Hire temporary staff for the same.
- Open washrooms on other floors.
- Open access to male washroom for ladies.
- Get male Sulabh workers to clean ladies room as well.

Logistics Efficiency

Unconventional | Easy | Kearney

The Consulting Club

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

The Consulting Club

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

Increase in Road Accidents

Unconventional | Hard | McKinsey

The Consulting Club

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 etc.

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

Unconventional | Hard | McKinsey

The Consulting Club

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

The Consulting Club

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

Unconventional | Hard | McKinsey

The Consulting Club

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

The Consulting Club

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.

Coffee Shop

Due Diligence | Moderate | BCG

The Consulting Club

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 etc?

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 like etc.

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

Due Diligence | Moderate | BCG

The Consulting Club

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 etc, 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 etc. 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

Due Diligence | Moderate | BCG

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

 # Customers

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**

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**

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

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 etc and about the VC firm – their pre existing portfolio, their intention with this investment etc.

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

Due Diligence | Challenging | Kearney

The Consulting Club

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 etc.

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 etc.
They could also increase promotion activities – get cricketers to promote the app, become partners for cricket tournaments, have experience centres (kiosks) in stadiums, malls etc. 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 etc. We could also try to put restriction on the winnings, games, player changes etc 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 etc. 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 (eg 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 etc.

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 etc.
- 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 etc
- Replace w/chatbots

Promotional
- Targeted promotions over mass promotions
- Reduce no. of channels

Part H – Appendix

Primer to Behavioural Prep

- What are you doing here?
  - Why Consulting?
- Why did you pick your school?
  - What do you think consultants do?
- What do you know about the job & the firm?
  - Why our firm over competitor?
- Tell me about yourself?
  - What accomplishments have given you the greatest satisfaction?

- A time you showed leadership skills
  - A time you were a team player
- A time you persuaded a group
  - Tell me about a recent crisis you handled
- Have you ever failed at anything?
  - A time you took initiative
- What type of work do you like the best?
  - What other firms are you interviewing?

Primer to Behavioural Prep

The Consulting Club

- Travel schedule? Typical work hours in a day?
- Why should I hire you?
- What type of consulting does the firm do?
- In what industries does the firm specialize?
- How big is the firm?
- Training programs the firm offers
- Type of work an entry level consultant do
- What experience/skills do you feel are particularly transferable to our organisation?
- Client contact in first year
- Firm's mentorship program
- How is a case team picked?
- How many consultants does the firm expects to hire? Compare to last year?
- How often do you get reviewed?
- Where do consultants go when they leave the firm?
- Is it possible to transfer to other offices and international offices?
- No of professionals in the firm

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

Supplementary Frameworks

The Consulting Club

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

Framework	Component	Sub-component	Factors
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

Guesstimate Cheat Sheet

The Consulting Club

Total Population of India ~140 Cr

Gender Split 50:50

Urban to Rural 40:60

Average Household Size
4-5 people/household

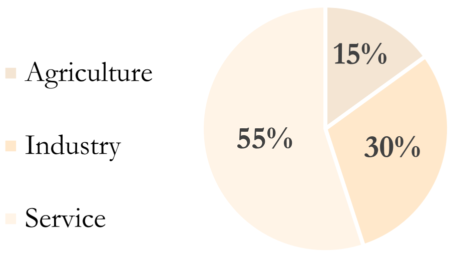
Age-wise Distribution of Population

Age Bracket	Percentage
0-14 Years	30%
15-24 Years	20%
25-34 Years	15%
35-44 Years	10%
45-54 Years	10%
55+ Years	10%

Tips & Tricks

- Always clarify the problem with the interviewer to understand the question
- Construct logical approach to the problem
- Analyze multiple approaches to see which one suits better
- State your assumptions clearly

GDP Distribution



Total GDP (~3 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	2-3 Cr
Area of Mumbai	600 square kms
Population of Mumbai	2-3 Cr

Internet Connectivity Distribution

Internet Penetration
800 Mn

Smart Phone Penetration
300 Mn

Income wise distribution of population

Income Segment	Percentage
Lower Income	20%
Middle Income	60%
Upper Income	20%

Fit Interview Questions

The Consulting Club

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

Introduction	**Must include:** Where you have been / what you have done, who / where you are now, and what you are interested in going forward **What they are looking for:** Interviewers remember stories and accomplishments more than common answers **Strong answers have:** Powerful "hook" –your value proposition that highlights how you have the competencies they are recruiting for
Why Consulting?	**Company fit:** Interviewee should know about the type of work, projects and the firm's lifestyle **Industry interest:** Interviewee should be able to convince the interviewer that they are committed to consulting **Strong answers have:** This question answered in opening pitch, structured reasons why, and demonstrates success-oriented behaviour
Questions about you	**Important to note:** Interviewers remember stories and accomplishments more than common answers **Types:** Context / challenge you faced, failure, achievements and learnings from it **It's good to include:** A learning element from a situation where you displayed leadership skills and took an initiative, bullet form structure, positivity, emotion and energy

Non-verbal Communication during Interview

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.

Meet Our Team: Consulting Club (2021-22)

The Consulting Club

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Karan Singhal

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Angshuman Das

Manan Rishi Aneja

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