

# WHARTON CONSULTING CLUB CASEBOOK 2024-2025

KNOWLEDGE FOR ACTION

### Editors' Note

Dear Wharton Consulting Club (WCC) Member,

We are happy to present this year's casebook to aid you in your preparation. This casebook is meant to provide you with a brief overview of consulting recruiting and interview preparation, as well as a number of practice cases. Please note that this is meant to supplement the excellent work done by our and other schools in earlier casebooks, so we strongly encourage you use diverse resources to prepare. We have also included a list of some good/classic cases from other casebooks that we recommend you to practice.

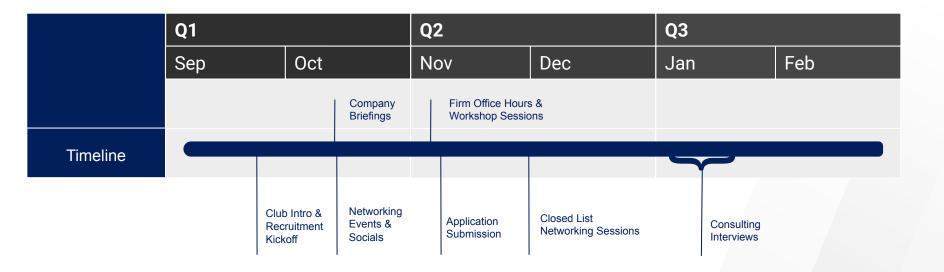
We wish you a productive recruiting experience!

Best wishes,
Alicia & Ameya
WCC Resource Development Team

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### Consulting Recruitment Schedule



Most candidates will spend up to 60-80 hours of preparation. Some individuals will require less or more time depending on their preparation and previous experience

# **Case Interview Tips**

### **Pre-Interview Tips**

In the pre-interview period (Q1-Q2), apart from casing and interview prep, you would also have to attend many of events below (not exhaustive)



WCC Club events

**Consulting Kickoff Day** 

**Lecture Series** 

**Live Case Demos** 



**MBACM** events

**Consulting Kickoff Day** 

Resume workshop

**Fit Interview tips** 



Firm Open events

**Employer Info Sessions** 

**Happy Hours** 

Coffee Chats (FCFS)



Firm Invite-only events

Invite only events

Office-specific dinners

Office visits

- Be prepared to learn and practice
- Learn about the process and target firms
- Form connections with your peers

- Be prepared to engage and ask questions
- Build connections (quality over quantity)
- Be respectful of others and their questions

Note: While it is good to have invites to invite-only events, it is definitely not the sole determining factor of an interview invite! However, you might want to connect with some of the office representatives or consultants and make sure you are on their radar

### What is a case?



Business problem (usually)



Conversation driving to a recommendation



Evaluation of analytical and communication skills



Just one part of the recruiting process

### Types of cases





Interviewer has specific set of questions/case direction

**Accenture** 

**McKinsey** 

**Oliver Wyman** 

Strategy&



### **INTERVIEWEE-LED**

Interviewee drives the direction of the case through their questions

**Bain** 

**BCG** 

**Deloitte** 

**LEK** 

**PwC** 

Strategy&

Generalizations based on candidate experience

### Case Prompts



**Profitability** 

Revenue growth

**Declining profits** 

**Cost optimization** 



Market study

Market entry

**Product launch** 

**Growth strategy** 



PE/Mergers and acquisitions

**Valuation** 

Return on investment

Synergy analysis



Unconventional

**Pro/Con analysis** 

Non-business cases

**Estimation cases** 

Not an exhaustive list

### Case Industries



Consumer/Retail



**Financial Services** 



Telecommunications & IT



Energy



Media & Entertainment



Healthcare & Life Sciences



Manufacturing



Transportation



Non-profit

Not an exhaustive list

### **Case Interview Components**

### Total time estimate ~20-25 minutes

| 2-3 minutes  | 4-5 minutes  | 3-5 minutes   | 8-10 minutes   | 2-3 minutes  |
|--|--|---|--|--|
| Background, Setup,<br>and Recap  | Framework Development & Explanation  | Solution<br>Building  | Math Exhibits<br>& Analysis  | Synthesis &<br>Rec   |
| <ul> <li>Listen actively</li> <li>Take thorough notes during prompt</li> <li>Summarize the problem</li> <li>Clarify objective</li> <li>Ask clarifying Q's</li> <li>Anticipate structure</li> </ul> | <ul> <li>Structure thoughts in organized manner (&lt;2 min)</li> <li>Provide high level overview of buckets</li> <li>Drill down into each bucket</li> <li>State hypothesis &amp; prioritize bucket (drive case forward)</li> </ul> | <ul> <li>Probe for information</li> <li>Identify and prioritize problem</li> <li>Organize brainstorming into multiple buckets</li> <li>Be MECE - mutually exclusive, collectively exhaustive - with your ideas</li> </ul> | <ul> <li>Provide overview of information</li> <li>Provide second level insights and prioritize them</li> <li>Utilize data from charts 11</li> <li>Note conclusions</li> <li>[MATH]</li> <li>Walk through math solution approach BEFORE you calc</li> </ul> | <ul> <li>Drive case to conclusion</li> <li>Be answer FIRST, then provide supporting facts from case</li> <li>Take a definitive stance</li> <li>Utilize hard data from case</li> <li>Address risks &amp; next steps</li> <li>RRRN         <ul> <li>Recommendation, Reasoning, Risks, Next Steps)</li> </ul> </li> </ul> |

# **Sample Case Frameworks**

### Case Type 1: Profitability

Overview

**Problem:** Client's earnings / profits has declined or stopped growing

**Objective:** Recommend ways to increase profits

### Sample Framework

#### 1. Market

### A. Industry

- Market size
- Growth trends
- Types of products/customers
- Specific regulations

#### **B.** Competition

- Market shares
- Competitive advantage/weakness
- Entry barriers

#### 2. Revenue

#### For each revenue stream:

#### A. Price

- Pricing changes
- Discounts

#### B. Volume

- # Customers
- # Purchases/customer
- # Amount purchased

### **C. Product Mix**

- High-end vs. Low-end (high vs. low margin)
- Bundling of products

#### 3. Cost

#### A. Fixed Costs

- PPE
- Overhead
- SG&A

#### **B. Variable Costs**

- COGS (process)
- Distribution
- Labour
- Utilities

### 4. Recommendation

#### A. Increase revenue

- Same market, product
- New market, product
- Product, price, promotion, place, people, process, physical evidence (for services)

#### **B.** Decrease cost

- Lower COGS
- Lower quantity/product
- Lower product sold

### Case Type 2: Revenue Growth

**Overview** 

Problem: Client is looking to grow their revenues

**Objective:** Ideate and evaluate various growth options for the client

### Sample Framework

#### 1. Market

#### A. Industry

- Market size
- Growth trends
- Types of products/channels
- Specific regulations

#### **B.** Competition

- Market shares
- Competitor response

#### 2. Same market

#### A. Same product

- New customers
- Higher penetration
- Higher loyalty
- Higher price

#### **B.** New product

- Market size, growth
- Profitability
- Synergies
- Cross-selling

### 3. New market

#### A. Same product

- New geography
- New customer segment
- New channel
- Cultural, Admin, Geo, Economic differences

#### **B.** New product

- Market size, growth
- Profitability
- Synergies
- Cross-selling
- Cultural, Admin, Geo, Economic differences

### 4. Risks/Capabilities

#### A. Internal

- Capital
- People
- Expertise
- Operations
- Cannibalization

#### B. External

- Partners/Entry strategy
- Regulations

### Case Type 3: Market Entry



**Problem:** Client is considering entering a new market or new product **Objective:** Recommend whether or not to enter (considerations: financial attractiveness, implementation success, risk assessment)

### Sample Framework

#### 1. Market

### A. Industry

- Market size
- Growth trends
- Types of products/customers
- Specific regulations

#### **B.** Competition

- Market shares
- Competitor response
- Entry barriers/partners

#### 2. Financial

#### A. Potential profits

- Market size
- Market share
- Profit margin

#### B. ROI/Break Even

- Opportunity costs
- Capital investment
- Break Even/ROI on investment

### 3. Capabilities

### A. Business Competency

- Market knowledge (product, cultural, administrative, geographic and economic differences)
- Comp advantages

#### **B. Technical Competency**

- Scaling operations
- Expansion management
- Other technical capabilities needed

### 4. Entry Strategy

#### A. Entry Methods

- Direct entry
- Acquisition
- Joint Venture

#### **B.** Considerations

- Market entry timing
- Piloting options
- Centralized vs
   Decentralized control
- Risks

### Case Type 4: Merger & Acquisition



**Problem:** Client is considering acquiring another company

**Objective:** Evaluate the target company and recommend whether or not to

pursue the deal

### Sample Framework

#### 1. Market

- **A.** Are buyer and target in the same market?
- **B.** Industry
- Growth trends
- Market size
- Specific regulations
- C. Competition
- Market shares
- Competitor response

### 2. Standalone Value

### A. Target's Financials

- Revenue and growth
- Costs and reductions
- Current profitability
- Target firm value
- Comparison with peers

#### **B. Target's Competency**

- Management culture
- Technical capabilities
- Business expertise
- C. Deal ROI
- ROI / Break Even / Comparables

### 3. Synergies

#### A. Acquisition Rationale

- Vertical integration
- Horizontal integration
- New market entry

### **B.** Synergies

- Cost driven
- Revenue driven
- Technical acquisition
- Response to competitor move
- C. Recalculation of ROI

### 4. Risk Assessment

#### A. Buyer capability

- Prior acquisition experience
- Capital funding
- Management/People

### B. Post acquisition

- Company cultural fit
- PMI process
- Organizational structure change
- Customer response



# **Behavioral Interview Tips**

### Behavioral interviews

- Showcase EQ: Cases test your IQ Fit interviews are your chance to show EQ
- **Be Memorable:** Answer all questions with a story/ example show vs. tell. Stories are compelling way to articulate and demonstrate fit for firm. And let personality shine!
- Delivery Matters: Be authentic, confident, structured and <u>succinct</u>. Demonstrate presence in front of a client
- Firms really care: Consulting is a highly interpersonal business
- You're in control (unlike cases): Use fit questions as a source of confidence

Use fit prep to boost a strength or shore up a weakness

### Personal Story Framework

The key it to be structured and try out different outlines to see what works for you!

**Headline:** Tell the interviewer where the story is going (~15%)

**Situation:** Set up the problem or conflict/give background (~15%)

**Action:** What did <u>you</u> do? (~55%)

**Result:** Highlight the outcome, the impact on the organization and what you learned (~15%)

### **STAR**

- Situation
- Task
- Action
- Result

### **SCARF**

- Situation
- Complication
- Action
- Result
- Future Lessons

The interviewer should understand the "so what?" before and after your story

### Sample Questions: Individual Contribution

- 1. Tell me about your proudest accomplishment
- 2. How would you describe your top 2 strengths and top 2 weaknesses?
- 3. Tell me about a time you set an ambitious goal, and what did you do to achieve it?
- 4. What is the biggest asset you can bring to your project team?
- 5. What makes you a good fit for consulting?

### Sample Questions: Management/Leadership

- 1. Tell me about a time when you made an unpopular decision
- 2. Tell me about a time when you managed a difficult team member or client
- 3. What is an example of a time when you led a team through a difficult situation
- 4. Tell me about a time when you had to provide someone negative feedback
- 5. Tell me about a time when you lead a team where there were a lot of differing opinions



### Sample Questions: Persuasion/Influence

- 1. Describe a time you had to convince someone who had an opposing viewpoint
- 2. Tell me about a time you had a disagreement with your manager
- 3. Tell me about the best presentation you have made
- 4. How do you convince others to change their viewpoint
- 5. Tell me about a time when you had to get buy-in from stakeholders

### Sample Questions: Analytics/Problem Solving

- 1. What is an example of a project that you worked on that was highly analytical?
- 2. Tell me about a time when you used data and analytics to solve a problem
- 3. Tell me about a time when you had to simplify technical data
- 4. Tell me about a time when you used data to drive a conclusion. What assumptions did you make?
- 5. Describe an example of when you had to work with complex data. How did you handle it?

### Sample Questions: Challenge/Failure

- 1. Tell me about a time when you had to overcome an obstacle
- 2. Tell me about a time when you were wrong and someone had to convince you
- 3. Tell me about a time when you had to navigate a difficult situation under time pressure
- 4. Tell me about a time you didn't succeed as a leader
- 5. Tell me about a time when you failed to meet a deadline or goal

### Sample Questions: Teamwork/Collaboration

- 1. Tell me about a time when you had to work with people from different backgrounds
- 2. Tell me about your role in a team
- 3. How have you dealt with differences in a team?
- 4. Tell me about a time when you had to work with a teammate whom you clashed with
- 5. Tell me about a time when you were in a difficult teamwork situation. How did you respond?

# **Case Math Analysis & Drills**



### Guide to Math Analysis

Case math is usually just simple arithmetic but is very easy to make mistakes!

### **Tips for Success**



 Sanity Check Make sure your numbers make sense in the context of the case. This is a very easy way to make your interviewer lose confidence in your candidacy.



 Context Matters Tie the numbers back to the question and explain the implications.



 Mistakes are okay You can recover from mistakes. Keep calm, acknowledge the mistake and avoid repeating the same mistake.



Practice, Practice, Practice
Practice until you're
comfortable doing math in front
of an interviewer. Consider
practice by videotaping
yourself, casing with a friend or
colleague.



 Watch those Zeros Round when needed and manage your zero's appropriately. Consider using scientific notation.



 Watch your Pace Take your time. Manage your time correctly but do not rush through the process. Quality matters more than speed.



 Talk thru the Process Talk through each step of the process. No interviewer wants to sit in silence as you crunch numbers.



Case interviews do not require any technical math or finance knowledge, but there are basic formulas that you should know.

### **Profit Formulas for Case Interviews**

| Revenue = Quantity * Price                          | Revenue is the amount of money from selling products.  | Your company sells shirts for \$20 each. Last year, your company sold 1,000 shirts. So, your total revenue last year was 1,000 * \$20 = \$20,000.  |
|---|--|--|
| Total Variable Costs = Quantity * Variable<br>Costs | Variable costs directly increase for each additional unit of product made.   | It costs your company \$5 to purchase the raw materials needed to make a shirt. If your company sold 1,000 shirts last year, the total variable costs are 1,000 * \$5 = \$5,000.   |
| Costs = Total Variable Costs + Fixed Costs          | Total costs calculated by adding total variable costs and fixed costs. Fixed costs are costs that do not directly increase for each additional unit of product made(i.e rent for the building or equipment needed to make product) | Your company pays annual rent of \$10,000. It also leases the equipment it needs to make its shirts for \$2,000 a year. Therefore, fixed costs are \$10,000 + \$2,000 = \$12,000. Total variable costs were calculated to be \$5,000 from the previous example. So, total costs are \$12,000 + \$5,000 = \$17,000. |
| Profit = Revenue – Costs                            | Profit is the amount of money the company keeps after paying for all of its costs.   | Last year, your shirt company generated revenues of \$20,000 and had costs of \$17,000. The profit last year was \$20,000 - \$17,000 = \$3,000.  |

Case interviews do not require any technical math or finance knowledge, but there are basic formulas that you should know.

### **Profit Formulas for Case Interviews**

| Profit = (Price – Variable Costs) * Quantity –<br>Fixed Costs | Formula summarizes the previous four formulas.  |   |
|---|---|---|
| Contribution Margin = Price – Variable Cost                   | Contribution margin represents how much money each product sold brings in after the cost of raw materials needed to make the product. | If your company's shirts sell for \$20 and raw materials cost \$5, then the contribution margin is \$20 - \$5 = \$15 per shirt.   |
| Profit Margin = Profit / Revenue                              | Profit margin represents the percentage of revenue that a company keeps as profit after taking into account all of its costs.         | Last year, your company generated \$20,000 in revenue and had \$17,000 in costs. Its profit was \$3,000. Therefore, your company's profit margin is \$3,000 / \$20,000 = 15%. |



Case interviews do not require any technical math or finance knowledge, but there are basic formulas that you should know.

### **Investment Formulas for Case Interviews**

| Return on Investment = Profit / Investment<br>Cost   | Return on investment, or ROI for short,<br>represents how much additional money a<br>company generates relative to the size of its<br>initial investment. | Your company spent \$5,000 on marketing to advertise its shirts. As a result, the company generated an additional \$6,000 in profits from selling shirts. This profit does not yet take into account the costs of the marketing campaign. Therefore, the company has a net increase in profits of \$1,000 from its original \$5,000 investment. The ROI is \$1,000 / \$5,000 = 20%. |
|--|---|---|
| Payback Period = Investment Cost / Profit per<br>Year                                      | Payback period represents how long it would take a company to recoup the money it spent on an investment. It is usually specified in years.               | Your company invested in redesigning its shirts for \$5,000. As a result, the company expects annual profits to increase by \$1,000 for every year going forward. Therefore, the payback period for this investment is \$5,000 / \$1,000 = 5 years.   |
| Break-Even Sales = Upfront Investment<br>Cost/(Per-Unit Selling Price - Per-Unit<br>Costs) | Calculates the number of units sold to pay back an upfront investment   | Your company invested in redesigning its shirts for \$5,000. As a result, the company needs to sell certain number of units to recoup investment. If shirts sell for \$10 but cost to produce each shirt is \$5 therefore \$5,000 / (\$10-\$5) = 1000 shirts needed to be sold.   |



Case interviews do not require any technical math or finance knowledge, but there are basic formulas that you should know.

### **Operations Formulas for Case Interviews**

| Output = Rate * Time                  |   | The machine that your company uses to produce shirts can produce 5 shirts per hour. If the machine runs for 12 hours, then it will produce 60 shirts.   |
|---------------------------------------|---|---|
| Utilization = Output / Maximum Output | Utilization represents how much a factory or machine is being used relative to its maximum possible output. | The machine that your company uses to produce shirts can produce 5 shirts per hour. Therefore, its maximum capacity in a day is 5 shirts per hour * 24 hours = 120 shirts. If your machine is being used to only produce 60 shirts per day, then it is at 60 / 120 = 50% utilization. |



Case interviews do not require any technical math or finance knowledge, but there are basic formulas that you should know.

### **Market Share Formulas for Case Interviews**

| Market Share = Company Revenue in the<br>Market / Total Market Revenue              | Market share measures the percentage of total market sales a particular company has.                    | Your company sells shirts and generates \$100M in annual revenues. The market size of shirts is \$500M. Therefore, your company has a market share of \$100M / \$500M = 20%.  |
|---|---|---|
| Relative Market Share = Company Market<br>Share / Largest Competitor's Market Share | Relative market share compares a company's<br>market share to the largest competitor's market<br>share. | Your company has a 20% market share in the shirts market. Your largest competitor has a 50% market share. Therefore, your relative market share is 20% / 50% = 0.4.  Your company is the market leader and has a 50% market share in the shirts market. Your largest competitor has a 25% market share. Therefore, your relative market share is 50% / 25% = 2. |



Case interviews do not require any technical math or finance knowledge, but there are basic formulas that you should know.

### Accounting, Finance, and Economics Formulas for Case Interviews

| Gross Profit = Sales – Cost of Goods Sold   | Gross profit is a measure of how much money a company makes from selling its product after taking into account the costs associated with making and sellings its product. | Your company sells shirts for \$20 each. Last year, your company sold 1,000 shirts. So, your total revenue last year was 1,000 * \$20 = \$20,000.  |
|---|---|--|
| Operating Profit = Gross Profit – Operating<br>Expenses – Depreciation – Amortization | Operating profit is calculated by taking gross profit and subtracting all operating expenses and depreciation and amortization.   | You sold \$20,000 of shirts last year. Cost of goods is \$5,000, operating expenses are \$10,000, depreciation of a machine is \$2,000, and amortization of a patent is \$500.  Therefore, your operating profit is \$20,000 - \$5,000 - \$10,000 - \$2,000 - \$500 = \$2,500. |
| Gross Profit Margin = Gross Profit / Revenue  | Gross profit margin measures how much money a company keeps from selling its products after taking into account cost of goods sold.                                       | Your company has a gross profit of \$15,000 from \$20,000 of revenue. Therefore, your gross profit margin is \$15,000 / \$20,000 = 75%.  |



Case interviews do not require any technical math or finance knowledge, but there are basic formulas that you should know.

### Accounting, Finance, and Economics Formulas for Case Interviews

| Operating Profit Margin = Operating Profit /<br>Revenue        | Operating profit margin measures how much money a company keeps from sellings its products after cost of goods sold, operating expenses, depreciation, and amortization is taken into account. | Your company has an operating profit of \$2,500 from \$20,000 of revenue. Therefore, your operating profit margin is \$2,500 / \$20,000 = 12.5%.   |
|--|--|--|
| EBITDA = Operating Profit + Depreciation + Amortization        | EBITDA is a financial metric used to measure a company's cash flow or the amount of cash that a company has generated in a period of time.   | Your company has an annual operating profit of \$2,500.  Depreciation expenses are \$2,000 and amortization expenses are \$500. Therefore, your EBITDA is \$2,500 + \$2,000 + \$500 = \$5,000.   |
| CAGR = (Ending Value / Beginning<br>Value)^(1/Time Period) – 1 | CAGR measures how quickly something is growing year after year.  | Your company generates \$144M in annual revenue. Two years ago, your company only generated \$100M. Over this time period, your CAGR was (\$144M / \$100M)^(1/2) - 1= 20%. In other words, your company grew by 20% each year for two years. |
| Rule of 72   | Shortcut used to estimate how long a market, company, or investment would take to double in size.  | Your company is growing steadily at 9% per year. Using the Rule of 72, we'd expect it to take 72 / 9 = 8 years for your company to double in size if it maintains its current growth rate.   |

Case interviews do not require any technical math or finance knowledge, but there are basic formulas that you should know.

### Accounting, Finance, and Economics Formulas for Case Interviews

| NPV = Cash Flow / [(1 + Discount Rate)^(Time<br>Period)]         | -  | You expect to receive \$1,000 five years from now. You expect that you will be able to get 8% annual returns by investing in the stock market. Therefore, the net present value of your future cash flow is \$1,000 / [(1 + 0.08)^5] = \$680.58. In other words, receiving \$680.58 today would give you the same value as receiving \$1,000 five years from now.                   |
|--|--|---|
| Perpetuity Formula: Present Value = Cash<br>Flow / Discount Rate | Annuity is a fixed sum of money paid at regular intervals such as every year.              | You are expecting to receive \$1,000 per year for the rest of your life. You expect that you will be able to get 8% annual returns by investing in the stock market. Therefore, the present value of this perpetuity is \$1,000 / 0.08 = \$12,500. In other words, receiving \$12,500 today would give you the same value as receiving \$1,000 each year for the rest of your life. |
| Return on Equity = Profit / Shareholder Equity                   | Return on equity measures how effectively a company is using its assets to create profits. | Your company's profit this year is \$100M. Shareholder equity, or the net worth of the company is \$1B. Your company has a ROE of \$100M / \$1B = 10%.  |



Case interviews do not require any technical math or finance knowledge, but there are basic formulas that you should know.

### Accounting, Finance, and Economics Formulas for Case Interviews

| Return on Assets = Profit / Total Assets  | Return on assets, or ROA for short, measures how profitable a company is relative to its total assets.                             | Your company's profit this year is \$100M. Your company as \$400M worth of assets. Your company has a ROA of \$100M / \$400M = 25%.   |
|---|--|---|
| Price Elasticity of Demand = (% Change in Quantity) / (% Change in Price)                         |  | Your company has decreased its product's price by 10%. As a result, the number of units sold has increased by 20%. Therefore, the price elasticity of demand is 20% / -10% = -2.      |
| Cross Elasticity of Demand = (% Change in Quantity for Good #1) / (% Change in Price for Good #2) | Cross elasticity of demand measures how much customer demand changes for a product given a change in price of a different product. | A competitor has decreased the price of a competing product by 20%. As a result, the demand for your product has dropped by 10%. The cross elasticity of demand is -10% / -20% = 0.5. |



# **Structuring Drills**

### How to use

- 1. This section has eight drills to help you practice structuring and building your framework
- 2. Read/Hear the prompt and think of some clarifying questions you would like to ask. We recommend you saying these out loud as you would do in the real scenario. We provide some good clarifying questions that could be asked before you start structuring
- 3. After looking at the clarifying questions and their answers, build out your own structure and time yourself. If you are starting out, take your time (~2 minutes) to build a robust structure. If you have some practice, try building a robust structure within 1.5 minutes
- We also provide a sample structure to move ahead with the case. Please note that this sample structure is only for guidance and there could be additional pointers, structures that could work

### **Knight Perfumes**



### **Case Question**

Knight Perfumes, a men's perfume brand has been experiencing decline in profitability in the past year. The brand wants you to help them understand why this is the case and offer some suggestions on how they could bring it back to previous levels.

(BUSINESS) Can you tell me more about the kind of products Knight sells? Are these deodorants, perfumes, any other products? (Hypothesis)

Knight Perfumes sells different fragrances in three types of offerings – a deodorant body spray, a mild perfume, and a strong perfume. All the three types of products have been experiencing declining volumes.

(OBJECTIVE) I understand that the objective here is two-fold, 1) to help the client understand why the profits have been declining and 2) ways to bring profits back to previous levels. Is that correct?

Yes, that is correct.

(GEOGRAPHY) In which geography does Knight Perfumes sell perfumes?

Knight Perfumes sells its perfumes in the US via online e-commerce and quick commerce channels.

#### Sample Framework

#### 1. Market

#### A. Industry

- Market size
- Growth trends
- Specific regulations

#### **B.** Competition

- Market shares
- Substitutes (roll on deodorants, etc.)

#### 2. Revenue

#### A. Price

- Price changes
- Discounts

#### B. Volume

- # Customers
- # Bottles/customer
- Frequency of purchase

#### C. Product Mix

- Low price (deodorant)
   vs. High price (perfume)
- Product bundling

#### 3. Cost

#### A. Fixed Costs

- PPF
- Overhead
- SG&A

#### B. Variable Costs

- COGS (bottles, liquid, spray mechanism)
- Utilities
- Distribution

#### 4. Improvement

#### A. Increase Revenue

- New market, product
- Same market, product

#### **B. Decrease Costs**

- Lower COGS
- Different channel mix

### Bank Co.



### **Case Question**

Bank Co., a retail bank based out of the Midwest has been experiencing declining profitability since the past few years. They want to understand what has been causing the same?

(BUSINESS) What exactly is a retail bank? What services does Bank Co. offer?

Retail banks are banks that provide banking and financial services to the general public rather than businesses. Bank Co. has three kinds of services – it offers deposit account services, loans and insurance services.

(BUSINESS) How does Bank Co. earn revenue? I am guessing from account fee, interest on loans and insurance premiums? (Hypothesis)

Yes, your understanding is correct.

(GEOGRAPHY) Does Bank Co. operate only in the Midwest or also in other regions of USA or the world?

Bank Co. only operates in the Midwest region and has 20 branches across 4 states. The problem is similar across all branches and is not particular to certain branches.

### Sample Framework

#### 1. Market

#### A. Industry

- Market size
- Growth trends
- Specific regulations

#### **B.** Competition

Market shares (other banks profitability)

#### 2. Revenue

#### A. Deposit accounts

- # Accounts
- Fees per account

#### B. Loans

- # Loans
- Interest rate of loans

#### C. Insurance schemes

- # Customers
- Insurance premiums
- Product mix (auto loan, home loan, etc.)

#### 3. Cost

#### A. Fixed Costs

- Platform costs
- SG&A

#### B. Variable Costs

- Deposits Interest expense, maintenance costs, fraud costs
- Loans Write-offcosts, processing costs
- Insurance claims, processing costs

## Avalon's Education Policy



### **Case Question**

The government of a hypothetical country Avalon needs our support in the creation of a new education policy for the country. They want to know what kind of initiatives they should be taking as part of the new education policy. Help them think of initiatives to include in their policy.

#### (OBJECTIVE) What are Avalon's goals in creating the new education policy?

Avalon wants to focus on three key things in the education system – Access, Quality and Accountability. Access to education means that everyone irrespective of their background should have access to education, Quality means that the quality of education in the country should meet certain standards. Accountability focuses on having procedures to ensure educational outcomes for the students in the education system.

Avalon wants to provide access to all kinds of students irrespective of financial, geographical or racial considerations. Currently this goal is not being in ~80% schools. Avalon wants to ensure that the quality of education in the schools is at least B level on the school quality index. For accountability, Avalon wants to ensure that at least 90% of the college graduates are employable within the major industries of Avalon.

#### (TIMELINE) What is time horizon for the new education policy?

The new education policy would be a 10-year plan and should include short term and long-term initiatives.

### Sample Framework

#### 1. About Avalon

#### A. Economy

- Major industries
- Income levels
- Current and target level of access, quality and accountability

#### **B.** Competition

 Similar economy education policies

#### 2. Initiatives

#### A. Access

- Geographical
- Financial
- Racial

#### B. Quality

- General quality
- Industry-specific quality

#### C. Accountability

- Literacy rates
- Employment rates
- Dropout rates

# 3. Other considerations

#### A. Financial resources

- Teaching infra
- Institutions infra

#### B. Non-fin. resources

- Teachers and human capital
- Implementation plan
- Governance and organization

## Furry Zoo



### **Case Question**

Our client Furry Zoo has been considering bringing in cheetahs on loan from South Africa to include in their zoo. They need your help in understanding whether this would be a good decision.

(OBJECTIVE) What is the client's objective in bringing the cheetahs to the zoo?

The client is looking to increase footfall by 20% in the zoo which would increase revenue. This is because having a cheetah will attract more visitors.

(ABOUT CLIENT) Where is the zoo located and would the conditions be suitable for accommodating cheetahs in the zoo?

The Furry Zoo is an open zoo and has safari rides throughout the zoo. The climate of the region would be suitable to accommodate the cheetah but we can further investigate other requirements for the accommodation of cheetahs in the zoo.

(SCOPE) Would we also be responsible to transport the cheetah and take care of regulatory requirements related to the transfer of the animal?

No, that would not be under the purview of the discussion of this case. We would only be concerned about the accommodation of the cheetah in the zoo and requirements for that.

(ALTERNATIVES) Are there any other alternatives to bringing the cheetah in the zoo?

There are no alternatives at the moment and this is the only decision to be made.

### Sample Framework

### 1. Revenue impact

- A. Ticket sales
- Increase in footfall
- Ticker price
- B. Other sources
- Merchandise sales
- F&B sales
- Other zoo sections' ticket sales

### 2. Cost impact

- A. Variable costs
- Food requirements
- Maintenance of zone
- Caretaker
- B. Fixed costs
- Construction of zone
- Approvals and contracts
- Marketing spend

# 3. Other considerations

- A. Capital
- Budget for initiative
- Budget for marketing
- B. Stakeholder response
- Other zoo animals response
- Visitors response
- Animal rights organization response

### Satellite Co.



### **Case Question**

Your client Satellite Co. is a provider of satellite imaging services which are used to assess the yield of crops and predict disasters such as floods. It is considering to enter a new country Wakanda and wants your opinion on whether it would be a good decision. Could you help the client analyze whether it should enter the new country?

(OBJECTIVE) What is the client's objective in entering the new country?

The client has already launched its satellites and is looking to grow its revenues by serving other countries around its own country using data from the same satellites.

(BUSINESS) Can you tell me a bit more about the satellite services provided by Satellite Co.? How exactly does it help in increasing yield of crops and prevention of disasters?

Satellite Co. uses a technology called Synthetic Aperture Radar and these satellites can take images of agricultural fields and predict crop yields based on historical image data. They can also take images of flood or disaster-prone areas and predict the damage from incoming disasters.

(BUSINESS) Who are the customers of Satellite Co? I am assuming they interact directly with farmers when reporting agricultural yield and the government when predicting floods. (Hypothesis)

Yes, your understanding is correct. Typically, they engage with a third-party organization or community of farmers to provide them with the data and insights about their crop yields. They assist government meteorological department in prediction of future disasters.

#### Sample Framework

#### 1. Market

#### A. Industry

- Market size
- Growth trends
- Specific regulations

#### **B.** Competition

- Competition market shares
- Competitor response

#### C. Partners

Potential partners

#### 2. Financial

#### A. Revenue growth

- Potential clients
- Expected profitability

#### **B.** Costs

- Variable costs report gen, client onboarding
- Fixed costs SGA, utilities, PPE costs
- Opp cost Investment in existing market

#### 3. Capabilities

#### A. Business Competency

- Market knowledge
- Comp advantages

#### B. Technical Competency

- Scaling operations
- Expansion management
- Other technical capabilities needed

#### 4. Entry Strategy

#### A. Entry Methods

- Direct entry
- Acquisition
- Joint Venture

#### **B.** Considerations

- Market entry timing
- Piloting options
- Centralized vs
   Decentralized control
- Risks

## Good Brewing Co.



### **Case Question**

Good Brewing Co. is a coffee shop in Philadelphia and has been losing customers recently. The issue they have mainly identified is that the number of first-time customers has remained similar but the number of repeat customers has been going down. They want help in understanding why that could be the case and how they can prevent this from happening.

Audio generated using realistic AI voice (naturalreaders.com)



(BUSINESS) Could you tell me a bit more about Good Brewing Co.? Does the shop have seating capacity and what type of food items does it sell?

Good Brewing Co. is in center city in Philadelphia where a lot of young Wharton graduates and working professionals reside. The shop has a seating capacity of around 15 people and has a good location which attracts many first-timers. The shop sells the usual items – coffee and some snacks.

(BUSINESS TERM) I wanted to clarify my understanding of repeat customers – does the term mean second-time and loyal customers?

Yes, that is correct.

(BUSINESS) I wanted to confirm the process that the customers go through once they visit the shop. As this would help me in understanding where potential problems could be. I assume the process to look something like this – customers come to the shop, they are greeted by the staff and make their payment, their order is prepared, they either take away their order or sit inside and eat and then they either stay and work or leave the shop. Is this understanding right? (Hypothesis)

Yes, your understanding of the general process is correct.

#### Sample Framework

Benchmarking all these steps historically and competitively

#### 1. Order placement

#### A. Greetings

- Service by barista
- Attire changes

#### B. Ordering

- Menu items
- Availability of items
- · Price of items

#### C. Payment

- Payment methods
- Processing time

#### 2. Order preparation

#### A. Preparation

- Time taken
- Hygiene and cleanliness

#### B. Receiving order

- · Method of order receipt
- Convenience of taking plates and cutlery
- Available sauces and napkins etc

#### 3. Eating

#### A. Takeaways

- Packaging
- · Quality of food
- Portion of food

#### B. Dining in

- Presentation
- Quality of food
- Portion of food
- Ambience

### Call Center Co.



### **Case Question**

Call Center Co. which serves customer grievances of a bank named Bank Co. has been experiencing increasing costs in the past year. They want our support in conducting a cost transformation exercise and helping them reduce costs.

(BUSINESS) Can you tell me a bit more about Call Center Co? I am envisioning something like an office with customer service representatives that attend to grievances of customers. I am also guessing that the major cost head is the personnel cost paid to the call center employees. (Hypothesis)

Yes, your understanding is correct. Customer service representatives attend calls and have goals related to number of calls in a day. The call center tries to reach its customer waiting time target and keep it below the target. For this case, you can only focus on reducing our personnel costs.

(BUDGET) Are we looking to make any investments in reducing our costs or simply looking to reduce costs with minimal investments?

We are open to looking at both options.

(TIMELINE) Is there a timeline for carrying out the cost transformation exercise?

We are looking to reduce the call center costs within a year and bring it back to last year's levels.

#### Sample Framework

Personnel cost = # employees x (# hours/employee) x (cost/hour)

#### 1. Reduce need

#### A. Overall need

- Automation
- Product improvements/FAQs
- Redirection to 3<sup>rd</sup> party

#### B. Peak time need

Redistribution of call volumes (ads)

#### 2. Fewer resources

#### A. More hours

- Lower absenteeism
- More hours/employee
- Lower vacation days

#### B. Higher productivity

- More trained representatives
- Scripts for reps
- Staggered lunch hours

#### 3. Lower cost

- A. Same setup
- More rookie employees
- Lesser benefits
- B. Alternate setup
- Lower cost location
- Offshoring

## H&N competitive response



### **Case Question**

H&N is a multinational cloth retailer with presence in the American region. However, in the recent years, it has seen a threat from fast fashion retailers such as Shine and Remu. How should the cloth retailer react to the rise of these fast fashion retailer?

(OBJECTIVE) I wanted to make sure that our client's objective is to develop a response strategy to the competitive threat posed by the fast fashion retailers?

Yes, your understanding is correct.

(BUSINESS) Can you tell me a bit more about our kind of business model and the fast fashion retail business model? My understanding is that we mainly sell offline via stores and nearshore manufacturing whereas fast fashion firms sell online via websites and manufacture in low-cost manufacturing regions. (Hypothesis)

Yes, your understanding is correct. The fast fashion retailers produce their clothes in low-cost countries and then ship their garments to the American region. They do not have physical stores and operate via their own websites and apps.

(BUSINESS) What are the types of products that are sold by us and those sold by the fast fashion retailers?

The kind of products that are sold by us and the fast fashion retailers are similar. However, there are two major differences, they offer higher variety of products as compared to us and their quality of clothes is not as good as us. There are many customers that feel that these fast fashion companies are not environment friendly due to higher waste generation.

#### Sample Framework

#### 1. Business impact

- A. Segment affected
- Style impact
- Channel impact
- B. Monetary impact
- Volume impact
- Prices impact

#### 2. Segment charac.

- A. Size/growth
- Segment size
- Growth trends
- B. Customer needs
- Channel preferences
- Overlap with existing H&N business

## 3. Potential responses

- A. Do nothing
- **B.** Mitigate impact
- Loyalty points
- Develop USP
- Others
- C. Align
- Push online sales
- D. Replicate
- New designs/offshoring
- E. Collaborate
- Partnerships

## 4. Risks and considerations

- A. Capital
- B. Stakeholder response
- Competitors
- Customers
- Employees
- Management
- C. Expertise/Knowledge
- D. Regulations

# Case Log (sample)

### How to use

- 1. Find the sample log at the following <u>link</u>. We have pre-filled the sample log with two examples from our end
- Try to update the case log every 1-2 cases and add as much detail as possible
- 3. Look over all the feedback every week to see if you are improving on your areas of improvement. You can also highlight your areas of improvement to the interviewer before starting out a new case for them to notice improvements
- 4. Casing feedback is feedback received on the way of doing a case communication, structuring, brainstorming, chart reading and so on
- 5. *Technical pointers* are tactical points or technical information that you can keep in mind for certain type of cases or industries.

# **Chart Drills**

### Guide to Chart Drills

Your interviewer will evaluate whether you understand the chart in front of you and if you can determine the most important insight and how it impacts the case.

When charts & data are presented in case interviews, there are three key things you want to prioritize

- Orient yourself: understand what's being presented
  - Understand the axes of the chart and then confirm your understanding by <u>articulating</u> what a single data point on this chart means.
- 2. Identify trends: call out the key trends illustrated
  - One way to think about this is you want to start identifying where there is OR is not movement in the chart. Is the data increasing or decreasing in a particular direction?
- 3. Connect the dots: answer the "So what?" implications
  - Connect your insights from the chart to the core question of the case. The real test comes
    when you take the insights you've learned from the chart and/or data and use that to drive
    insight into the case question.

In each of these steps, you want to verbalize your process so that the interviewer can follow along! This allows you to continue a natural dialogue while giving yourself the time to understand the data in front of you.

## Amigos!

### **Case Question**

Amigos! is a mobile, social network, founded in Mexico. It provides users a fun, quirky way to share photos, videos, stories and engage with content creators. As Amigos! has expanded, it's added functionality around augmented reality, location functionality / mapping and increasingly brought in creators and third party content providers to the platform.

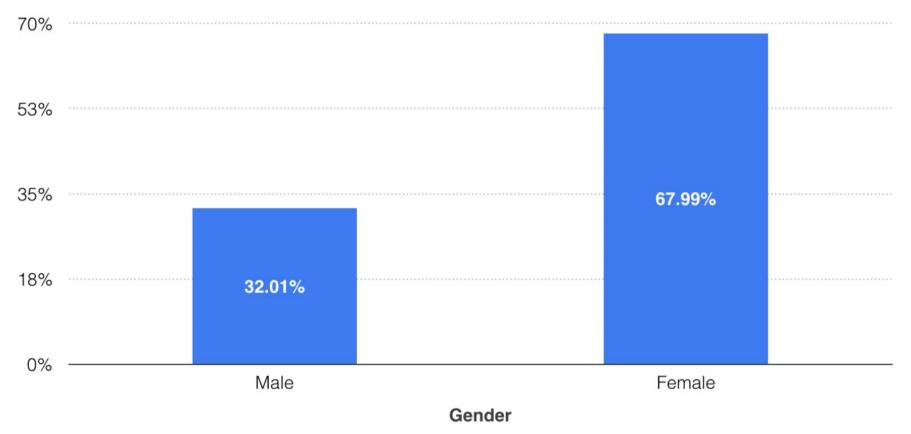
Amigos! daily active users (DAU) is just under 400M and it's annual revenue is approaching \$5B.

### **Chart Presented**

Your Interviewer will typically present you a chart or dataset like the below and provide an additional piece of information.

**Additional Piece of Information:** Amigos! wants to understand their early user base from its early days in 2005.

#### User base, split by gender (%)



## Good Points to Highlight

(ORIENT YOURSELF) I see that the chart in front of me highlights Amigos! user base in 2005 split by gender. Users are predominantly female, roughly 68% while the rest are male at roughly 32%.

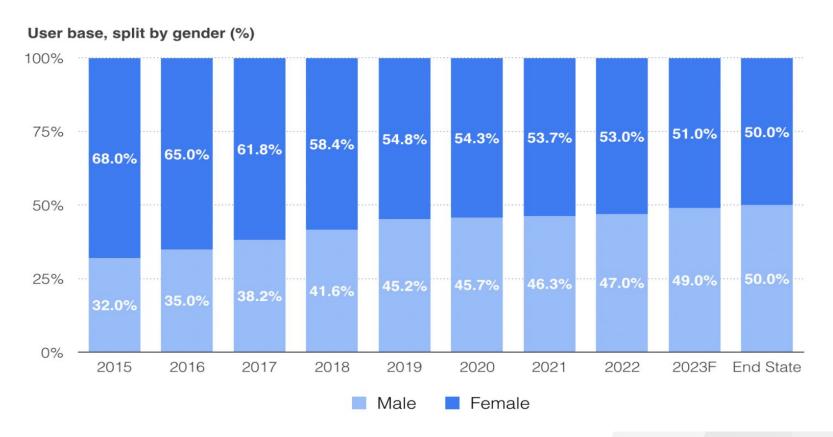
(IDENTIFY TRENDS) Amigos! user base skews heavily towards females.

(SO WHAT? - TIE IT TO THE CASE OBJECTIVE) Now, that we have a sense of the gender mix in 2015, moving forward though, it would be important for Amigos! to understand how its gender mix will evolve. This could help the platform provide content relevant to its audience and allow the Amigos! sales team appropriately target and pitch advertisers on inventory. Do we have information on the gender mix in preceding years?

### **Chart Presented**

Your Interviewer may provide an additional chart as you advance in case. Remember to tie your insights to the objective.

**Additional Piece of Information:** Strategy team at Amigos! recently completed an analysis which forecasted its expected gender mix through the year 2023 - after which it expects to reach a rough equilibrium.



## Good Points to Highlight

(ORIENT YOURSELF) I see that the chart in front of me highlights Amigos! user base over an 8 year timespan split by gender from 2015 to the expected split at the end of 2023.

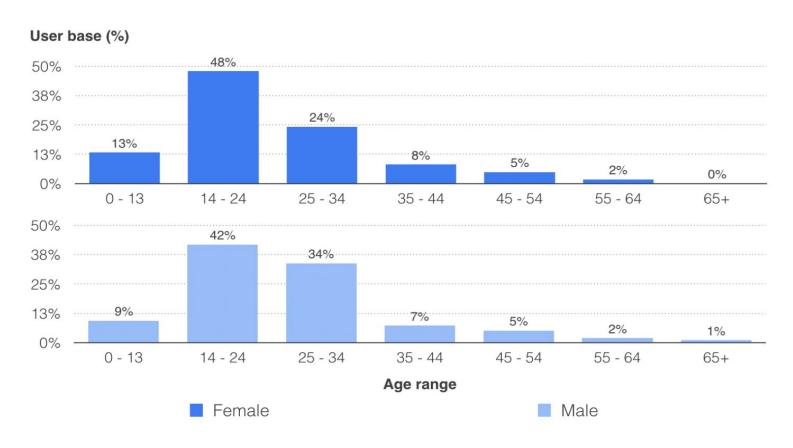
(IDENTIFY TRENDS) The % breakdown of the user base changes consistently each year until it reaches an expected a rough equilibrium.

(SO WHAT? - TIE IT TO THE CASE OBJECTIVE) The gender mix on a platform is a critical piece of information for the sales team to know so it can appropriately target and pitch advertisers on Amigos! inventory. Additional information such as age, income, geographic area would help the platform be more relevant to its audience. Would we have additional information on user demographics?

### **Chart Presented**

Your Interviewer will probably not present more than 2-3 data points. As such, make sure to familiarize yourself with various chart styles.

**Additional Piece of Information:** In the same analysis, the strategy team put together the following data display which shows a snapshot of its current user base.



## Good Points to Highlight

(ORIENT YOURSELF) I see that the chart in front of me highlights Amigos! user base split by gender and age mix.

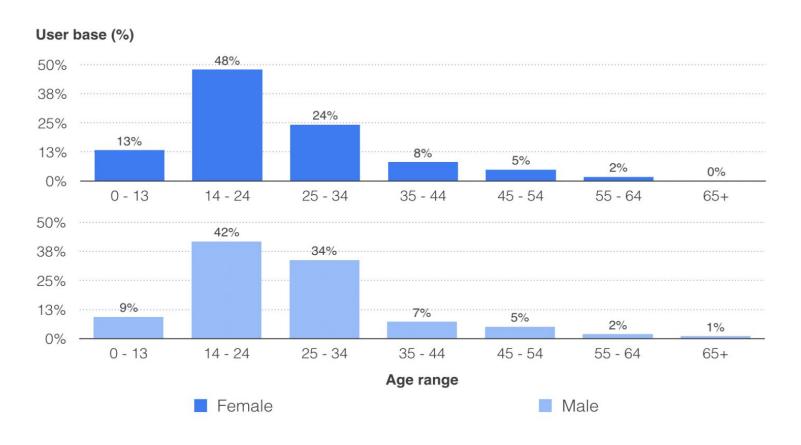
(IDENTIFY TRENDS) A significant portion of the user base lies between 14-34 ages. In the female user base the breakdown is 72% respectively and male user base 76%.

(SO WHAT? - TIE IT TO THE CASE OBJECTIVE) Along with gender, age is good determinate of the type of content the platform can leverage to advertisers. Do we have information on how audience is broken out by gender and age?

## **Additional Question**

Your Interviewer may ask you to calculate data points based on the chart they present. As always, make sure to tie your calculations to the greater objective.

**Additional Question:** Assume a new Amigos! competitive messaging app emerged that specifically targeted females 13 or below, and Amigos! lost 100% of their female user base 13 or below due to this competitive presence. What percent of their total user base would that represent?



## How to approach the Question

(ORIENT YOURSELF) To calculate the lost female user base due to competitive presence, I would need to determine the percentage female users are out of the total user base and multiply that by the percentage of users under 13. Is it safe to assume that females make up 50% of the overall user base at this point?

Yes, that makes sense to me. Please proceed.

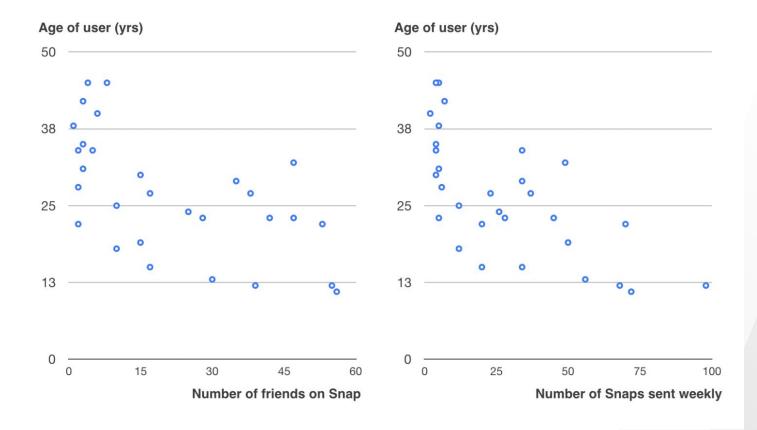
(IDENTIFY TRENDS) Since the female user base is 50% and the users under 13 is 13% then 6.5% of females under 13% would be lost to competitors.

(SO WHAT? - TIE IT TO THE CASE OBJECTIVE) This is significant loss to competitive presence which will have a negative impact on the audience demographics the company can offer to third-party vendors and user acquisition. I would like to understand how users are interacting with the platform to enhance user acquisition and lifecycle - do we have any information on this?

## **Additional Question**

Your Interviewer will probably not present more than 2-3 data points. As such, make sure to familiarize yourself with various chart styles.

**Additional Piece of Information:** Amigos! CEO is thinking more about how age correlates to user behavior on the platform. She's thinking that maybe user age and the number of snaps sent is also a function of the number of friends any given user has on the platform.



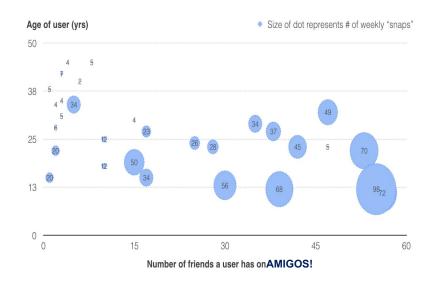
# Good Points to Highlight

(ORIENT YOURSELF) The two scatterplots showcases the relationship between age, number of friends and number of snaps. On the left, this chart demonstrates the relationship between age and number of friends. While on the right, the relationship is between age and number of snaps. To clarify, I understand snaps to be a picture or message. Is that correct?

Yes, A snap is a picture or video you send through the app to one or more of your friends.

(IDENTIFY TRENDS) Thank you for clarifying. It appears that younger users send more snaps as well as have more friends than their older counterparts.

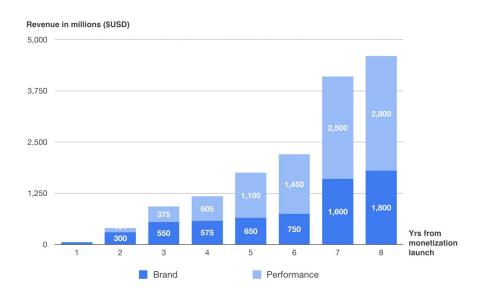
(SO WHAT? - TIE IT TO THE CASE OBJECTIVE) It seems like there is a strong correlation between age and both the number of snaps a user sends as well as the number of friends they have on the platform. This could potentially have implications for their user acquisition and product strategy. Is there any data on the user acquisition and retention?

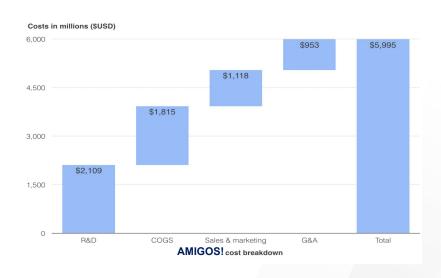


|                  | Snap         | Twitter      | Meta / Facebook |
|------------------|--------------|--------------|-----------------|
| Photo chat       | •            |              |                 |
| Video chat       | •            | lacktriangle | $\circ$         |
| Text chat        | lacktriangle | lacktriangle | •               |
| News discovery   | •            | •            | •               |
| Social discovery | •            | •            | •               |

**Bubble Charts** 

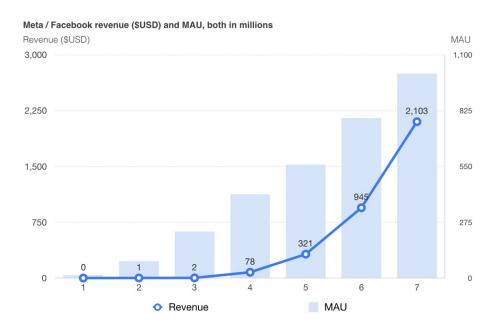
**Harvey Balls Charts** 



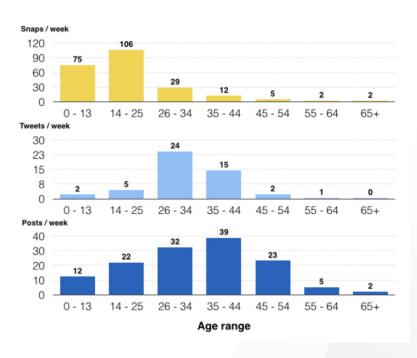


**Combination Charts** 

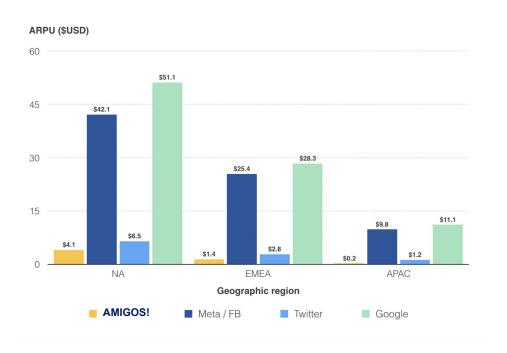
**Waterfall Charts** 



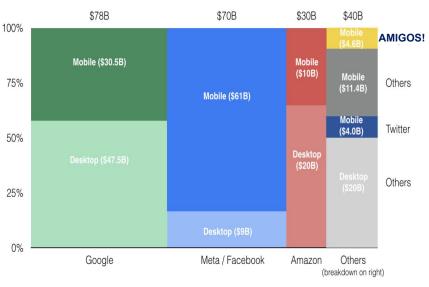
**Bar and Line Charts** 



**Distribution Charts** 



US Online advertising market (\$USD)



**Clustered Bar Charts** 

**Marimekko Charts** 

# Cases

## Cases

| # | Case                | Format          | Туре                        | Difficulty | Industry                   | Stretch Area     |
|---|---------------------|-----------------|-----------------------------|------------|----------------------------|------------------|
| 1 | Electro Chargers    | Interviewee-Led | Market Entry                | Medium     | Automobiles/Infra.         | Structuring      |
| 2 | Happy Bellies       | Interviewer-Led | Revenue Growth              | Hard       | Consumer Packaged<br>Goods | Structuring      |
| 3 | Smart Radiators     | Interviewee-Led | Mergers and<br>Acquisitions | Medium     | Consumer Electronics       | Exhibit Analysis |
| 4 | Compress and Expand | Interviewee-Led | Revenue Growth              | Medium     | Industrial Goods           | Exhibit Analysis |
| 5 | PSU Bank Co.        | Interviewer-Led | Revenue Growth              | Hard       | Financial Services         | Brainstorming    |
| 6 | Fruit Drink Co.     | Interviewee-Led | Profitability               | Easy       | Consumer Packaged<br>Goods | Brainstorming    |
| 7 | Race to the Bottom  | Interviewee-Led | Profitability               | Medium     | Airlines                   | Case Math        |
| 8 | Coolant Co.         | Interviewer-Led | Market Entry                | Medium     | Consumer Electronics       | Case Math        |
| 9 | Lux Rides           | Interviewee-Led | Unconventional              | Hard       | Automotive/Luxury          | Brainstorming    |



## Cases

| #  | Case               | Format          | Туре                   | Difficulty | Industry                   | Stretch Area     |
|----|--------------------|-----------------|------------------------|------------|----------------------------|------------------|
| 10 | Slippery Soap      | Interviewee-Led | Profitability          | Easy       | Consumer Packaged<br>Goods | Case Math        |
| 11 | Thomas the Tank    | Interviewer-Led | Profitability          | Medium     | Industrial Goods           | Brainstorming    |
| 12 | Jurassic Vale      | Interviewee-Led | Unconventional         | Medium     | Entertainment              | Market Sizing    |
| 13 | Timeless Comfort   | Interviewer-Led | Profitability          | Medium     | Consumer Goods             | Case Math        |
| 14 | Packaging Co       | Interviewee-Led | Unconventional         | Medium     | Manufacturing              | Case Math        |
| 15 | Rubber Plant       | Interviewee-Led | Investment<br>Decision | Hard       | Public Sector              | Case Math        |
| 16 | University Program | Interviewer-Led | Unconventional         | Medium     | Education                  | Brainstorming    |
| 17 | <u>Biopharma</u>   | Interviewee-Led | Unconventional         | Medium     | Pharmaceuticals            | Case Math        |
| 18 | Voter Turnout      | Interviewee-Led | Unconventional         | Hard       | Public Sector              | Exhibit Analysis |



# Case 1: Electro Chargers

Format: Interviewee-led case

Type: Market Entry

Difficulty: Medium

Industry: Automobiles/infrastructure

Stretch Area: Structuring



## Tips for interviewee-led case

- 1. Try to minimize hand-holding.
- 2. Try to let the candidate ask questions If the candidate isn't on the right track and seems lost, try to give a hint or ask a question from the slides
- 3. Feel free to manage the conversation to hit all the questions from the slides, e.g.:
  - "That's a great question! What do you think?"
  - "Sure. Before we dig into that, what are you thoughts on ... [question from the slide]?"
  - "Sure, we'll explore it. Before that, let me share some data from our analyst/client that we've just received and... [ask a Math question]"
- 4. When the case time is running out, prompt the candidate to provide recommendation

## Electro Chargers - Prompt

#### **Problem Statement**

Your client, Electro Chargers, is a manufacturer of Electric vehicle battery swap stations that are used to house batteries for swappable electric vehicles. Rather than charging vehicles at charging stations, customers come to the stations when their batteries get depleted (<10% charge) and swap their vehicle's batteries with batteries from the station. Electro Chargers is considering entering a new city to setup its chargers and Rebecca, the CEO wants our support in deciding which city to enter. She also wants our support in estimating the amount of fixed investment the firm would require until 2030 to setup a battery swapping network in the city.

### **Additional Information (Provide Upon Request)**

- Objective To shortlist the city to enter based on potential number of EVs in the city (demand for the chargers) and estimate fixed investment required <u>until 2030</u>
- Geography Electro Chargers is a US-based company and already has operations in Boston and have shortlisted 5 cities - New York, Washington DC, Seattle, Miami and Atlanta.
- Business Swap stations are an alternative to traditional charging stations or home charging setups. The time taken for customers is similar to the time taken to refuel at gas stations.
- Technology These batteries are only suitable for 4-wheeler passenger cars with swappable batteries. Batteries and interoperable and can be used with any swappable EV.

# I. Background, Setup, and Recap

### Make sure the candidate follows these steps:

| 01 | Restate the prompt               | Candidates are expected to restate the prompt briefly to make sure they are on the same page with the interviewer   |
|----|----------------------------------|---|
| 02 | Add colors (optionally)          | Candidates can react to the prompt by providing some quick thoughts which will demonstrate candidates' business acumen, e.g.: • "Great to work on this exciting case! As EV adoption rates become higher, it will be interesting to understand how charging networks can be set up to prepare for this trend!" or "This is really exciting as my family owns an EV and we have a home charging setup, this sounds like a good alternative and less time consuming too. Happy to dive in!" |
| 03 | Ask 2-3 clarifying questions     | It is common that candidates ask 2-3 clarifying questions before designing their framework. Typical questions include: - Geography of client's operations/sales - Client's goal/objective - Business model of the client  |
| 04 | Ask for a moment<br>to structure | Typically, candidates ask for a couple of minutes to structure their approach   |

# II. Framework Development & Explanation

### Sample Framework

#### 1. City prioritization

#### A. Market potential

- Revenue potential
- Growth trends

#### **B.** Competition

- # of competitors and market share
- C. Other considerations
- Alternate fuel prices
- Policy support

### 2. Investment calculation

#### A. Estimation of stations

- Number of swappable electric vehicles
- Number of stations/EV

### B. Estimation of fixed cost

- Station PPE cost
- Rent
- SGA cost
- Overheads

#### 3. Capabilities

#### A. Business Competency

- Capital for investment
- City knowledge (product, cultural, administrative, geographic and economic differences)
- Comp advantages

#### **B. Technical Competency**

- Scaling operations
- Expansion management
- Other technical capabilities needed (app updates, etc.)

#### 4. Entry strategy

#### A. Considerations

- Market entry timing
- Piloting options
- Centralized vs
   Decentralized control
- Risks (flood risk, etc.)

#### **Hypothesis:**

- "As discussed before, the client wants to understand which city to enter. I am assuming potential revenue would depend on a number of factors such as the potential number of electric vehicles, number of competitors, alternate fuel prices and policy support. Do we have any data on any of these factors for the shortlisted cities?"



# III. Solution building

Question 1: (Provide Exhibit A) We have some information for the shortlisted cities. Based on this information, which city should the client enter and setup its operations?

### **Sample Answer**

- 1. There are quantitative factors for comparison of the cities such as number of potential swappable EVs in 2030 and qualitative factors for comparison of cities such as policy support or number of competitors.
- 2. Next page for detailed analysis of exhibit

# III. Solution building

| City             | # of<br>EVs | Swappa<br>ble EV<br>(%) | Estd. growth<br>of swappable<br>EVs (2025-30) | Potential # of<br>swappable EV<br>(2030) | # of<br>comp.<br>firms | Policy<br>support | Gallon/mile reqd.<br>for gas-powered<br>vehicles* | Rank |
|------------------|-------------|-------------------------|---|--|------------------------|-------------------|---|------|
| New York         | 60000       | 8%                      | 100%  | 6000*8%*(1+100%) =<br>9600               | 5                      | Medium            | 1/15  | 1    |
| Washington<br>DC | 20000       | 5%                      | 80%   | 1800<br>(Eliminated)                     | 5                      | Medium            | 1/20  | 4    |
| Seattle          | 30000       | 12%                     | 100%  | 7200                                     | 4                      | High              | 1/24 (Eliminated)                                 | 3    |
| Miami            | 30000       | 5%                      | 150%  | 3750                                     | 4                      | Medium            | 1/10  | 2    |
| Atlanta          | 15000       | 6%                      | 80%   | 1620<br>(Eliminated)                     | 2                      | Low               | 1/20  | 5    |

- 1. Firstly, looking at the potential # of swappable EVs, New York and Seattle stand out with almost 10,000 and 7,000 swappable EVs in 2030. The third city is Miami with almost half the demand as Seattle. Thus, we eliminate DC and Atlanta from consideration due to very low demand potential.
- 2. As per number of competing firms, lesser number of competitors makes it slightly easier to enter the market. Thus, Miami and Seattle are more attractive than New York.
- 3. In terms of policy support, there is high support in Seattle as compared to Miami and New York probably due to it being a mature market on the west coast and the state government being more supportive of technology.
- 4. Lastly, when the miles per gallon are compared for gas-powered vehicles across the cities, people in Miami and New York are most likely to switch to EVs due to lower miles/gallon for the gas vehicles. Seattle folks are not likely to switch to EVs due to lower mileage offered by EVs.
- 5. Thus, first ranked city would be **New York**, followed by Miami. We can look to create competitive advantages to secure some share despite competition and slightly lower policy support.

Question 2: How many stations would be needed and what is the required fixed investment to set up operations in new York? (Ask for approach and then show exhibit B for calculation of number of stations and exhibit C for investment calculation)

### **Additional Information (Provide Upon Request)**

**Firstly**, we would need to estimate the number of chargers required:

Number of stations

= Number of EVs\*(Number of stations/EVs)\*Market share = 9600 x 10/100 x 10% = 96 stations

Advanced comment - This number seems to be reasonable as this would not mean too few or too many stations in New York

If the number comes one order higher or lower, candidate should catch their mistake

**Secondly**, to calculate the fixed investment required (using ~100 stations for estimation):

Fixed investment

= Station set up + Rent (for the first year) + SGA + Overheads = (5.5 + 0.5 + 4 + 2) Mn = 12 Mn

Question 3: What are some other considerations for Electro Chargers that they should consider before entering the new city? (Brainstorming)

### Sample Answer

Electro Chargers would need to consider the following aspects:

#### A. Business and Technical aspects

- Capital for investment
- City knowledge (product, cultural, administrative, geographic and economic differences)
- Competitive advantages
- Customer awareness and likeliness to switch to EV
- Brand awareness and reputation
- Human capital and operations team management
- Other technical capabilities needed (app updates, etc.)

#### **B.** Entry considerations

- Market entry timing
- Piloting options
- Centralized vs Decentralized control
- Other risks (flood risk, etc.)



### Make sure the candidate follows these steps (brainstorming):

| 01 | Take time or do<br>on-the-go             | Most interviewers feel comfortable when candidates take 30-40 seconds to think and write down their ideas before walking the interviewer through them   |
|----|--|---|
| 02 | Do horizontal<br>presentation (optional) | The best practice is to structure brainstorming and offer a 10-second top-down overview, e.g. "Interesting question. I'd like to think about two kinds of considerations - business related and entry strategy related. In business related aspects we would need to consider factors such as funding, human capital and in entry strategy we would need to consider factors such as conducting pilots, looking at other risks such as floods," |
| 03 | Provide at least 4<br>ideas              | Feedback from consulting firms is that candidates offer only three ideas which is a bit on the lower end Push the candidate to provide at least 4 ideas Top-5% of candidates can usually suggest 7-8 ideas  |
| 04 | Add colors<br>(optionally)               | To impress the interviewer, the candidates can contextualize some of their ideas In this brainstorming each idea is presented as a story  |

## V. Synthesis and Recommendation

Question 4: Rebecca, the CEO is about to walk into the room, what are your recommendations for her?

### Sample Answer

**Recommendation:** We recommend that Electro Chargers enter and setup operations in New York. The fixed investment required for the same would be 12 Million dollars.

Reason #1: The city has the highest potential number of swappable electric vehicles in 2030 and we would be able to cater to the demand by setting up ~100 swapping stations.

Reason #2: The amount of fuel required for gas-powered vehicles is very high and people would find it economical to switch to electric vehicles that offer a better mileage.

#### Risks:

High amount of competition which would require building competitive advantages Time-taking process with government approvals and regulations

#### **Next steps:**

Building an entry strategy and piloting operations in the city before setup of the entire network of swapping stations

# Electro Chargers - Exhibit A

### Shortlisted city characteristics:

| City             | # of EVs | Swappable<br>EV (%) | Estd. growth<br>of swappable<br>EVs (2025-30) | # of<br>comp.<br>firms | Policy<br>support | Gallon/mile for gas-powered vehicles* |
|------------------|----------|---------------------|---|------------------------|-------------------|---------------------------------------|
| New York         | 60000    | 8%                  | 100%  | 5                      | Medium            | 1/15                                  |
| Washington<br>DC | 20000    | 5%                  | 80%   | 5                      | Medium            | 1/20                                  |
| Seattle          | 30000    | 12%                 | 100%  | 4                      | High              | 1/24                                  |
| Miami            | 30000    | 5%                  | 150%  | 4                      | Medium            | 1/10                                  |
| Atlanta          | 15000    | 6%                  | 80%   | 2                      | Low               | 1/20                                  |

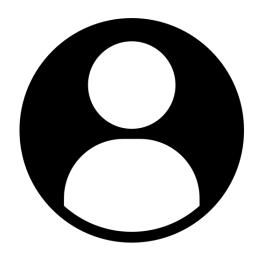
<sup>\*</sup>Cost of gas (per gallon) is the same across all the cities.



<sup>\*</sup>Swappable EVs provide a mileage that is equivalent of around 21 miles/gallon for gas-powered vehicles

# Electro Chargers - Exhibit B

### Comments from Mr. Albert, COO of Electro Chargers:



"Assuming that there are 100 vehicles in a city and all of them use only our swap stations, we would need to deploy 10 swap stations."

"If we enter a new city, we will have to sign new contracts with utility firms, pay rent and have to deploy a new team to overlook operations. We will also have to undertake maintenance. There is no person required to assist customers at the stations as the batteries are fairly lightweight."

"We are optimistic that we would be able to achieve a 10% market share by 2030 in the city we enter."

# Electro Chargers - Exhibit C

### Fixed Investment requirement:

| Cost  | Amount    | Unit                          |
|---|-----------|-------------------------------|
| Station setup cost                            | 55,000    | one time per station          |
| Rent (starting 2030)                          | 5,000     | per year per station          |
| SGA for operations team                       | 4,000,000 | for 2025-2030 for the network |
| Overheads cost (maintenance, contracts, etc.) | 2,000,000 | for 2025-2030 for the network |

# Case 2: Happy Bellies

Format: Interviewer-led case

Type: Revenue Growth

Difficulty: Hard

Industry: Food and Beverage, Consumer Packaged Goods

Stretch Area: Structuring



# Happy Bellies - Prompt

#### **Problem Statement**

Your client, Happy Bellies, is a meal kit delivery service that streamlines the culinary journey for the customer from grocery shopping to proportioning the ingredients and providing detailed instructions for a home cooked meal. The company is the first in the meal-kit space but has seen over the years many competitors entering the market. To differentiate from competitors, the company would like to launch a new product offering to entice loyal customers to spend more money per box (weekly order). How can Happy Bellies increase their revenue?

### **Additional Information (Provide Upon Request)**

- Objective Evaluate the best product offering to grow revenue while minimizing costs
- Geography Happy Bellies is a New York-based company with meal kit manufacturing based in the states of New Jersey, Texas and California. They only deliver in the US.
- Business Current offerings are either 2-person or 4-person recipe slots at three, four or five meals per weekly order.
- Costs Corporate expenses (product, engineering, project management etc.) are negligible.
   The client is worried primarily about procurement and production costs.

# I. Background, Setup, and Recap

### Make sure the candidate follows these steps:

| 01 | Restate the prompt            | Candidates are expected to restate the prompt briefly to make sure they are on the same page with the interviewer  |
|----|-------------------------------|--|
| 02 | Add colors (optionally)       | Candidates can react to the prompt by providing some quick thoughts which will demonstrate candidates' business acumen, e.g.: "This is such an interesting case! Meal kits have transformed home-cooking for many people - convenient, educational and time-efficient." or "The meal kit industry strikes me as a competitive space as its easy to incur costs with increased food expenses, sourcing issues and manufacturing logistics." |
| 03 | Ask 2-3 clarifying questions  | It is common that candidates ask 2-3 clarifying questions before designing their framework. Typical questions include: - Geography of client's operations/delivery - Client's goal/objective - Business model of the client - Major sources of cost  |
| 04 | Ask for a moment to structure | Typically, candidates ask for a couple of minutes to structure their approach  |

## II. Framework Development & Explanation

Note: There are many possible alternatives to this framework. These are only provided as possible suggestions.

### **Sample Framework**

#### 1. Market

#### A. Target Segment

- Size & Growth
- Customer Needs -WTP, Substitutes (take out food), preferences
- Geographies

#### **B.** Competition

- # of competitors and market share
- Competitive advantage
- Position of company

#### C. Other considerations

• Channel Preferences

### 2. Opportunity identification

#### A. Existing opportunities

- Pricing optimization
- Reduction of stockouts
- Better targeting

#### **B.** New opportunities

- Geographic expansion
   Canada, Mexico
- Channel expansion retail stores, D2C
- Product expansion cultural expansion, desserts

### C. Other strategies/Opp. cost

- Doing nothing
- Align/Acquire
- Collaborate

### 2. Investment calculation

#### A. Initial Investment

- investment costs
- Source of Investment
- Time Horizon

### B. Estimation of running costs

- Sourcing channels (ingredients, packaging etc.)
- SGA cost
- Delivery

#### C. Return on investment

- ROI
- Payback period

#### 3. Capabilities

#### A. Business Competency

- Product Features
- Price
- Distribution
- Brand & Advertising

#### **B. Technical Competency**

- Scaling operations
- Expansion management
- Other technical capabilities needed (app updates, etc.)

#### Hypothesis:

- "As discussed before, the client wants to understand how to determine the best product offering while avoiding high costs. I am assuming potential product offerings would depend on understanding the targeted demographic and competitive market. Do we have any data on the competitive market?"



# III. Solution building

Question 1: (Provide Exhibit A) The team decided to look at their industry wide position. The analysts on our team compiled the following chart outlining our client against the top three competitors. What does this tell you?

### Sample Answer

#### **Expected Initial Insights:**

- The client is the smallest player among the top four and has remained in the same position over the past 5 yrs.
- The industry saw an unprecedented spike in Year 2 and Year 3 which could indicate growth due to the pandemic crisis, cultural shifts toward the product, or geopolitical events etc.
- As the industry resumes to normal levels after Year 3, the client is the only player in the space to see a decrease in revenue. All players saw a decrease in profit margins indicating an increase in macro costs such delivery, labor, or sourcing.

Question 2: Secondly the client would like to know how their profits have performed year to year.

### Additional Information (Provide Upon Request)/Answer

**Firstly**, we would need to estimate the profit margins per year. Candidate should provide reasonable estimates and confirm with interviewer. Provide upon request the following profit margins.

Yr. 1 - 4%, Yr. 2 - 5%, Yr. 3 - 5%, Yr. 4- 3%, Yr. 5 - 3%

**Secondly,** to calculate profits the candidate will multiple profit margin against revenue.

Yr. 1 - \$1,750,000, Yr. 2 -\$4,000,000 , Yr. 3 - \$3,150,000, Yr. 4- \$1,500,000, Yr. 5 -\$1,000,000 Commentary:

The candidate should ultimately start to see that client has lost revenue (-43%) from Yr. 1 to Yr.5 as well as profit margins. A great response would want to understand the product mix of the client vs. competitors to understand if product development has helped other meal kit companies. In addition, cost cutting reductions would help increase profits.

Question 3: (Provide Exhibit B) The client strategy team has decided to pilot "Holiday Boxes" a specialized box that provides a main dish with side entrees for special occasions. Your team is helping the company assess the viability of the new product. As part of this project, your team has helped them run a test-market campaign in a few key markets. You're now looking at the results and need to determine which city to to choose

### **Sample Answer**

#### **Expected Initial Insights:**

- San Francisco would be best market to launch in given the results
- Adopters across all markets tend to skew toward higher income individuals (likely pressed for time)
- Service at least in its current format doesn't appear to appeal well to lower income individuals
- New York might be a good mid-sized market to enter into if the company wants to improve the odds of efficient delivery and logistics since the manufacturing is in NJ.
- New York & SF are cities where fewer people have ability to drive themselves to grocery store, also highly populated and fewer people have cars thus likely leading to the higher adoption rates.

Question 4: What are some additional cost cutting reductions that can made while the company launches a new product? (Brainstorming)

### **Sample Answer**

Happy Bellies would need to consider the following aspects:

#### Reduce Resources

- Eliminate waste (donate/sell excess products to 3rd party vendors)
- Improve Productivity (add automation to increase efficiency)
- Operate with a leaner staff (reduce hours or limit number of associates on floor)

#### Reduce cost of resources

- Renegotiate with vendor contracts
- Find alternative delivery methods
- Find cheaper alternatives for ingredients & packaging
- Outsource packing to other companies

### Make sure the candidate follows these steps (brainstorming):

| 01 | Take time or do<br>on-the-go          | Most interviewers feel comfortable when candidates take 30-40 seconds to think and write down their ideas before walking the interviewer through them   |
|----|---------------------------------------|---|
| 02 | Do horizontal presentation (optional) | The best practice is to structure brainstorming and offer a 10-second top-down overview, e.g. "Interesting question. I'd like to think about two kinds of considerations - reduction of the resources itself and reduction of the cost of resources within the reduction of resources, operating leaner kitchens and so on" |
| 03 | Provide at least 4<br>ideas           | Feedback from consulting firms is that candidates offer only three ideas which is a bit on the lower end Push the candidate to provide at least 4 ideas Top-5% of candidates can usually suggest 7-8 ideas  |
| 04 | Add colors<br>(optionally)            | To impress the interviewer, the candidates can contextualize some of their ideas In this brainstorming each idea is presented as a story  |

## V. Synthesis and Recommendation

Question 5: The CEO is about to walk into the room, what are your recommendations for them?

### **Sample Answer**

**Recommendation:** We recommend that Happy Bellies moves forward with a launch of Holiday Boxes in key markets of New York and San Francisco where we have seen strong early adoption.

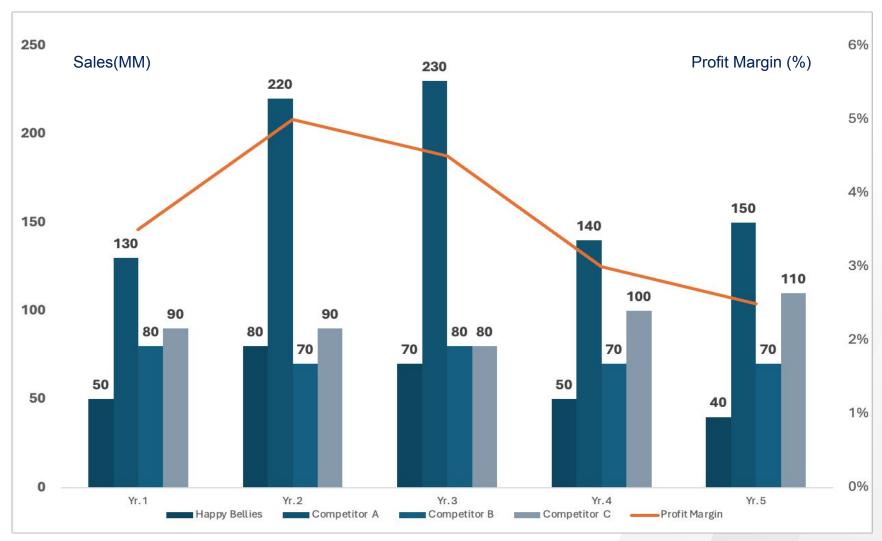
Reason #1: The new product launch will address the declining revenue sales (roughly -43% loss)the company has seen in the last 5 yrs.

Reason #2: In addition, we have identified cost cutting reductions in operations that will help realize stronger profit margins while the product launches.

Risks: Competitive Response is anticipated with this new product launch as the top 3 players may replicate, diminishing the new product's market impact.

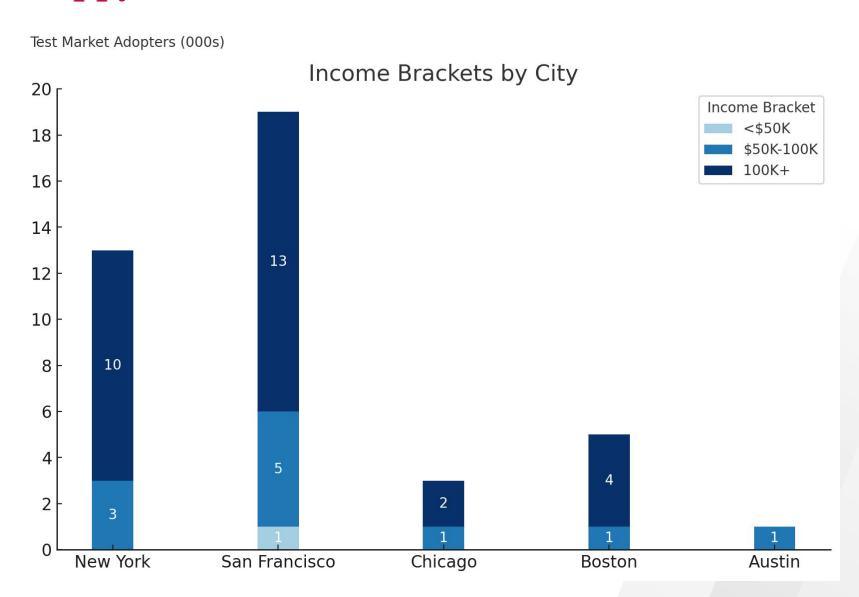
Next steps:Building a tactical marketing campaign strategy to minimize competitor's cannibalization and improve customer awareness of the product.

# Happy Bellies - Exhibit A



Note: Profit margin is industry average

# Happy Bellies - Exhibit B



## Case 3: Smart Radiators

Format: Interviewee-led case

Type: Acquisition

Difficulty: Medium

Industry: Technology/Consumer Electronics

Stretch Area: Exhibit Analysis



# Tips for interviewee-led case

- 1. Try to minimize hand-holding.
- 2. Try to let the candidate ask questions If the candidate isn't on the right track and seems lost, try to give a hint or ask a question from the slides
- 3. Feel free to manage the conversation to hit all the questions from the slides, e.g.:
  - "That's a great question! What do you think?"
  - "Sure. Before we dig into that, what are you thoughts on ... [question from the slide]?"
  - "Sure, we'll explore it. Before that, let me share some data from our analyst/client that we've just received and... [ask a Math question]"
- 4. When the case time is running out, prompt the candidate to provide recommendation

# Radiator Co. - Prompt

#### **Problem Statement**

Smart Radiator Valves (SRVs) are small radiator accessories that have been gaining popularity in Europe recently. These devices are similar to thermostats and allow wireless control of radiators that heat the house.

Your client, Radiator Co, is a Japanese manufacturer of radiators wishes to acquire an SRV startup to add the wireless capability to their radiators. The CEO wants our support in deciding which startup to acquire. He also wants our support in estimating the deal value for the deal.

### **Additional Information (Provide Upon Request)**

- Objective To select the target startup to acquire and estimate the deal value
- Geography The client is the European division of Radiator Co, which is headquartered in Japan. The division is based in Germany. The potential startup targets are all Europe-based.
- Business Competitors have started offering wireless control functionality and the European division (~1,800 employees, USD 50 Mn revenues, sells via electronic stores) intends to replicate their offerings.
- Criteria Both non-technical parameters and technical parameters of the product are important to decide the target acquisition. Compatibility and number of features are valued.
- Acquisition type Cash acquisition the client will pay equal to the firm value + synergies

# I. Background, Setup, and Recap

### Make sure the candidate follows these steps:

| 01 | Restate the prompt            | Candidates are expected to restate the prompt briefly to make sure they are on the same page with the interviewer   |
|----|-------------------------------|---|
| 02 | Add colors (optionally)       | Candidates can react to the prompt by providing some quick thoughts which will demonstrate candidates' business acumen, e.g.: "Great to work on this exciting case! With lifestyles moving towards high convenience, people want to control everything using phones or wirelessly. Traditional companies have to upgrade!" or "I have used radiators myself and thermostat control would have been convenient and potentially save energy! I see the benefits to the consumer. Happy to dive in!" |
| 03 | Ask 2-3 clarifying questions  | It is common that candidates ask 2-3 clarifying questions before designing their framework. Typical questions include: - Geography of client's operations/sales - Client's goal/objective - Business model of the client  |
| 04 | Ask for a moment to structure | Typically, candidates ask for a couple of minutes to structure their approach   |

# II. Framework Development & Explanation

### Sample Framework

#### 1. Target shortlist

#### A. Technical capabilities

- Features
- Product quality
- Product compatibility

#### B. Non-technical points

- Size of company (employees, revenue)
- HQ location
- Market share

#### C. Other considerations

- Other partnerships of the startup
- Manufacturing capab.
- Willingness to be acquired

#### 2. Standalone value

#### A. Estimation of profits

- Hardware Revenues
- Software Revenues
- Costs

#### **B. EV/EBITDA**

Competitor EV/EBITDA

### 3. Synergies

#### A. Cost synergies

- Manufac. synergies
- Distribution synergies

#### B. Revenue synergies

- Volume increase (due to better product)
- Price increase (due to bundling)

### 4. Risks and considerations

#### A. Business Competency

- Experience
- Capital for investment
- Human capital

#### B. Post-acquisition

- Culture fit
- Org. structure

### Hypothesis:

- "As discussed before, the client wants to understand which startup to acquire. Firstly, I would like to look at any current list of startups shortlisted by Radiator Co. Since this is a high-tech product, technical capabilities of the company would be very important. Do we have data on features, compatibility or other information about the shortlisted startups?"



# III. Solution building

Question 1: (Provide Exhibit A) We have some information for the some shortlisted startups. Based on this information, which startup should the client acquire?

### **Sample Answer**

- 1. Thank you for sharing this exhibit! I see that there are different kinds of information provided about the startups. There is non-technical information, technical (feature-related) information and ownership information about the startups.
- 2. Next page for detailed analysis of exhibit

# III. Solution building

| Parameter             | А            | В                | С           |
|-----------------------|--------------|------------------|-------------|
| Number of Employees   | 6,000        | 200              | <10         |
| HQ location           | Germany      | Switzerland      | France      |
| Revenue (USD Mn)      | 30           | 12               | 3           |
| Presence in EU        | 15 countries | 10 countries     | 2 countries |
| Main distrib. channel | Offline      | Offline + Online | Online      |
| Mobile App            | No           | Yes              | Yes         |
| Schedule feature      | Yes          | Yes              | No          |
| Air quality control   | No           | No               | Yes         |
| Ownership             | Public       | Private          | Private     |

- 1. Insight #1: Looking at non-technical parameters, A definitely looks very big to acquire for the European division although the presence is very attractive. It also lacks in technical features. Thus, we eliminate A.
- 2. Insight #2: Looking at technical features, A also lacks two out of three features and for this reason, lags behind products B and C.
- 3. Insight #3: The ownership structure indicates that options B & C are private and could be easier to acquire with scope for negotiations.
- 4. Based on advantages in size, presence and channel, **Option B** seems to be the best startup candidate followed by C. We should continue to track the activity of startup C as it scales. Option C can also be argued as a potential startup candidate to proceed but it has the risk of having smaller presence and size.

# IV. Math Exhibits and Analysis

Question 2: For calculation of the deal value, utilize the waterfall chart in Exhibit B and given EBITDA to estimate the firm value. Additionally, what could be potential reasons for startup B's high SG&A costs?

### Sample answer

For calculation of the deal value (acquisition price), price paid = firm value + synergies

For firm value, we will use the average EV/EBITDA value = (8.2 + 9.3 + 9.5)/3 = 9.0

Firm value = Avg. EV/EBITDA \* EBITDA =

For B: 9\*1 Mn = 9 Mn; For D: 9\*0.5 Mn = 4.5 Mn

Synergies = USD 4 Mn

Fair deal value = Firm value + Synergies

For B: USD 13 Mn; For C: 9.5 Mn

Advanced comment - This price does not seem unreasonable compared to the revenues of the European division. It is also possible that the Japanese headquarters help with the acquisition.

Potential reasons for high SG&A costs - too many employees, high marketing and ad spend due to presence in multiple countries, lack of SG&A technology usage

# IV. Math Exhibits and Analysis

### Make sure the candidate follows these steps (brainstorming):

| 01 | Take time or do<br>on-the-go             | Most interviewers feel comfortable when candidates take 30-40 seconds to think and write down their ideas before walking the interviewer through them   |
|----|--|---|
| 02 | Do horizontal<br>presentation (optional) | The best practice is to structure brainstorming and offer a 10-second top-down overview, e.g. "Interesting question. I'd like to think about three kinds of costs - Sales, General and Admin related costs. In sales costs, we can look into marketing and ad spend by regions, for general and admin expenses, we can look into usage of tech and employee productivity" |
| 03 | Provide at least 4<br>ideas              | Feedback from consulting firms is that candidates offer only three ideas which is a bit on the lower end Push the candidate to provide at least 4 ideas Top-5% of candidates can usually suggest 7-8 ideas  |
| 04 | Add colors<br>(optionally)               | To impress the interviewer, the candidates can contextualize some of their ideas In this brainstorming each idea is presented as a story  |

# V. Synthesis and Recommendation

Question 3: The CEO is about to walk into the room, what are your recommendations for him?

### Sample Answer

**Recommendation:** We recommend that Radiator Co acquire startup B for an acquisition price of USD 13 Mn.

Reason #1: Startup B has the best technical capabilities and the product has most features, which would improve our product.

Reason #2: Startup B also has the best presence across different countries which would help us distribute the SRVs in multiple countries with our radiators. They also have established connection in offline channels.

#### Risks:

Lack of air quality control functionality which can be a disadvantage
High SG&A costs which can potentially be brought down after the acquisition

#### Next steps:

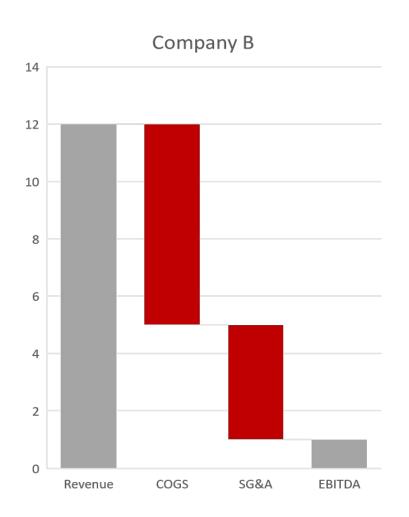
Considering funding and elaborate due diligence of the startup. Analysis of SG&A costs and understanding the importance of air quality control feature to customers

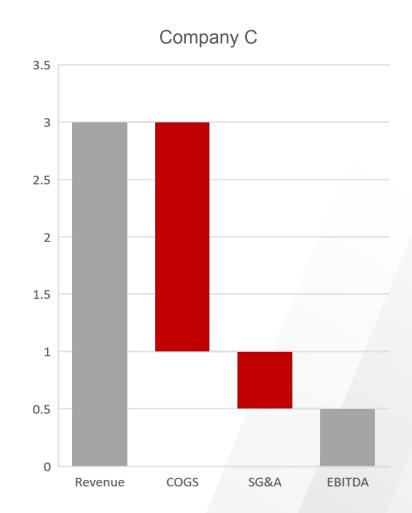
### Radiator Co - Exhibit A

### Shortlisted startup characteristics:

| Parameter             | А            | В                | С           |
|-----------------------|--------------|------------------|-------------|
| Number of Employees   | 6,000        | 200              | <10         |
| HQ location           | Germany      | Switzerland      | France      |
| Revenue (USD Mn)      | 30           | 12               | 3           |
| EV/EBITDA             | 8.2          | 9.3              | 9.5         |
| Presence in EU        | 15 countries | 10 countries     | 2 countries |
| Main distrib. channel | Offline      | Offline + Online | Online      |
| Mobile App            | No           | Yes              | Yes         |
| Schedule feature      | Yes          | Yes              | Yes         |
| Air quality control   | No           | No               | Yes         |
| Ownership             | Public       | Private          | Private     |

### Radiator Co - Exhibit B





Note: In terms of synergies, both startups will help achieve a lifetime revenue increase of USD 4 Mn

# Case 4: Compress and Expand

Format: Interviewee-led case

Type: Revenue Growth

Difficulty: Medium

Industry: Industrial Goods

Stretch Area: Exhibit Analysis



# Tips for interviewee-led case

- 1. Try to minimize hand-holding.
- 2. Try to let the candidate ask questions If the candidate isn't on the right track and seems lost, try to give a hint or ask a question from the slides
- 3. Feel free to manage the conversation to hit all the questions from the slides, e.g.:
  - "That's a great question! What do you think?"
  - "Sure. Before we dig into that, what are you thoughts on ... [question from the slide]?"
  - "Sure, we'll explore it. Before that, let me share some data from our analyst/client that we've just received and... [ask a Math question]"
- 4. For growth cases, feel free to also ask more ideas for growth when the candidate is explaining their framework. This helps in testing brainstorming skills and pressure handling.
- 5. When the case time is running out, prompt the candidate to provide recommendation

# Compressor Co. - Prompt

#### **Problem Statement**

Compressor Co. is a gas compressor manufacturer that makes gas compressors for usage in refineries and steel plants. Recently, their revenues have stayed flat and they want to grow their revenue.

The CEO wants our support in thinking about how they can go about the same.

### **Additional Information (Provide Upon Request)**

- Objective To find avenues for revenue growth for the compressor manufacturer
- Geography The client is a US-based company with \$1 Bn sales but sells to clients all over the world. Turnaround time from receipt of orders to delivery of the compressors is ~1.5 years.
- Product Gas Compressors are huge equipment (size of football field) that are used to compress air and generate high pressures required in the refineries and steel plants. These generally have a life of 10-20 years when maintained regularly.
- Business The client, Compressor Co. earns revenues from selling gas compressors for large-scale refineries or steel plant projects across the world. Maintenance of their compressors is currently handled by third party players that are locally stationed.
- Timeline The client is looking at both short-term as well as long-term recommendations.

# I. Background, Setup, and Recap

### Make sure the candidate follows these steps:

| 01 | Restate the prompt               | Candidates are expected to restate the prompt briefly to make sure they are on the same page with the interviewer   |
|----|----------------------------------|---|
| 02 | Add colors (optionally)          | Candidates can react to the prompt by providing some quick thoughts which will demonstrate candidates' business acumen, e.g.: "Great to work on this exciting case! I have no experience with the industry and this can be a great way to understand a bit about the same!" or "With transitions towards clean energy and sustainability, approaching new industries or customers could help the client. It will be great to explore such options and more" |
| 03 | Ask 2-3 clarifying questions     | It is common that candidates ask 2-3 clarifying questions before designing their framework. Typical questions include: - Geography of client's operations/sales - Client's goal/objective - Business model of the client  |
| 04 | Ask for a moment<br>to structure | Typically, candidates ask for a couple of minutes to structure their approach   |

# II. Framework Development & Explanation

### Sample Framework

#### 1. Industry

#### A. Industry

- Size and growth
- Types of compressors (within gas, outside gas)
- Global growth trends
- Regulation changes (e.g. environmental compliance)

#### **B.** Competition

- Market shares
- New entrants or compressor technologies

#### 2. Same market

#### A. Same product

- New customers within same use cases
- Replacement sales
- New distribution channels

#### B. New product

- Add-on attachments (energy consumption reduction etc.)
- Compressor maintenance services
- New technologies

#### 3. New market

#### A. Same product

- New geographies
- New customer segment

#### **B.** New product

- Add-on attachments (energy consumption reduction etc.)
- Compressor maintenance services
- New technologies

### 4. Risks/Capabilities

#### A. Internal

- Capital for growth
- Teams in product development or regions
- Expertise in product development or regions
- Operations setup for procurement and distribution of compressors

#### B. External

- Partners/Entry strategy
- Regulations

#### **Hypothesis:**

- "As discussed before, the client wants to grow revenues and sells mainly to refineries and steel plants. To understand which avenues of growth would be the greatest and feasible, I would like to understand more about the different options I talked about. A good place to start could be understanding if there are new offerings or regions which we could enter. Do we have information on what all we currently offer as compared to our competitors or regional demand?"



# III. Solution building

Question 1: (Provide Exhibit A) From sources, we understand that the market leader firm A offers some features and upgrades that we do not offer. Which of these should we look to offer in the short-term and long-term?

### **Sample Answer**

- 1. Thank you for sharing this exhibit! There are two key observations:
  - a. There are upgrades for which we have the capability and we can realise the revenue impact in the short-term by offering the services
  - b. There are upgrades for which we do not have capability but can look to build capabilities in order to realise the revenue impact in the future
- 2. Next page for detailed analysis of exhibit

# III. Solution building

- 1. The total revenue impact of all upgrades is \$282 Mn and this information can be used to benchmark each upgrade and its relative impact
- 2. (GOOD) Insight #1: Compressor Co should look to offer the upgrades for which we have capabilities: these are 4 upgrades (coatings, couplings, journal bearings and thrust bearings and have a total revenue impact of \$72 Mn)
- 3. (ADVANCED) Insight #2: Compressor Co should then focus on offering upgrades for which they do not have the capability but high revenue impact. This would increase revenues in the long term. These would be Windback seals, Impellers and Dry Seals which have a total revenue impact of \$164 Mn
- 4. (ADVANCED) Insight #3: Adding these two categories of upgrades to our offerings would help in potentially increasing our revenues by \$236 Mn, which is ~84% of the total revenue impact. Focusing on these would help in achieving more than 80% of the total impact and we can focus on these first.
- 5. However, an analysis of the costs, operations setup and ease of implementation for these upgrades also needs to be undertaken.

# IV. Solution building

Question 2: Gas compressors are sold to customers who are establishing plants such as oil refineries or steel plants. Given that currently the firm operates in USA and South Korea, using Exhibit B, suggest regions where Compressor Co should focus for revenue growth based on the the projected increase in oil refining capacity.

### Sample answer

From the chart, we can look at the projected increase in oil refinery capacity by 2028.

| Country     | 5-year increase in capacity |
|-------------|-----------------------------|
| USA         | 22.5 MMTPA                  |
| China       | 16.6 MMTPA                  |
| Russia      | -0.825 MMTPA                |
| India       | 7.5 MMTPA                   |
| South Korea | 3.6 MMTPA                   |

The increases in capacity suggest many new projects in USA and China. Keeping this in mind, the client should focus on winning new projects in USA as well as entering China. The firm can also look to transition out of South Korea and potentially shift focus to China or India.

Advanced comment - Given recent tensions between US and China, India could also potentially be a good region to enter and investigations into kinds of projects and requirements could be started.

# IV. Brainstorming

Question 3: Considering that the US region is also growing in capacity, what could be potential avenues for revenue growth within the region?

### Sample answer

In the US region, the client could explore the following options for revenue growth:

- 1. Same product -
- Approaching project owners of new oil refinery and steel plant projects
- Approaching project owners of other industries that use gas compressors
- Marketing via conferences and other industry magazines
- Offering new compressors to companies whose compressors would be old
- Improvements in the product based on feedbacks and trends and price optimization
- New products -
- Compressor upgrades (as discussed before)
- Maintenance services for own products via annual contracts or partnerships
- Maintenance services for competitor products via annual contracts or partnerships

# IV. Brainstorming

### Make sure the candidate follows these steps (brainstorming):

| 01 | Take time or do<br>on-the-go             | Most interviewers feel comfortable when candidates take 30-40 seconds to think and write down their ideas before walking the interviewer through them   |
|----|--|---|
| 02 | Do horizontal<br>presentation (optional) | The best practice is to structure brainstorming and offer a 10-second top-down overview, e.g. "Interesting question. I'd like to think about two kinds of growth areas - Growth within gas compressors and growth within other offerings. In the same product, we can look into new customers in refineries and steel or even new industries" |
| 03 | Provide at least 4<br>ideas              | Feedback from consulting firms is that candidates offer only three ideas which is a bit on the lower end Push the candidate to provide at least 4 ideas Top-5% of candidates can usually suggest 7-8 ideas  |
| 04 | Add colors<br>(optionally)               | To impress the interviewer, the candidates can contextualize some of their ideas In this brainstorming each idea is presented as a story  |

# V. Synthesis and Recommendation

Question 4: The CEO is about to walk into the room, what are your recommendations for him?

### Sample Answer

**Recommendation:** We recommend that Compressor Co offer some compressor upgrades (revenue potential of USD 232 Mn), prepare an entry strategy for China oil refineries and plans to strengthen position in USA.

Reason #1: Competitor and market leader A offers many compressor upgrades and the short term revenue impact of feasible upgrades is USD 72 Mn. Other upgrades are worth USD 160 Mn.

Reason #2: China and USA have the highest revenue potential in the oil refining industry due to highest capacity being added in next 5 years. India is also the third ranked in additional capacity.

#### Risks:

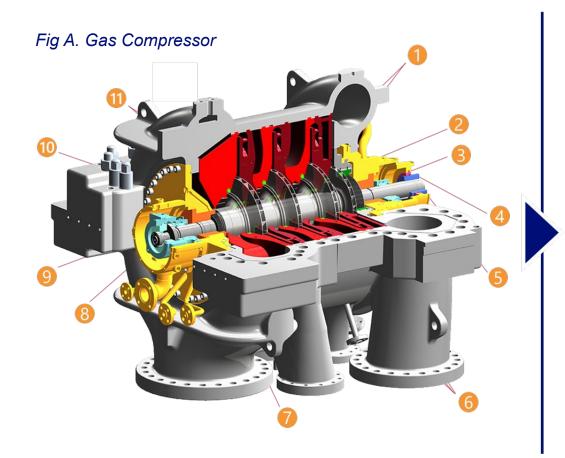
Operationally, compressor upgrades might be difficult to execute in existing projects. Entry strategy and local partnerships might be required to enter China and India.

#### **Next steps:**

Analyze costs and operations of offering short term and long term upgrades. Prepare entry strategy for China and penetration strategy for the US market.

# Compressor Co - Exhibit A

In case of compressors, Competitor A offers multiple upgrades to improve efficiency, reliability and corrosion resistance of the compressor components

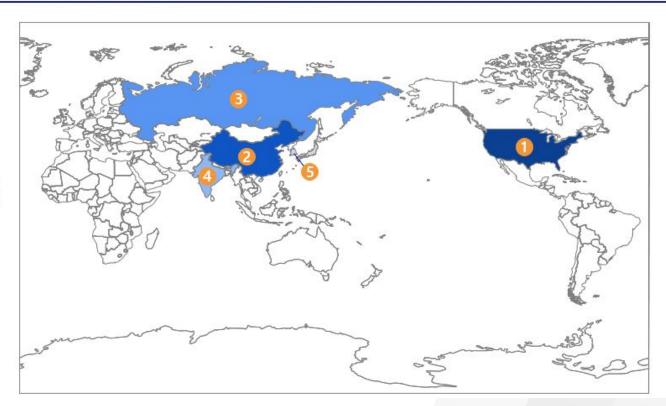


| Compressor upgrades  | Capab.    | Rev.<br>impact |
|--|-----------|----------------|
| <ul> <li>Coatings: To minimize corrosion and fouling</li> </ul>  | ✓         | 40 Mn          |
| <u>Balance Piston Seal</u> : Upgrade to abradable seats for higher efficiency and reliability                              | Х         | 8 Mn           |
| Monitoring Instrumentation: Upgrades to<br>facilitate early problem detection and aid in<br>maintenance planning           | Х         | 16 Mn          |
| Couplings: Flexible, dry-type couplings flex<br>under misalignment and do not require<br>lubrication.                      | ✓ <b></b> | 12 Mn          |
| Windback Seals: Provides greater energy efficiency, meets environmental regulations.                                       | Х         | 64 Mn          |
| 6 <u>Impellers</u> : With complex geometries, minimal variation  | х         | 30 Mn          |
| <b>7</b> Dry seals/catridge seals: Multiple application  | x         | 70 Mn          |
| 8 <u>Journal bearings</u> : For superior damping and<br>stability, improved wear resistance, reduced<br>mechanical losses. |           | 7 Mn           |
| <u>Thrust bearings</u> : Self-leveling or directed<br>lube thrust bearings for improved efficiency<br>and reliability      | ✓         | 13 Mn          |
| 10 Endwalls: Upgrade from split to solid endwalls to eliminate the potential for leaks, improve reliability and safety.    | Х         | 10 Mn          |
| Impeller eye and shaft seals: Abradable seals for improved efficiency and reliability                                      | Х         | 10 Mn          |
| Total  |           | XX Mn          |

# Compressor Co - Exhibit B

### Countries with highest oil refinery capacity and projected capacity expansion

- 1 UNITED STATES 2020: 900 MMTPA 5-Year CAGR: +2.51%
- 2 CHINA 2020: 830 MMTPA 5-Year CAGR: +2.05%
- 3 RUSSIAN FEDERATION
  2020: 330 MMTPA
  5-Year CAGR: -0.24%
- 4 INDIA 2020: 250 MMTPA 5-Year CAGR: +3.00%
- 5 SOUTH KOREA 2020: 180 MMTPA
  5-Year CAGR: +1.95%



According to IEA, China is expected to overtake USA in the next few years in terms of refining capacity. Chinese refining capacity has nearly tripled since the turn of millennium as it tried to keep pace with rapid growth of diesel and gasoline consumption.

Note: MMTPA stands for Million Metric Tonnes per Annum



# Case 5: PSU Bank Co.

Format: Interviewer-led case

Type: Revenue Growth

Difficulty: Hard

Industry: Financial Services

Stretch Area: Brainstorming



# Tips for interviewer-led case

- 1. Sometimes during interviewer-driven cases, the interviewers ask the first question and then the candidate takes time to build their framework
- 2. Try to ask the candidate questions If the candidate isn't on the right track and seems lost, try to give a hint or ask a question from the slides
- 3. Feel free to manage the conversation to hit all the questions from the slides, e.g.:
  - "That's a great question! What do you think?"
  - "Sure. Before we dig into that, what are you thoughts on ... [question from the slide]?"
  - "Sure, we'll explore it. Before that, let me share some data from our analyst/client that we've just received and... [ask a Math question]"
- 4. For growth cases, feel free to also ask more ideas for growth when the candidate is explaining their framework. This helps in testing brainstorming skills and pressure handling.
- 5. There is **no recommendation** in an interviewer-driven interview

# PSU Bank Co. - Prompt

#### **Problem Statement**

PSU Bank Co. is a public sector bank and their mutual fund division has not been doing well recently. The CEO wants your support in identifying the reasons for the same and wants you to help her solve the problem.

The division pools invests money of investors in a diverse set of stocks to achieve good returns.

### **Additional Information (Provide Upon Request)**

- Objective The AUM (assets under management) of the Mutual Fund is the total amount of investor's money that the company manages. The AUM has not been growing fast enough as the firm has not been able to attract more investments. Objective is to find the reasons for this.
- Business You can assume AUM to be similar to sales in a traditional firm. The mutual fund division gets a small fee in exchange of managing the money of volunteering investors.
- Geography The client is a US-based bank with \$70 Bn in AUM.
- Competition The industry growth rate for last two years has been 8% whereas the client has been growing at 3%. The growth has been slower compared to the competition.

# I. Background, Setup, and Recap

### Make sure the candidate follows these steps:

| 01 | Restate the prompt               | Candidates are expected to restate the prompt briefly to make sure they are on the same page with the interviewer  |
|----|----------------------------------|--|
| 02 | Add colors (optionally)          | Candidates can react to the prompt by providing some quick thoughts which will demonstrate candidates' business acumen, e.g.: "As an investor in mutual funds, I assume marketing and ads via bank applications would be ways in which banks would try and attract customers to Mutual Fund investments but it would be good to understand this more!" |
| 03 | Ask 2-3 clarifying questions     | It is common that candidates ask 2-3 clarifying questions before designing their framework. Typical questions include: - Geography of client's operations/sales - Client's goal/objective - Business model of the client   |
| 04 | Ask for a moment<br>to structure | Sometimes during interviewer-driven cases, the interviewers ask the first question and then the candidate takes time to build their framework  |

# **Case Questions**

### This is an interviewer-driven interview

| 1 | What could be potential reasons for why the AUM has not been growing as fast as the competitors?   |
|---|--|
| 2 | (See Exhibit A) We have information of sales of our bank and the industry by different distribution channels used to sell Mutual Fund products. What are your observations here? |
| 3 | What are your hypothesis for the poor performance of MF sales through the bank itself (own channel)?   |
| 4 | (Provide Exhibit B) We have some additional data from our benchmarking study with our competitors. What conclusions can be inferred from the same?                               |
| 5 | (Provide Exhibit C) We have another piece of information - Does this help in identifying the underlying issue of lower AUM conversion?   |

# II. Framework Development & Explanation

Question 1: What could be potential reasons for why the AUM has not been growing as fast as the competitors?

### **Sample Framework**

#### 1. Market

#### A. Industry

- Types of mutual fund products
- Types of customers
- Sales channels (e.g. bank application, calls)

#### **B.** Competition

- Market shares
- New entrants or products

### 2. AUM (Sales)

#### A. # of investors

- Number of investors (total investor base, sales conversion)
- Mix of investors

#### B. Avg. investment

 Invested amount per investor (performance of the fund, diversity of products)

### 3. Risks/Capabilities

#### A. Internal

- Capital for changes
- Human capital for suggested changes
- Other operations setup

#### B. External

- Brand impact
- Regulations

#### **Hypothesis:**

- "As discussed before, the client wants to understand why the competitors' AUM has been growing at a faster rate as compared to PSU Bank Co's AUM. To understand the reasons for the same, I would first want to understand if there have been any changes at the industry level - any changes in mutual fund products being offered or types of customers or in sales channels being used in the industry. Do we have any data that indicates the same?"

# III. Solution building

Question 2: (Provide Exhibit A) We have information of sales of our bank and the industry by different distribution channels used to sell Mutual Fund products. What are your observations here?

### Sample Answer

- 1. Thank you for sharing this exhibit! There are two key observations:
  - a. This validates that the growth rate in AUM for PSU Bank is only 3% whereas for the industry it is 8% year over year
  - b. PSU Bank Co. is also not bringing in enough investments from its own channels as compared to the industry. While the industry has roughly 50-50 split between channels, PSU Bank Co. has a 25-75 split
- 2. Next page for brainstorming

# IV. Brainstorming

Question 3: What are your hypothesis for the poor performance of MF sales through the bank itself (own channel)?

### Sample answer

The AUM for customers via own channel could be lower due to following reasons:

Advanced comment - AUM via own channel = Own bank account holders x % investing in mutual funds x avg. investment per investor

- The bank has fewer account holders
- 2. The conversion rate of account holders to mutual fund investors is lower due to:
- Mutual fund products not being good compared to industry in terms of diversity
- Mutual fund products not being good compared to industry in terms of performance
- Good products but ineffective sales team
- Good products and sales but customers do not tend to invest in mutual funds
- 3. Average investment per investor could be low due to:
- Average balance of customer could be lower
- Average share invested in mutual fund could be lower

# IV. Brainstorming

### Make sure the candidate follows these steps (brainstorming):

| 01 | Take time or do<br>on-the-go             | Most interviewers feel comfortable when candidates take 30-40 seconds to think and write down their ideas before walking the interviewer through them  |
|----|--|--|
| 02 | Do horizontal<br>presentation (optional) | The best practice is to structure brainstorming and offer a 10-second top-down overview, e.g. "Interesting question. I'd like to think about three kinds of reasons - number of account holders, mutual fund investors within those and average investment size from these investors. For mutual fund investors, I would like to check how many purchase mutual fund investments compared to the industry" |
| 03 | Provide at least 4<br>ideas              | Feedback from consulting firms is that candidates offer only three ideas which is a bit on the lower end Push the candidate to provide at least 4 ideas Top-5% of candidates can usually suggest 7-8 ideas   |
| 04 | Add colors<br>(optionally)               | To impress the interviewer, the candidates can contextualize some of their ideas In this brainstorming each idea is presented as a story   |

# IV. Math Exhibits & Analysis

Question 4: (Provide Exhibit B) We have some additional data from our benchmarking study with our competitors. What conclusions can be inferred from the same?

### Sample answer

From table 1, we observe that the performance of mutual fund products of our client and the competitors is similar.

From table 2, we see that the account holders for our bank are comparable and even larger than the competition but the conversion to mutual fund customers is ~13% whereas for the competitors, it ranges from 24% to 37.5%

Interviewee should move the discussion forward and understand what could be causing the lower conversion from account holders to mutual fund investors. Some potential reasons (from before):

- Mutual fund products not being good compared to industry in terms of diversity (eliminated based on note in Exhibit B)
- Mutual fund products not being good compared to industry in terms of performance (eliminated based on note in Exhibit B)
- Good products but ineffective sales team
- Good products and sales but customers do not tend to invest in mutual funds

# IV. Math Exhibits & Analysis

Question 5: (Provide Exhibit C) We have another piece of information - Does this help in identifying the underlying issue of lower AUM conversion?

### Sample answer

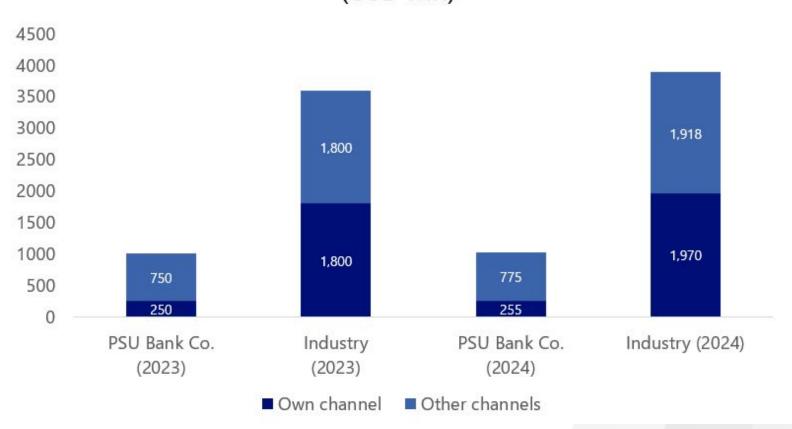
There are three important observations:

- 1. Salespeople have two kinds of products to sell and these products are cannibalizing into each other
- 2. For the client, the incentive to sell high yield savings products compared to mutual fund products is much higher compared to the industry average
- 3. Due to competing incentives and higher incentive to sell high yield savings products, the knowledge level of the sales staff is very low for mutual fund products (or vice versa i.e. knowledge for mutual funds is low and therefore they are not selling them)

Advanced comment - Since the profit margins for mutual funds is slightly higher than high yield savings products, there is no benefit from promoting high yield savings more than mutual funds and having more incentive for the same.

### PSU Bank Co. - Exhibit A

# AUM (Sales) by distribution channel (USD Mn)



## PSU Bank Co. - Exhibit B

TABLE 1

| Value of USD 100 invested in MF products | Year 1 end | Year 2 end | Year 3 end |
|--|------------|------------|------------|
| Client                                   | 111        | 123        | 145        |
| Competitor 1                             | 108        | 124        | 146        |
| Competitor 2                             | 110        | 121        | 143        |
| Competitor 3                             | 111        | 125        | 141        |

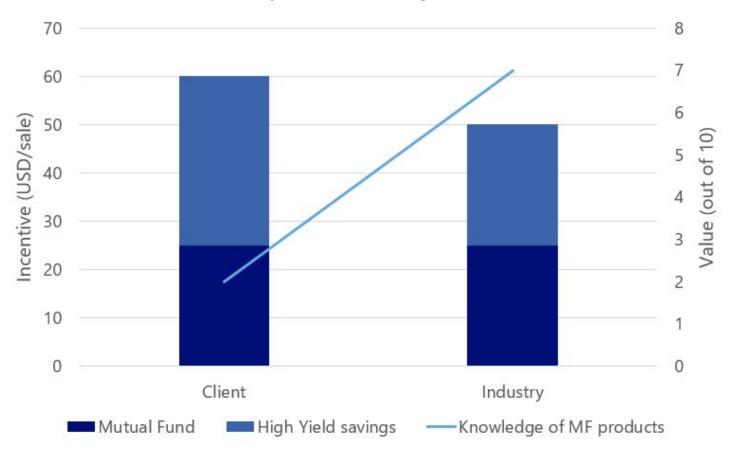
Note: Among the mutual fund products, all players have similar diversity among products being offered to investors

TABLE 2

| Value of USD 100 invested in MF products | Total deposits in the bank (Mn) | Total AUM sales through bank's own channel (Mn) |
|--|---------------------------------|---|
| Client                                   | 1,200                           | 250   |
| Competitor 1                             | 500                             | 120   |
| Competitor 2                             | 400                             | 150   |
| Competitor 3                             | 1,000                           | 300   |

### PSU Bank Co. - Exhibit C

### Salesperson survey results



Note: Sales staff cross-sell both mutual fund and life insurance products to customers. Incentives are given based on which product they are able to sell. Among mutual funds and life insurance products, mutual fund products have slightly higher profit margins for the bank than insurance products.

## Case 6: Fruit Drink Co.

Format: Interviewee-led case

Type: Profitability

Difficulty: Easy

Industry: Consumer Packaged Goods

Stretch Area: Brainstorming



## Tips for interviewee-led case

- 1. Try to minimize hand-holding.
- 2. Try to let the candidate ask questions If the candidate isn't on the right track and seems lost, try to give a hint or ask a question from the slides
- 3. Feel free to manage the conversation to hit all the questions from the slides, e.g.:
  - "That's a great question! What do you think?"
  - "Sure. Before we dig into that, what are you thoughts on ... [question from the slide]?"
  - "Sure, we'll explore it. Before that, let me share some data from our analyst/client that we've just received and... [ask a Math question]"
- 4. For growth cases, feel free to also ask more ideas for growth when the candidate is explaining their framework. This helps in testing brainstorming skills and pressure handling.
- 5. When the case time is running out, prompt the candidate to provide recommendation

## Fruit Drink Co. - Prompt

### **Problem Statement**

We have been hired by a large CPG client. One of their product lines is a pomegranate drink. They have observed that they are losing market share to the competition as well as their profitability is lower compared to the competition. We have been asked to help them turn around the situation.

### **Additional Information (Provide Upon Request)**

- Objective Objective is to understand why the market share and profitability is lower compared to competition and how we can turn-around the situation.
- Business The client is manufacturer of the drink and uses third party retailers and distributors.
- Geography The client is a US-based client and has sales all over US region.
- Competition Our market share is 20% vs. 36% for our competitor. Our profit margin is -8% compared to 10% for our competitor. Profits have been in the red for the last two years. There are other players in the market but we do not have much data for them.

# I. Background, Setup, and Recap

### Make sure the candidate follows these steps:

| 01 | Restate the prompt            | Candidates are expected to restate the prompt briefly to make sure they are on the same page with the interviewer   |
|----|-------------------------------|---|
| 02 | Add colors (optionally)       | Candidates can react to the prompt by providing some quick thoughts which will demonstrate candidates' business acumen, e.g.: "Since we have only been losing money since the past two years, there seems to be some change affecting only our firm and not the entire industrypotentially a supplier change or low salesit will be interesting to investigate!" or "It seems like we are the market challenger but if we do not turn around quickly, we risk being pushed out of the market" |
| 03 | Ask 2-3 clarifying questions  | It is common that candidates ask 2-3 clarifying questions before designing their framework. Typical questions include: - Geography of client's operations/sales - Client's goal/objective - Business model of the client  |
| 04 | Ask for a moment to structure | Typically, candidates ask for a couple of minutes to structure their approach   |

## II. Framework Development & Explanation

### Sample Framework

#### 1. Market

### A. Industry

- Pomegranate juice market size and trends
- Types of products (non-pulp, organic, etc.) or customers
- Regulatory changes

#### 2. Revenue

#### For each revenue stream:

#### A. Price

- Pricing changes
- Seasonal discounts

#### B. Volume

- # Customers
- # Purchases/customer
- # Amount purchased

#### C. Product Mix

- High-margin sales vs.
   Low-margins juice sales
- Bundling of products

#### 3. Cost

#### A. Fixed Costs

- Rent
- PPE
- Overhead & Supplies
- SG&A
- Labor

#### **B. Variable Costs**

- Raw Material
- Manufacturing
- Packaging
- Distribution
- Sales & Marketing

### 4. Recommendation

#### A. Increase revenue

- Same market, product
- New market, product
- Product, price, promotion, place

#### **B.** Decrease cost

- Lower COGS
- Lower quantity/product
- Lower product sold

### **Hypothesis:**

- "As discussed before, the client wants to understand why the market share and profitability is lower as compared to the competitor. My hypothesis would be that there has been some change in the revenue or cost structure of making the pomegranate juices. I would want to understand how we compare to the competitor with respect to the fixed and variable costs of the production process. Do we have any data that indicates our costs could be higher?"



## III. Solution building

Question 1: (Provide Exhibit A) We have information of the fixed and variable costs per product vis-a-vis our main competitor. What are your observations here?

### **Sample Answer**

- 1. Thank you for sharing this exhibit! There are three key areas because of which our profits are lower:
  - a. Pomegranate Cost: USD 11.5 vs. USD 9 per unit for competition
  - b. Packaging cost: USD 1.2 vs. USD 0.5 per units for competition
  - c. Sales cost of USD 0.3 vs. USD 0.1 per unit for competition
- 2. Next page for brainstorming

## IV. Brainstorming

Question 2: What are your hypotheses for each of the cost levers being higher than the competitor?

### Sample answer

- 1. The pomegranate cost could be higher because pomegranate content could be higher or the procurement price is higher
  - Response: Our competitor is in an exclusive venture with an irrigation equipment company where they provide irrigation equipment to the farmer in exchange for right to purchase directly from them. We purchase from wholesalers which leads to higher prices for us. We would only be able to reduce the cost to USD 11.3
- Packaging cost could be higher due to type of packaging, cost or amount of packaging reqd.
   Response: The competitor uses tetrapaks whereas we use plastic bottle. Switching to tetrapaks is an option for us too. We would only be able to match their cost of USD 0.5
- 3. Sales and marketing costs could be higher due to diff. channels, higher spend per channel Advanced comment Even if we reduce the pomegranate and packaging costs, we will still be making a loss of USD 0.3 per unit. There is little incentive to increase our market share but we should look to increase our price.

# IV. Brainstorming

### Make sure the candidate follows these steps (brainstorming):

| 01 | Take time or do<br>on-the-go          | Most interviewers feel comfortable when candidates take 30-40 seconds to think and write down their ideas before walking the interviewer through them   |
|----|---------------------------------------|---|
| 02 | Do horizontal presentation (optional) | The best practice is to structure brainstorming and offer a 10-second top-down overview, e.g. "Interesting question. I would like to think of market share as being driven by three things - production, distribution and demand. Within production, there could be supply limitations due to low capacity, unutilized capacity, spoilage, etc" |
| 03 | Provide at least 4 ideas              | Feedback from consulting firms is that candidates offer only three ideas which is a bit on the lower end Push the candidate to provide at least 4 ideas Top-5% of candidates can usually suggest 7-8 ideas  |
| 04 | Add colors<br>(optionally)            | To impress the interviewer, the candidates can contextualize some of their ideas In this brainstorming each idea is presented as a story  |

## V. Synthesis and Recommendation

Question 3: The CEO is about to walk into the room, what are your recommendations for her?

### Sample Answer

**Recommendation:** With the existing cost structure, Fruit Juice Co. should focus on increasing price and justify the price increase to retain or increase market share. This is because:

Reason #1: We have explored all cost reduction options and even after implementing all of them, we would be unprofitable at a per unit level.

Reason #2: With an increased price, we could turn profitable per unit and position our brand as a premium brand. We can also look to improve the taste of the product and use signalling by packaging or advertisements.

#### Risks:

Customers may not be willing to buy a higher priced juice packs.

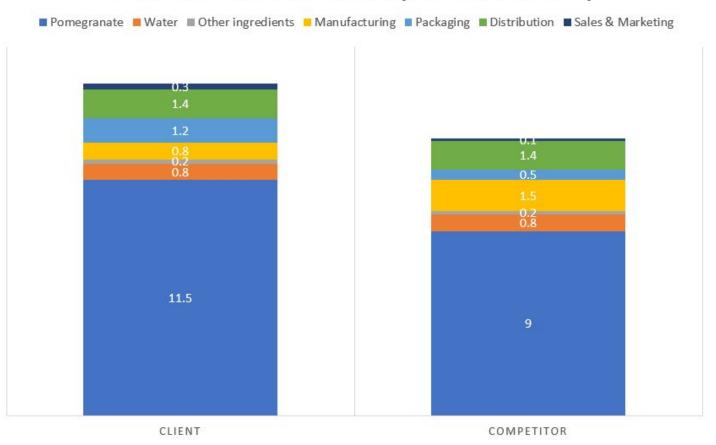
Changes in packaging or marketing efforts may alienate our customers.

#### **Next steps:**

Perform a price elasticity exercise with the customers and conduct a product clinic to see likeliness of customers to buy newly packaged and marketed product

## Fruit Drink Co. - Exhibit A

### PER UNIT COST ANALYSIS (FIGURES IN USD)



Note: Price of 12x8 oz juice packs for both brands is USD 15. Exclude fixed costs from the analysis.

## Case 7: Race to the Bottom

Format: Interviewee-led case

Type: Profitability

Difficulty: Medium

Industry: Airlines

Stretch Area: Case Math



## Tips for interviewee-led case

- 1. Try to minimize hand-holding.
- 2. Try to let the candidate ask questions If the candidate isn't on the right track and seems lost, try to give a hint or ask a question from the slides
- 3. Feel free to manage the conversation to hit all the questions from the slides, e.g.:
  - "That's a great question! What do you think?"
  - "Sure. Before we dig into that, what are you thoughts on ... [question from the slide]?"
  - "Sure, we'll explore it. Before that, let me share some data from our analyst/client that we've just received and... [ask a Math question]"
- 4. For growth cases, feel free to also ask more ideas for growth when the candidate is explaining their framework. This helps in testing brainstorming skills and pressure handling.
- 5. When the case time is running out, prompt the candidate to provide recommendation

## Race to the Bottom - Prompt

### **Problem Statement**

We have been hired by a Bernard, the CEO of Gamma Airlines, a regional carrier in Germany. Their profitability has been declining since the past year and they want our support in thinking of next steps.

### **Additional Information (Provide Upon Request)**

- Objective Objective is to understand why the profitability is declining and how the situation can be turned around.
- Geography The client is a small regional airline carrier and operates only one route between Stuttgart, a smaller city with manufacturing hubs and Berlin, the capital of Germany. The flight is a non-stop flight with a duration of 1 hr 15 mins.
- Competition Our competitors have also experienced a decline in their profitability in the last year but our decline in profitability has been more than them.

# I. Background, Setup, and Recap

### Make sure the candidate follows these steps:

| 01 | Restate the prompt            | Candidates are expected to restate the prompt briefly to make sure they are on the same page with the interviewer  |
|----|-------------------------------|--|
| 02 | Add colors (optionally)       | Candidates can react to the prompt by providing some quick thoughts which will demonstrate candidates' business acumen, e.g.: "Airlines is traditionally a very low margin business and any decline in profitability is a big hit to players. It will be important for Gamma to turn around the situation quickly." or "Airlines are a very dynamic industry and there could be regulatory, competitive or even airplane related concerns. This will be an interesting case to discuss!" |
| 03 | Ask 2-3 clarifying questions  | It is common that candidates ask 2-3 clarifying questions before designing their framework. Typical questions include: - Geography of client's operations/sales - Client's goal/objective - Business model of the client   |
| 04 | Ask for a moment to structure | Typically, candidates ask for a couple of minutes to structure their approach  |

## II. Framework Development & Explanation

### Sample Framework

#### 1. Market

### A. Industry

- Germany airline market size and trends
- Types of airlines (regional, national, LCC, etc.) or customers (leisure, business)
- Alternate travel options between the cities
- Regulatory changes

### 2. Revenue

#### A. Price

- Pricing changes
- Overbooking issues

#### B. Volume

- # Seats
- % Occupied (Load Factor)

#### C. Product Mix

- High-margin business passengers vs.
   Low-margin leisure passengers
- Additional services

#### 3. Cost

#### A. Fixed Costs

- Rent for airline hangers
- Airline costs (depreciation)
- SG&A

#### **B. Variable Costs**

- Fuel costs
- Maintenance costs
- Crew costs

### 4. Recommendation

#### A. Increase revenue

- Same route, model
- New route, model
- Product, price, promotion, place

#### **B.** Decrease cost

- Lower fixed costs such as rent and SG&A
- Lower variable costs

### **Hypothesis:**

- "As discussed before, we want to understand why the profitability has been declining in the past year. Since the other players in industry have also been experiencing declines, my hypothesis would be that there could have been some regulatory change or a new entrant or an alternative travel option that could have started in the past year. Do we have any data that indicates any of these factors could have changed?



## III. Solution building

Question 1: (Provide Exhibit A) We performed a competitive benchmarking exercise with our competitors and have some information from the same. What are your observations here?

### **Sample Answer**

- 1. Thank you for sharing this exhibit! There are three key observations in this exhibit:
  - a. There are three major players in the route and in terms of profits, we are the second largest airline operating in the route
  - b. All three airlines operating in the STR-BER route have experienced declining profits as discussed but the problem is larger for us than the competition. While their profits have declined by 9% and 11% respectively, our profits have declined by ~27% (make the candidate do the % comparison)
  - c. The note states that costs of operation of the airlines have not changed significantly for all airlines which suggests that the declining revenues seem to be the problem
- 2. Next page for brainstorming

## IV. Brainstorming

Question 2: Why do you think the revenues could have declined for all the players?

### Sample answer

- 1. There could be multiple reasons why the revenues could have declined across all players. Some hypothesis for the same are as follows:
- External factors:
  - Regulations: Price regulation changes, cap on number of flights operated, changes in crew availability due to regulations
  - Alternate travel options: New train or bus routes
- Internal factors:
  - Alternate airline routes: New airline routes have opened up
  - Airport problems: Changes in infrastructure at airports, weather or other closures

Response: In the past year, there have been no significant changes in the regulations around the airline industry or changes in infrastructure or weather closures. However, there has been a new high-speed train that has been introduced between the two cities which takes only 2.5 hrs for commuters. The train station in Berlin is also located very close to the business center.

 Advanced comment - This could explain why the entire industry could be declining in revenue. However, we still need to identify why we have been experiencing higher declines in revenue. One hypothesis could be to understand if we cater to business travellers and have been experiencing more of the declines (driving the conversation forward)

# IV. Brainstorming

### Make sure the candidate follows these steps (brainstorming):

| 01 | Take time or do<br>on-the-go             | Most interviewers feel comfortable when candidates take 30-40 seconds to think and write down their ideas before walking the interviewer through them  |
|----|--|--|
| 02 | Do horizontal<br>presentation (optional) | The best practice is to structure brainstorming and offer a 10-second top-down overview, e.g. "It is interesting to see an entire industry declining. Reasons could be external or internal to the industry. I would like to think of external issues such as alternate travel options or regulatory changes. Internally, there could be alternate routes that could have opened or issues such as airport closures" |
| 03 | Provide at least 4<br>ideas              | Feedback from consulting firms is that candidates offer only three ideas which is a bit on the lower end Push the candidate to provide at least 4 ideas Top-5% of candidates can usually suggest 7-8 ideas   |
| 04 | Add colors<br>(optionally)               | To impress the interviewer, the candidates can contextualize some of their ideas In this brainstorming each idea is presented as a story   |

## IV. Solution building

Question 3: (Provide Exhibit B) Can you help us estimate Gamma's average revenue per flight in 2023 and 2024? (After the calculations) What do you think are the reasons for higher revenue declines for us and what could we do to overturn this?

### Sample answer

1. Based on the data provided, revenue per flight is (Business revenue) + (Leisure revenue)

For 2023, Gamma has an average revenue per flight = 0.3\*200\*300 + 0.7\*200\*80 = 29,200\$

For 2024, Gamma has an average revenue per flight = 0.1\*180\*250 + 0.9\*180\*80 = 17,460\$

After this calculation, candidate can be provided with other revenues:

2023, AirGer: 24,480\$ & 2024, AirGer: 21,340\$

2023, Beta Airlines: 10,800\$ & 2024, Beta Airlines: 9,600\$

- 2. Revenues have declined more for us due to:
- Higher share of business passengers who could have shifted to the train for time saving and direct transportation to the business district. They may also prefer some other features such as the Wifi or Hospitality in the train
- Higher retention for AirGer business class, potentially due to loyalty programs or other amenities
- 3. We could offer features such as priority check-ins, in-flight WiFi, discounted cab rides to business districts or even better meals to differentiate from the competitors and train service

Advanced comment: There is also a decline in the business class prices potentially due to downward pressure due to the train prices



## V. Synthesis and Recommendation

Question 4: The CEO is about to walk into the room, what are your recommendations for him? (candidate can take 30 seconds if they ask)

### Sample Answer

**Recommendation:** Gamma Airlines should focus efforts on increasing the revenues by differentiating itself as a business class operator, marketing for higher load factor and potentially operating new routes. This is because:

Reason #1: We were the preferred business class operator and could offer features such as priority check-ins, in-flight WiFi, discounted cab rides to business districts or even better meals to differentiate from the competitors and train service

Reason #2: With an increased load factor, revenue would increase and costs per passenger would fall

Reason #3: New routes would help in diversifying our revenue source and the train will potentially continue to cannibalize our revenues as people prefer it (especially, the business travellers)

#### Risks:

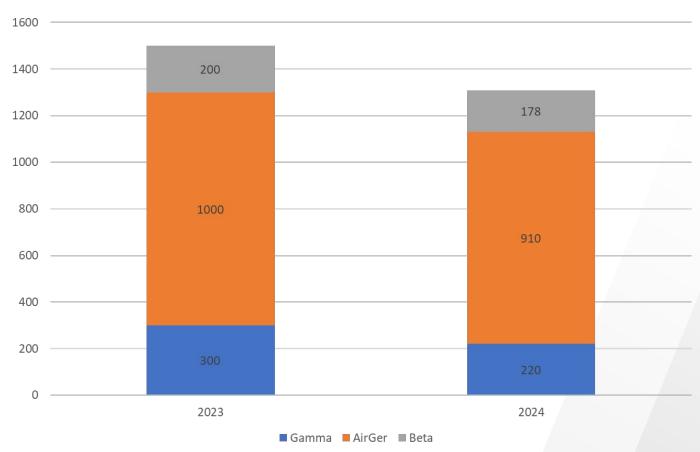
Customers travelling from STR - BER may only prefer to travel by train in the future. New offerings and marketing may create a high financial burden on profits.

#### **Next steps:**

Perform an analysis of business customers to understand preferences and willingness to accept the offerings. Evaluate revenue potential of other new routes.

### Race to the Bottom - Exhibit A





Note: The costs of operation of all three airlines have not changed significantly in the past year

## Race to the Bottom - Exhibit B

| Parameters<br>(avg. per<br>flight) | Gamma  | AirGer   | Beta                 |
|------------------------------------|--|--|----------------------|
| Type of passengers                 | 2023: Business – 30%; Leisure – 70%  | 2023: Business – 10%; Leisure – 90%  | 2023: Leisure – 100% |
|                                    | 2024: Business – 10%; Leisure – 90%  | 2024: Business – 10%; Leisure – 90%  | 2024: Leisure – 100% |
| Occupied seats (total 300)         | 2023: 200  | 2023: 240  | 2023: 180            |
|                                    | 2024: 180  | 2024: 220  | 2024: 160            |
| Price                              | 2023: Business – 300\$; Leisure – 80\$<br>2024: Business – 250\$; Leisure – 80\$ | 2023: Business – 300\$; Leisure – 80\$<br>2024: Business – 250\$; Leisure – 80\$ | Leisure – 60\$       |

## Case 8: Coolant Co.

Format: Interviewer-led case

Type: Market-entry

Difficulty: Medium

Industry: Consumer Electronics

Stretch Area: Case Math



## Coolant Co. - Prompt

### **Problem Statement**

Coolant Co. is a Chinese cooling equipment manufacturer that manufactures equipment for datacenters in China. The company wants to enter the US market but wants to understand if it is a good decision. The CEO views USA as a growth engine due to proliferation of AI technologies which require large data-centers.

### **Additional Information (Provide Upon Request)**

- Objective To evaluate the market entry decision and recommend entry or non-entry. Coolant
   Co. intends to break even within the first two years of doing business.
- Business The Chinese cooling equipment manufacturer is one of the leading cooling equipment manufacturers in China. The equipment has proprietary technology that uses special cooling liquids and special design to cool big servers in data-centers.
- Geography The client is wholly-China based at the moment and looking to make its first expansion outside China. The US data-center market is large and extremely fast-growing and the CEO is keen on entering US.
- Competition There are some local players in the US which offer data-center cooling equipment but Coolant Co. equipment has some competitive advantages and is lower priced product in China.

## Tips for interviewer-led case

- 1. Sometimes during interviewer-driven cases, the interviewers ask the first question and then the candidate takes time to build their framework
- 2. Try to ask the candidate questions If the candidate isn't on the right track and seems lost, try to give a hint or ask a question from the slides
- 3. Feel free to manage the conversation to hit all the questions from the slides, e.g.:
  - "That's a great question! What do you think?"
  - "Sure. Before we dig into that, what are you thoughts on ... [question from the slide]?"
  - "Sure, we'll explore it. Before that, let me share some data from our analyst/client that we've just received and... [ask a Math question]"
- 4. For growth cases, feel free to also ask more ideas for growth when the candidate is explaining their framework. This helps in testing brainstorming skills and pressure handling.
- 5. There is **no recommendation** in an interviewer-driven interview

# I. Background, Setup, and Recap

### Make sure the candidate follows these steps:

| 01 | Restate the prompt               | Candidates are expected to restate the prompt briefly to make sure they are on the same page with the interviewer  |
|----|----------------------------------|--|
| 02 | Add colors (optionally)          | Candidates can react to the prompt by providing some quick thoughts which will demonstrate candidates' business acumen, e.g.: "In the current geopolitical scenario with uncertain tariff regulations, the client has to be cautious while entering the US but there might be a strong financial incentive to explore. Excited to proceed for the same reason" |
| 03 | Ask 2-3 clarifying questions     | It is common that candidates ask 2-3 clarifying questions before designing their framework. Typical questions include: - Geography of client's operations/sales - Client's goal/objective - Business model of the client   |
| 04 | Ask for a moment<br>to structure | Sometimes during interviewer-driven cases, the interviewers ask the first question and then the candidate takes time to build their framework  |

# **Case Questions**

### This is an interviewer-driven interview

| 1 | What are some factors that Coolant Co. needs to consider while entering the US market?   |
|---|--|
| 2 | (See Exhibit A) Given some data from our analysis, should Coolant Co. look to enter the US market?   |
| 3 | What could be some alternate ways for Coolant Co. to enter the market apart from importing completely assembled equipment and what could be pros and cons of the options?    |
| 4 | (Provide Exhibit B) We have some comments from Mr. Albert, the Head of Corporate Development at Coolant Co. Can you suggest which of the two options would be better suited? |

## II. Framework Development & Explanation

Question 1: What are some factors that Coolant Co. needs to consider while entering the US market?

### Sample Framework

#### 1. Market

#### A. Industry

- Market size
- Growth trends
- Types of data-centers
- Specific regulations (on Chinese entry or investments)

### **B.** Competition

- · Competitor response
- Entry barriers
- Potential partners

### 2. Financial

#### A. Potential profits

- Market size
- Market share
- Profit margin

### B. ROI/Break Even

- Opportunity costs
- Capital investment
- Break Even/ROI on investment

### 3. Capabilities

#### A. Business Competency

- Market knowledge (product, cultural, administrative, geographic and economic differences)
- Comp advantages

### **B. Technical Competency**

- Scaling operations
- Expansion management
- Other technical capabilities needed

### 4. Entry Strategy

#### A. Entry Methods

- Chinese equipment imports
- Direct entry
- Acquisition
- Joint Venture

### **B.** Considerations

- Market entry timing
- Pilot tests
- Centralized vs Decentralized control

### Hypothesis:

- "As discussed before, the client wants to enter the US Data Center market and sell the cooling equipment to the major players. For doing this, the best place to start would be to see if there is a market for selling the Chinese equipment (compatibility of types of data centers) and if regulations allow entry of a Chinese player in the US market. We can dive into financial considerations post this. I would first like to see if we have any information on compatibility and allowance of a Chinese player to enter the market in this industry?"



## III. Solution building

Question 2: (See Exhibit A) Given some data from our analysis, should Coolant Co. look to enter the US market?

### **Sample Answer**

- 1. Thank you for sharing this exhibit! There are four key observations:
  - a. The revenues of data center firms have been increasing which is a positive sign indicating a growing data center industry. The growth is a healthy ~50%
  - b. In terms of competition, there are many players in the cooling equipment field and the market is dispersed with the largest player having only 10% share
  - c. From the news articles, we can see that the equipment is compatible with the US data-centers which is good because some parts can be brought to the US
  - d. There is a regulatory concern around Chinese imports and keeping a long-term view, other methods of market entry should be explored. A partnership or JV with an existing player could prove helpful in terms of knowledge and regulations
  - 2. Thus, overall, it seems like an attractive market to enter with some concerns around geopolitics which could be circumvented using other methods of entry

## IV. Brainstorming

Question 3: What could be some alternate ways for Coolant Co. to enter the market apart from importing completely assembled equipment and what could be pros and cons of the options?

### Sample answer

- Other forms of market entry:
  - Direct entry (setting up American manufacturing plant) Pros would be easier navigation around regulations and higher control; Cons are a huge capital and time investment
  - Licensing (licensing of technology to another company) Pros would be lower costs due to localized supply chains; Cons could be vital technology transfer
  - Acquisition (acquiring an existing company) Pros would be quick setup and access to existing customers; Cons could be alienation of customers and employees
  - Partnership (partner with a local company or brand to enter the market) Pros can be access to local expertise and resources; Cons could be management of partnership and revenues
  - Joint venture (partner with another company to create a third company) Pros can be shared knowledge and abiding by regulations; Cons can be sharing equity

# IV. Brainstorming

### Make sure the candidate follows these steps (brainstorming):

| 01 | Take time or do<br>on-the-go          | Most interviewers feel comfortable when candidates take 30-40 seconds to think and write down their ideas before walking the interviewer through them  |
|----|---------------------------------------|--|
| 02 | Do horizontal presentation (optional) | The best practice is to structure brainstorming and offer a 10-second top-down overview, e.g. "Interesting question. I'd like to think about other kinds of modes of entry that allow navigating the regulation around Chinese imports. For this, local production or importing of certain components can be thought. Some options are high control options such as acquisitions and direct entry vs. other lower control options of forming a partnership, JV or licensing agreement" |
| 03 | Provide at least 4 ideas              | Feedback from consulting firms is that candidates offer only three ideas which is a bit on the lower end Push the candidate to provide at least 4 ideas Top-5% of candidates can usually suggest 7-8 ideas   |
| 04 | Add colors<br>(optionally)            | To impress the interviewer, the candidates can contextualize some of their ideas In this brainstorming each idea is presented as a story   |

## IV. Math Exhibits & Analysis

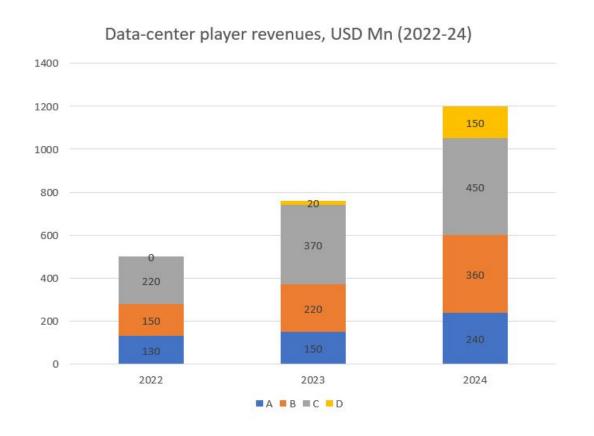
Question 4: (Provide Exhibit B) We have some comments from Mr. Albert, the Head of Corporate Development at Coolant Co. With a payback goal of 2 years, can you suggest which of the two options would be better suited?

### Sample answer

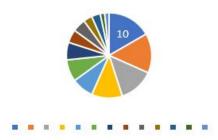
|                          | Option 1 - Direct Entry                       | Option 2 - Partnership w VRF Co.                                    |
|--------------------------|---|---|
| Market share             | Year 1 - 0; Year 2 - 5%                       | Year 1 = 2.5%; Year 2 = 5%  |
| Revenues                 | Year 1 - 0<br>Year 2 - 5%*10%*1728 M = 8.64 M | Year 1 = 2.5%*10%*1440 M = 3.6 M<br>Year 2 = 5%*10%*1728 M = 8.64 M |
| Fixed<br>Investment      | 1 Mn  | 1.1 Mn  |
| Profit<br>(Contribution) | 8%*8.64 M which is < 1 Mn                     | 10%*(3.6 M + 8.64 M) = 1.224 M<br>which is higher than investment   |

After the calculations, Option 2 seems to be the better entry option for Coolant Co. It helps them break even within a timeframe of 2 years and also helps them establish local presence and knowledge in the US market.

### Coolant Co. - Exhibit A







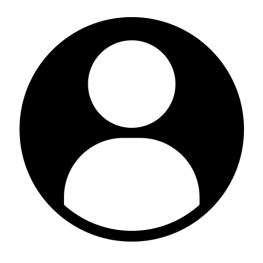
#### NEWS -

- The Chinese cooling equipment is compatible with the US Data Center designs
- There are regulatory concerns around imports from China and tariffs could increase in next 2 years

Note: The revenue growth rate for the next two years is expected to be 20% for the data center players

## Coolant Co. - Exhibit B

### Comments from Mr. Albert, Head of Corporate Development, Coolant Co:



"According to our information, the revenues for cooling equipment is 10% of the total data center industry revenues."

"If we enter the US, there would be two scenarios.

|                          | Option 1 - Direct<br>Entry | Option 2 -<br>Partnership w VRF<br>Co. |
|--------------------------|----------------------------|--|
| Market share             | Year 1 - 0; Year 2 - 5%    | Year 1 = 2.5%; Year 2 = 5%             |
| Fixed<br>Investment      | 1 Mn                       | 1.1 Mn                                 |
| Profit<br>(Contribution) | 8% of sales                | 10% of sales                           |

Note: Assume no time value of money

# Case 9: Lux Rides

Format: Interviewee-led case

Type: Unconventional

Difficulty: Hard

Industry: Automotive/Luxury

Stretch Area: Brainstorming



# Tips for interviewee-led case

- 1. Try to minimize hand-holding.
- 2. Try to let the candidate ask questions If the candidate isn't on the right track and seems lost, try to give a hint or ask a question from the slides
- 3. Feel free to manage the conversation to hit all the questions from the slides, e.g.:
  - "That's a great question! What do you think?"
  - "Sure. Before we dig into that, what are you thoughts on ... [question from the slide]?"
  - "Sure, we'll explore it. Before that, let me share some data from our analyst/client that we've just received and... [ask a Math question]"
- 4. For growth cases, feel free to also ask more ideas for growth when the candidate is explaining their framework. This helps in testing brainstorming skills and pressure handling.
- 5. When the case time is running out, prompt the candidate to provide recommendation

# Lux Rides - Prompt

### **Problem Statement**

Lux Rides, an Italian 2-wheeler brand is looking to enter the luxury scooter segment in Vietnam. 2-wheelers are very popular in the country and the client sees this as an attractive opportunity. They have conducted some initial analysis and decided to enter the market. However, the Country Head, Alex, who has been newly appointed, wants our support in knowing how they should price Model Z, the luxury scooter model.

### **Additional Information (Provide Upon Request)**

- Objective The objective of the client is to maximize revenue in first 2 years. We have to suggest an appropriate price for the luxury scooter to achieve this goal.
- Business Lux Rides, manufactures 2-wheelers across the world and sells in countries with large 2-wheeler penetration. However, for Model Z, which is the luxury model, Lux Rides plans to manufacture the scooter in Italy and export it to Vietnam to control quality.
- Geography The client is an Italian player but is looking to enter the Vietnam market. It has not introduced Model Z in any country yet.
- Competition There are many competitors in the Vietnam 2-wheeler market but most of the players are lower-end players.
- Price benchmark There is no price in mind and we would like to know your suggestions

# I. Background, Setup, and Recap

### Make sure the candidate follows these steps:

| 01 | Restate the prompt            | Candidates are expected to restate the prompt briefly to make sure they are on the same page with the interviewer   |
|----|-------------------------------|---|
| 02 | Add colors (optionally)       | Candidates can react to the prompt by providing some quick thoughts which will demonstrate candidates' business acumen, e.g.: "A luxury scooter! Wow that seems like a very unique idea. I have heard of luxury bikes in the past but have not heard of a luxury scooter yet. We will also have to see if there is a market for different price points of Model Z. This will be interesting to see" or "This is a very unique product and we would have to see how much the target customers are willing to pay. Being luxury should help us in commanding a higher price!" |
| 03 | Ask 2-3 clarifying questions  | It is common that candidates ask 2-3 clarifying questions before designing their framework. Typical questions include: - Geography of client's operations/sales - Client's goal/objective - Business model of the client  |
| 04 | Ask for a moment to structure | Typically, candidates ask for a couple of minutes to structure their approach   |

## II. Framework Development & Explanation

### Sample Framework

#### 1. Market//Product

#### A. Market

- Target customer segment
- Available substitutes in marketplace

#### **B. Product**

- Unique selling points of the model
- Other models sold by Lux Rides
- Other upgrades offered

### 2. Cost-based price

#### A. Fixed Costs

- Manufacturing rent
- Design costs
- Utilities and SG&A

#### **B. Variable Costs**

- Supplier costs
- Labor costs
- Delivery costs

# 3. Competition based price

#### A. Target segment

- Other players in market
- Relative shares and blue ocean strategy

#### **B.** Competitor prices

- Direct competitor prices
- Indirect competitor prices

### 4. Value-based price

- Income of target customer segment
- Willingness to Pay
- Price sensitivity

#### **Hypothesis:**

- "As discussed before, we want to decide a good price to sell the luxury scooter in the Vietnam market. Firstly, we will have to ascertain which customers would be willing to purchase such scooters. I believe that only very high net worth individuals would be able to purchase. To establish a baseline of what the price should be, first I would like to look at the cost of manufacturing and shipping the scooter. Do we have any information about the same?"



### IV. Math Exercise

Question 1: (Provide Exhibit A) Based on this data and a minimum 10% margin requirement, what would be the minimum feasible price to sell one scooter?

### Sample answer

- 1. The total cost of components of the scooter = 24 Mn VND.
- 2. Shipping costs: 12.5% of total component costs = 3 Mn VND.
- 3. The cost of the Spanish and Italian components of the scooter = 20.5 Mn VND.
- 4. The 20% tariff cost is applicable on these costs = 0.2\*20.5 Mn = 4.1 Mn VND.
- 5. Thus, the total cost of importing the scooter to Vietnam = 24 Mn + 3 Mn + 4.1 Mn VND = 31.1 Mn VND
- 6. Since, Lux Rides is looking to make minimum 10% margin based on this total cost, this value is 90% of the minimum scooter price.
- 7. Thus, minimum scooter price = 31.1/0.9 = 34.5 Mn VND

  (Give credit to the candidate even if they are not able to do the last calculation (= 31.1/0.9)

# III. Solution building

Question 2: (Provide Exhibit B) Our scooter is a high performance scooter with a relative power rating of 4.5. We have some information on other 2-wheeler models sold in the market. What do you gather from the information?

### **Sample Answer**

- 1. Thank you for sharing this exhibit! There are four key observations in this exhibit:
  - a. Ten models represent 85% of the market and this shows that the market is fairly consolidated. We can ignore the rest of the market (80-20 rule)
  - b. There are currently no high performance scooters in the market. Our product will be placed in competition with high performance bikes.
  - c. Within high performance bikes, many are priced at the lower end (25-30 Mn VND) and one model that is highest performance, demands high price (50 Mn)
  - d. Advanced comment: There are some models that are low performance but still priced higher, we might want to see why that is the case. This could be due to any other functionalities.
- 2. For our very high performance scooter, we must look to price it high in order to maximize our revenue but it might depend on whether we have the other advantage in our product too.
- 3. Based on overlaps with other products and customer segments, we could even potentially price the scooter at 50 Mn VND,

# IV. Solution building

Question 3: (Provide Exhibit C) Based on a customer survey, we have identified the customer interest in purchasing the luxury scooters and motorcycles at different price points. What do you infer from this?

### Sample answer

- 1. Based on the data provided, there are two key observations:
  - a. More customers are willing to pay a high price for motorcycles as compared to scooters
  - b. For values of price higher than 34.5 Mn VND, the price point of ~38-40 Mn VND seems to be the most attractive in terms of maximizing revenue from the sale of the luxury scooter
- 2. Advanced comment: The price point of 40 Mn would also be lower than the price of 50 Mn for a comparable motorcycle model (as shown in Exhibit A) and this would be acceptable in the market

# IV. Solution building

Question 4: Alex is an executive who likes to plan ahead and he believes that the main Vietnamese competitor in the market may launch a competing luxury model. How could Lux Rides respond in such a case?

### Sample answer

- 1. In order to prevent the Vietnamese competitor from stealing share, Lux Rides can use the following tactics:
  - a. Product Differentiation: Position Model Z as a product that embodies Italian craftsmanship, luxury and innovation and command a higher WTP
  - b. Premium features: Consider adding premium features such as safety features, smart connectivity and luxury colours such as gold, black or even matte finish options
  - Bundling and Financing: Offer accessories and service packages with Model Z that are exclusive to Lux Rides. Lux Rides could also provide attractive deal to distributors.
  - d. Launch and expansion strategy: Lux Rides could target cities with the highest number of HNIs such as Ho Chi Minh City or other cities.
  - e. Events and Partnerships: Lux Rides could build as aspirational image via events and partnerships in Vietnam such as partnership with biking superstars or organize bike rallies.

# V. Synthesis and Recommendation

Question 5: Alex is about to walk into the room, what are your recommendations for him?

### **Sample Answer**

**Recommendation:** Lux RIdes should price the luxury scooter at 40 Mn VND when entering the Vietnam market. This is because of three reasons:

Reason #1: The price would help in meeting the minimum margin requirements of 10% margin and help in having an attractive margin of ~22%

Reason #2: There is no top scooter model in the high performance segment and we would be able to differentiate as compared to the market while still being lower priced than the comparable motorcycle

Reason #3: Maximum share of customers are willing to purchase the scooter at this price point and this will maximize the revenues

#### Risks:

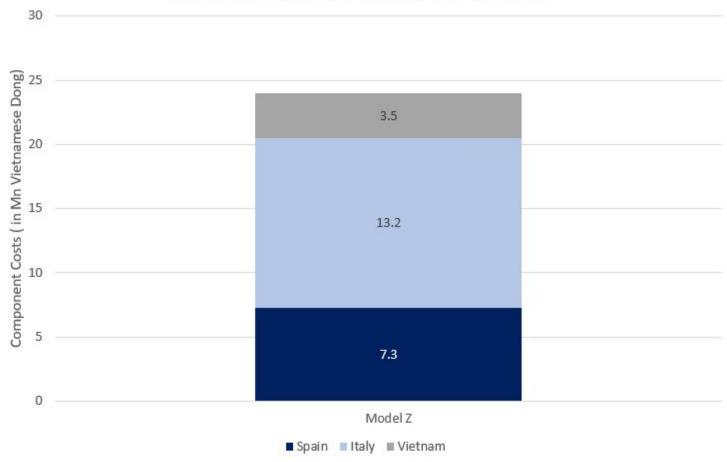
Risk of the main Vietnamese competitor imitating and launching their own premium scooter model in the market

#### **Next steps:**

Perform a pilot program and check initial sales to understand popularity of scooter. Understand which other features are valued by customers and offer upgrades.

### Lux Rides - Exhibit A



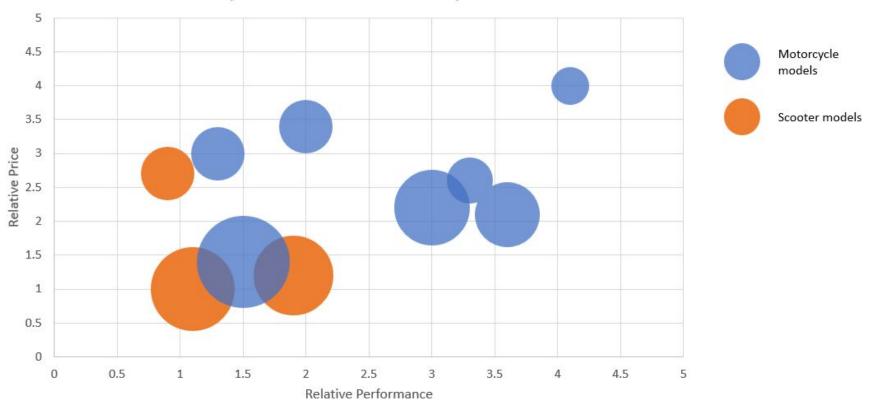


Note 1: Shipping costs estimated at 12.5% of total component costs

Note 2: Tariffs estimated at 20% of component costs

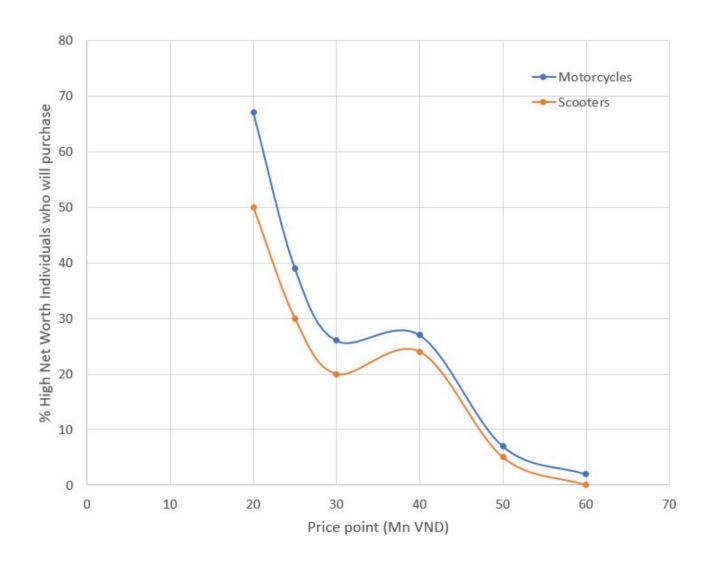
### Lux Rides - Exhibit B

Price vs. Performance of top 10 2-wheeler models in VN (~85% of 2-wheeler market)



Note: The size of the bubble indicates the number of sales of the model in previous year Note (2): 1 unit of the relative price is equivalent to 12.5 Mn VND (Vietnam's currency)

## Lux Rides - Exhibit C



# Case 10: Slippery Soap

Format: Interviewee-led case

Type: Profitability

Difficulty: Easy

Industry: Consumer Goods

Stretch Area: Case Math

BCG-inspired case



# Tips for interviewee-led case

- 1. Try to minimize hand-holding.
- 2. Try to let the candidate ask questions If the candidate isn't on the right track and seems lost, try to give a hint or ask a question from the slides
- 3. Feel free to manage the conversation to hit all the questions from the slides, e.g.:
  - "That's a great question! What do you think?"
  - "Sure. Before we dig into that, what are you thoughts on ... [question from the slide]?"
  - "Sure, we'll explore it. Before that, let me share some data from our analyst/client that we've just received and... [ask a Math question]"
- 4. For growth cases, feel free to also ask more ideas for growth when the candidate is explaining their framework. This helps in testing brainstorming skills and pressure handling.
- 5. When the case time is running out, prompt the candidate to provide recommendation

# Slippery Soap - Prompt

### **Problem Statement**

The \$200 Mn personal care department of a US-based pharmacy client has not reported any profit growth over the last few years. The department consists of two main business lines: 1) creams and lotions (lotions, skin creams, etc.) and 2) bath products (soaps, shampoos, etc.) We have been asked to help the client understand why their profits are not growing and what they need to do to turn things around

### **Additional Information (Provide Upon Request)**

- Objective The objective of the client is to understand why the profits are not growing and how the profitability can be turned around
- Business While creams and lotions industry has remained flat, bath products category has seen 10% market growth due to growing focus on hygiene. The client introduced two new products in last two years (1) a viral Instagram-trending shampoo and (2) "made to order" custom herbal bath bombs – both products have been a boost to bath & body revenue.
- Competition There is competition from personal care departments of other pharmacies, supermarkets, e-retailers, etc. and "upscale" retailers like Sephora, Ulta, Lush, etc.
- Product For the "Made to order" bath bombs, one employee makes custom blends for customers for 8 hours (one shift) a day. A bath bomb is a single-use, spherical blend of fragrant oils and extracts that you can toss in your tub.

# I. Background, Setup, and Recap

### Make sure the candidate follows these steps:

| 01 | Restate the prompt            | Candidates are expected to restate the prompt briefly to make sure they are on the same page with the interviewer  |
|----|-------------------------------|--|
| 02 | Add colors (optionally)       | Candidates can react to the prompt by providing some quick thoughts which will demonstrate candidates' business acumen, e.g.: "That is very interesting! I personally feel that I have myself been receiving so many personal care products in my Instagram feed. The viral products need not necessarily be good for our income statement" or "I have noticed some shops offer custom bath salts but I do imagine the customization taking more time" |
| 03 | Ask 2-3 clarifying questions  | It is common that candidates ask 2-3 clarifying questions before designing their framework. Typical questions include: - Geography of client's operations/sales - Client's goal/objective - Business model of the client   |
| 04 | Ask for a moment to structure | Typically, candidates ask for a couple of minutes to structure their approach  |

# II. Framework Development & Explanation

### Sample Framework

### 1. Revenue down, Costs down

#### Revenue down

For each revenue stream:

#### A. Price down

- Pricing changes
- Instant/Social media discounts

#### B. Volume down

- # Customers
- # Purchases/customer
- # Amount purchased

### C. Product Mix changed

- Low-price product sales
- Bundling of products

### 2. Revenue up, Costs up

#### Costs up

#### A. Fixed Costs

- Rent
- PPE
- Overhead & Supplies
- SG&A
- Labor for bath bombs

#### B. Variable Costs

- Bath bomb materials
- Manufacturing
- Packaging
- Distribution
- Sales & Marketing

# 3. How to turn-around

#### A. Increase revenue

- Same market, product
- New market, product
- Product, price, promotion, place

#### **B.** Decrease cost

- Lower COGS
- Lower quantity/product
- Lower product sold (Remove unproductive items)

#### **Hypothesis:**

- "As discussed before, we want to understand why the profits for the personal care division have remained the same over the past few years. There could be two key reasons, either the revenues have gone down and costs have gone down too or the revenues have gone up but the costs have gone up too. Do we have any information on how the revenues and margins look like for the two categories of personal care products?"



# III. Solution building

Question 1: (Provide Exhibit A) The client has shared some financials of its personal care department. What can you infer from this?

### **Sample Answer**

- 1. Thank you for sharing this exhibit! There are two key observations in this exhibit:
  - a. Bath Products category has three fourth of the sales within personal care as compared to Creams and Lotions which only has ¼ share.
  - b. While the revenues for Bath Products has been increasing (Revenues increased by 25% = (100-80)/80, COGS are up by 50% (60-40)/40. Therefore, the profit margins have declined from 50% to 40%

### IV. Math Exercise

Question 2: (Provide Exhibit B) We also do have some more information about the two new product introductions by the client. Does this help in understanding the potential reasons for the decline in the client's profit margins?

### Sample answer

- 1. Information (provided if requested at this stage):
  - The client introduced two new products in last two years (1) a viral Instagram-trending shampoo and (2) "made to order" custom herbal bath bombs both products have been a boost to bath & body revenue.
  - For the "Made to order" bath bombs, one employee makes custom blends for customers for 8 hours (one shift) a day. A bath bomb is a single-use, spherical blend of fragrant oils and extracts that you can toss in your tub.
- 2. For the face creams, Revenue = \$5 per 8 oz container and Cost = \$2.75 per 8 oz. Therefore, the margins are \$2.25 per canister = +45% margins
- 3. For the bath bombs, Revenue = \$8 per 2-pack x 20 packs per day = \$160 per day

  Costs = \$4 per pack x 20 packs + \$20/hr x 8 hrs/day = \$80 + \$160 = \$240

  Margin per store per day = (\$80) = -50% margins

# IV. Solution building

Question 3: What are some potential ideas for the bath bombs that the client could implement?

### Sample answer

- Some strategies that the client could use to improve profitability:
  - a. Optimize Production Efficiency:

Reduce Employee Costs: Reducing the number of dedicated hours or explore part-time or shift-based work.

Automation: Introducing machinery or tools to automate parts of the bath bomb-making process

#### b. Increase Price or Bundling:

Premium Pricing: Raising the price based on price elasticity

Offer Multi-Packs: Selling in larger quantities (e.g., 4-pack or 6-pack) might help reduce per-pack costs

Cross-Promotion: Bundling bath bombs with other complementary products, like face creams

#### c. Reduce Material Costs:

Bulk Purchasing: Purchasing raw materials in bulk to lower unit costs.

Alternative Suppliers: Looking for suppliers with lower prices

# V. Synthesis and Recommendation

Question 4: The CEO is about to walk into the room, what are your recommendations for them?

### Sample Answer

**Recommendation:** The decline in the client's profitability is due to the Bath Products category and specifically the Bath Bombs. This is because the category has a -50% profit margin driven by high labor involvement.

The client should focus on strategies to either eliminate or reposition the bath bombs such as:

- 1. Optimizing production efficiency
- 2. Increasing price or bundling
- 3. Reducing material costs

#### Risks:

Customers may decrease their visits to the Bath Products area or quality of the bath bombs may decline in case of material changes

#### **Next steps:**

Perform an analysis of stores in which bath bombs could be eliminated and consider options for optimization of the price and operations for retaining the bath bombs

# Slippery Soap - Exhibit A

|                    | 2020  | 2021  | 2022  |
|--------------------|-------|-------|-------|
| Creams and Lotions |       |       |       |
| Revenues           | \$50M | \$45M | \$50M |
| COGS               | 30    | 25    | 30    |
| Bath Products      |       |       |       |
| Revenues           | 80    | 90    | 100   |
| COGS               | 40    | 50    | 60    |
| Overall            |       |       |       |
| Revenues           | 130   | 135   | 150   |
| COGS               | 70    | 75    | 90    |
| Gross Margin       | 60    | 60    | 60    |

# Slippery Soap - Exhibit B

| Face Cream                 |                              |  |
|----------------------------|------------------------------|--|
| Price                      | \$5 per 8 oz canister        |  |
| COGS                       | \$2.75 per 8 oz canister     |  |
| "Made-to-order" Bath Bombs |                              |  |
| Price                      | \$8 per 2-pack               |  |
| Avg. sales/store           | 20 packs per day             |  |
| Total material cost        | \$4 per pack                 |  |
| Employee cost              | \$20 per hour (fully loaded) |  |
| Dedicated hours            | 8 hours per day              |  |

## Case 11: Thomas the Tank

Format: Interviewer-led case

Type:Profitability

Difficulty: Medium

Industry: Industrial/Railroad

Stretch Area: Brainstorming

McK-inspired case



# Thomas the Tank - Prompt

### **Problem Statement**

Your client is Iron Peak Rails, a railroad operator in a developing Latin American country, providing domestic transportation for both passengers and cargo. The company was previously successful and heavily involved in nationwide transportation. Iron Peaks created crucial connections between cities and towns. The country is rather large and demand was high so the company grow rapidly. In the last 10 years, the company's situation has changed drastically.

### **Additional Information (Provide Upon Request)**

- Objective The CEO wants your team to understand what has caused the the revenue decline and how to reverse the damage.
- Business Impact Revenue has declined in particular in passenger transportation. In addition, demand has decreased as the population has become more mobile. The transportation industry in general has been developing.

# II. Framework Development & Explanation

Note: There are many possible alternatives to this framework. These are only provided as possible suggestions.

### **Sample Framework**

### 1. Overall passenger volumes and trends

#### A. Domestic travel

- Expansion of domestic air travel,long distance flights connecting major cities
- Bus transportation, a cheap and comfortable alternative
- Individual travel, expansion of road and affordability of vehicles; increase of liveable wage

#### B. International travel

- Changes in demographics (younger demo using different modes of transportation)
- Potential growth in foreign international railway

# 2. Frequency of railway trips and change over time

#### A.Change in travel behavior

- Frequency of daily work trips (growth in remote and hybrid work)
- Growing amenities in small cities (housing, workplaces, schools) may reduce need for train
- New transportation: ridesharing, motorcycles, bikes.car rentals.

#### **B.**Change in destinations

- With major cities connected by air, only smaller cities /rural may need rail links
- Trends may favor frequent, short trips over long-distance journeys.

# 3. Average price in railway passenger ticket

#### A. Tickets

- Sales by service class (economy, deluxe ect.)
- Sales by train type (standard, high-end)
- Sales by destination (short vs. long, direct vs. with connections)
- Sales by departure time
- Share of non-refundable and subsidized tickets (senior discounts, other programs)

# 4. Non-ticket element of railway fare

#### A. Other Purchases

 Decline in purchases of additional onboard services (e.g., food, drinks, media, internet).

# III. Math Exhibits and Analysis

Question 1: (Provide Exhibit A) The team has received the client's ticket sales data for the past 10 years. The client emphasized the importance of understanding the underlying causes of these changes, considering potential impacts from consumers, competitors, or internal factors.

What changes to the ticket sales do you notice and what do you think could have contributed to these changes?

### Sample Answer

### **Expected Initial Insights:**

- **Overview:**Over the past decade, ticket sales declined by 25%. In a growing market, this may support alternative providers (mainly air travel) and a shift from domestic to international travel.
- Tickets by Car Category: The share of economy tickets rose by 15 percentage points (from 45% to 60%),
  while higher service classes (compartment, sleeping, and deluxe) declined. This shift could indicate reduced
  disposable incomes, possibly due to a domestic economic downturn, or a preference for air travel on longer,
  comfort-demanding routes.
- *Tickets by Destination*:Long-distance tickets dropped by half (from 20% to 10%), likely due to rail's competitiveness issues versus air travel on long routes, where time savings are significant. Additionally, higher pricing for premium rail services could drive passengers toward faster air travel for a similar cost.
- Public Mobility Trends: The reduction in long-distance rail travel may also reflect shifts in public mobility.
   Previously popular domestic destinations have lost traction as international travel opens up, making overseas destinations more appealing for vacations and leisure travel.

# IV. Solution Building

Question 2: After sharing its current analysis on the primary causes of revenue decline, the team was asked to provide a list of short- and long-term strategies to help the company regain financial success. What are some ideas you would recommend to the client?

### Additional Information (Provide Upon Request)/Answer

An answer may include the following.

- Offer product bundles (e.g., train ticket with a meal, 20% off for booking five round-trip tickets).
- Implement dynamic pricing to adjust fares with demand.
- Adjust routes and schedules; add international destinations if possible.
- Introduce specialized cars (e.g., accessible, family-friendly, pet-friendly).
- Promote rail travel comfort and unique experience over air travel.
- Offer value-added services like Wi-Fi, streaming, taxi, and hotel reservations.
- Develop a dedicated website and mobile app.
- Start a loyalty program.

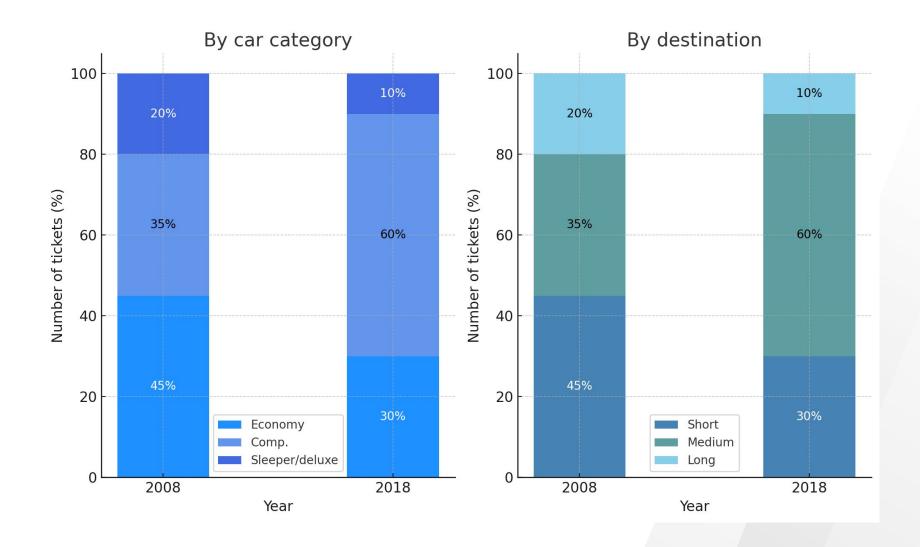
# V. Synthesis and Recommendation

Final Question: What are some ideas you would recommend to the client?

### **Potential Strategies/Answers**

- Offer Bundles: Combine train tickets with meals, or offer discounts when booking multiple trips at once. This encourages more spending and frequent travel.
- Use Dynamic Pricing: Adjust ticket prices based on demand, with cheaper prices during slower times and higher prices when demand is high. This helps maximize revenue.
- Improve Routes and Times: Adjust train schedules and routes to fit customer needs, and add international
  destinations if possible. This makes travel more convenient and attracts more passengers.
- Add Special Train Cars: Introduce cars for specific needs, like barrier-free access for disabled passengers, or cars for families, pets, or more comfort. This makes train travel more appealing to different groups.
- Run Promotion Campaigns: Promote the comfort and unique experience of train travel compared to flying. Highlight things like more space, easier boarding, and scenic views.
- Offer Extra Services: Provide Wi-Fi, streaming, and booking services for taxis or hotels. This makes travel more convenient and enjoyable.
- Create a Website and App: Develop your own website and app for easy ticket booking and customer service. This improves the overall experience.
- Start a Loyalty Program: Launch a loyalty program to reward frequent travelers and encourage repeat trips.

### Thomas the Tank - Exhibit A



## Case 12: Jurassic Vale

Format: Interviewee-led case

Type: Unconventional

Difficulty: Medium

Industry: Entertainment

Stretch Area: Market Sizing

BCG-inspired case



# Tips for interviewee-led case

- 1. Try to minimize hand-holding.
- 2. Try to let the candidate ask questions If the candidate isn't on the right track and seems lost, try to give a hint or ask a question from the slides
- 3. Feel free to manage the conversation to hit all the questions from the slides, e.g.:
  - "That's a great question! What do you think?"
  - "Sure. Before we dig into that, what are you thoughts on ... [question from the slide]?"
  - "Sure, we'll explore it. Before that, let me share some data from our analyst/client that we've just received and... [ask a Math question]"
- 4. For growth cases, feel free to also ask more ideas for growth when the candidate is explaining their framework. This helps in testing brainstorming skills and pressure handling.
- 5. When the case time is running out, prompt the candidate to provide recommendation

# Jurassic Vale - Prompt

### **Problem Statement**

Vale is a Brazilian multinational corporation engaged in metals and mining and is the largest producer of iron ore and nickel in the world. A few weeks ago, Vale won a public tender to exploit a mine in the province of Manaus in the Brazilian Amazon, and during the exploratory stage, a team of engineers discovered a dinosaur. The company has contracted a project with your team to figure out what to do with it.

### **Additional Information (Provide Upon Request)**

- The dinosaur is an alive male Tyrannosaurus rex that's 13 meters long
- He is young and can likely still live for the next 100 years
- He eats a lot of grass daily but its cost is negligible
- His veterinary expenses are negligible and he is quite calm, does not seem aggressive with humans
- For now, his discovery has been kept strictly confidential
- There is no current legislation that prohibits its sale or commercial exploitation
- There is no known female and the dinosaur seems to be able to live with little space

# I. Background, Setup, and Recap

### Make sure the candidate follows these steps:

| 01 | Restate the prompt               | Candidates are expected to restate the prompt briefly to make sure they are on the same page with the interviewer   |
|----|----------------------------------|---|
| 02 | Add colors (optionally)          | Candidates can react to the prompt by providing some quick thoughts which will demonstrate candidates' business acumen, e.g.: "That is very interesting! I imagine that this would be world-changing and people would go crazy at the news. It would be interesting to think of potential options such as selling or donating the dinosaur to a research center." |
| 03 | Ask 2-3 clarifying questions     | It is common that candidates ask 2-3 clarifying questions before designing their framework. Typical questions include: - Geography of client's operations/sales - Client's goal/objective - Business model of the client  |
| 04 | Ask for a moment<br>to structure | Typically, candidates ask for a couple of minutes to structure their approach   |

# II. Framework Development & Explanation

### Sample Framework

# 1. Sell/Rent for Entertainment

- Zoo
- Circus
- Theme park
- Film
- Fighting with other animals
- Copyright for merchandising
- Pet for a billionaire

# 2. Sell/Rent for Non-entertainment

#### A. Public Companies

 Conservation or research center

#### **B. Private Companies**

- Wildlife conservation NGO
- Pharmaceutical
- Research laboratory
- Food or fur clothing

#### 3. Risks

- Possible new legislation
- Negative public opinion
- Dinosaur wellbeing

#### **Hypothesis:**

- "The most profitable thing for our client to do would potentially be to sell the dinosaur to the highest bidder. This would likely be for entertainment purposes. Has our client explored any sale opportunities of the dinosaur?



# III. Solution building

Question 1: A round of consultations has been held and Walt Disney seems to be the most interested bidder and plans to take the dinosaur to its amusement park in Southern California. How much do you think Walt Disney would be willing to pay for it?

### **Sample Answer**

- That's an interesting question. The way that I'd think about it is to find the incremental margin that the dinosaur would generate for the park.
  - a. To do this, I would first calculate the current annual revenue of the park.
  - b. I'd then estimate how much the price of tickets and volume of visitors would increase over the dinosaur's lifespan.
  - c. I would also have to consider the maximum capacity of the park when thinking about the increase in the number of visitors.

### IV. Math Exercise

Question 2: Very well, can you estimate how many people visited Disneyland last year?

### Sample answer

- 1. There are multiple ways to estimate the number. One possible way would be to calculate the number of passenger arrivals to Los Angeles and taking a percentage of those passengers.
  - a. Landings every 2 minutes
    - i. 30 planes per hour
  - b. Average of 200 passengers per plane
  - c. Operation of 20h a day at the airport

$$30 \times 200 \times 20 \times 365 = \sim 44 \text{ M passengers}$$

- d. 10% of passengers come with other means of transportation (train, car, bus, etc)
- e. 50% of passengers are tourists
- f. 8 out of 10 tourists go to Disneyland

 $44 \times 1.1 \times 0.5 \times 0.8 = ~20 \text{ M people}$ 

### IV. Math Exercise

Question 3: Estimate how much Walt Disney would be willing to pay at most for the dinosaur.

### Provide only if requested:

- 1. The current price of entrance is \$20
- 2. Maximum capacity of the theme park is 30M per year
- 3. The price of the ticket could increase to \$40 and still attract 60M people per year to the park

#### Sample answer

- 1. Current revenue =  $20M \times $20 = $400M$  per year
- 2. New revenue =  $30M \times $40 = $1.2B$  per year
- 3. Incremental margin assuming no incremental costs = \$800M per year

Candidate should notice it is a perpetuity due to the dinosaur's lifespan. (Candidate is not expected to have a financial background, so they should ask for the formula)

On the other hand, it would be expected to value the dinosaur applying a high discount rate considering the risks associated with this particular project (e.g., 50%).

PV = C/r, where PV = present value, C = cash flow, r = discount rate

PV = \$800M/0.5 = \$1.6B

# V. Synthesis and Recommendation

Question 4: What should our client do?

### **Sample Answer**

**Recommendation:** Our client should sell the dinosaur to the Walt Disney Company due to the lack of core skills to exploit the dinosaur's discovery and if possible ASAP to avoid any legal consequences.

Reason #1: The Walt Disney Company appears to be the highest bidder and could possibly pay up to \$1.6B for it, assuming a recurrent \$800M per year margin increment at a 50% discount rate perpetuity

#### Risks:

Our client could face backlash from selling the dinosaur to an amusement park instead of a research center

#### **Next steps:**

Evaluate how important public sentiment is for our client and evaluate how to mitigate negative sentiment to the amount necessary

# Case 13: Timeless Comfort

Format: Interviewer-led case

Type:Profitability

Difficulty: Medium

Industry: Consumer Goods

Stretch Area: Case Math

McK-inspired case



# Timeless Comfort - Prompt

#### **Problem Statement**

Our client, Timeless Comfort, is a luxury household furniture manufacturer that operates across three countries and over 40 cities in Central Asia. Founded in 2005, the company quickly became a recognized brand, further enhancing its reputation through television advertising. While sales in Timeless Comfort's own showrooms have been growing steadily, sales in the multi-brand furniture stores have not seen the same growth. What factors should Timeless Comfort consider in the context of boosting sales via the showrooms within multi-brand furniture stores?

### **Additional Information (Provide Upon Request)**

- Objective The company's CEO is looking to increase sales in these larger retail outlets.
- Product Offering Timeless Comfort showcases its products in showrooms where customers
  can view samples and order customized pieces to fit their desired dimensions. The company
  sells through its own showrooms as well as in large multi-brand furniture stores, where it rents
  dedicated space for its brand.

# II. Framework Development & Explanation

Note: There are many possible alternatives to this framework. These are only provided as possible suggestions.

### Sample Framework

# 1. Number of multi-brand versus own showrooms

#### A. Showrooms

- How many exclusive showrooms are there compared to their spaces in multi-brand stores?
- How has this number evolved over time?
- Additionally, how do these figures vary by city and country?

# 2. Average number of items sold per showroom

#### **A.Visitors**

Visitors per showroom?
 Percentage made on
 purchases? Conversion
 between showrooms and
 in multi-brand stores?

#### **B.Purchases**

- Items per purchase?
- How do average sales per showroom compare to those in different multi-brand outlets?
- Types of furniture and decor sold in multi-brand stores?
- Competitors' products?
- Marketing? Online and offline ads?

### 3. Average price of items sold

#### **A.Pricing Policy**

- What is the pricing policy for showrooms in other stores?
- Do these stores set their own prices or offer sales unavailable at the company's outlets?
- What is the average price by product type, and how does it compare to competitors in the high-end market?

# 4. Difference between their vs. other showrooms

#### A.Product/ Shop Design

 Are products displayed more effectively in client showrooms than in multi-brand stores?

#### **B.Customers/Visitors**

 Do customer budgets, & needs vary between client showrooms and multi-brand stores? How does pricing compare between the two?

#### C.Sales Personnel

 Is there a difference in sales staff training, knowledge, or incentives that could affect sales between the two formats?



# III. Math Exhibits and Analysis I

Question 1: (Provide Exhibit A) You held a meeting with Timeless Comfort representatives to explore revenue growth strategies. The Chief Sales Officer noted that adding showrooms in multi-brand furniture stores in cities with already dense networks could lead to revenue cannibalization of their own showrooms. After the meeting, you analyzed data from Comfort's largest cities and found that showrooms within other stores generate, on average, only half the revenue of Comfort's own showrooms.

Counting both own showrooms and showrooms within other stores, which of the cities has the least dense network of Timeless Comfort showrooms?

# III. Math Exhibits and Analysis II

### **Sample Answer**

#### **Expected Insights:**

- Density = (No. of showrooms within other stores (a) + No. of own network showrooms (b)) / City area (c) (b) and (c) are known for each city. It is necessary to calculate (a) on the basis of market volume data.
- Compare market shares of own showrooms and showrooms within other stores
  - No. of showrooms within other stores = No. of own showrooms
     × 2 × (Share of showrooms within other stores / Share of own showrooms

City 1(a) = 
$$12 \times 2 \times (20\% / 10\%) = 48$$
  
Density<sub>a</sub> =  $((a) + (b)) / (c) = (48 + 12) / 300 = 60 / 300 = 0.2$  showroom/km<sup>2</sup>  
City 2(a) =  $9 \times 2 \times (20\% / 20\%) = 18$   
Density<sub>s</sub> =  $((a) + (b)) / (c) = (18 + 9) / 180 = 27 / 180 = 0.15$  showroom/km<sup>2</sup>  
City 3(a) =  $14 \times 2 \times (5\% / 10\%) = 14$ 

Density<sub>k</sub>= ((a) + (b)) / (c) = (14 + 14) / 350 = 28 / 350 = 0.08showroom/km<sup>2</sup>

City 3 has the lowest density of Timeless Comfort showrooms, reducing the risk of cannibalization. In contrast, City 1 has a high store density, increasing the chance of cannibalization between Comfort's original showrooms and mini-showrooms in other stores. The company may need to reconsider its showroom distribution across cities.

# IV. Solution building

Question 2: After client interviews and analysis, your team concluded that increasing sales per showroom in-store will drive the highest revenue growth. What factors should the company consider to assess the average items sold per showroom?

### Sample Answer

#### **Visitor Count**

- Spontaneous Visitors
  - What region is the showroom in?ls it a large market, and what is the density of showrooms?
  - Physical location? Foot traffic?ls it a high-focus (furniture mall), or a general area(suburbs)?
  - Are the showroom's sign and exterior design visible and appealing?
- Target Visitors
  - Which marketing channels bring in buyers, and how effective are they?

#### **Visitor-to-Buyer Conversion**

- How competitive is client's quality, design, and pricing?
- Does service drive sales? Are customer details collected for follow-ups? Communication type?
- What portion of customers return for repeat purchases?
- Are sales motivated by incentives? Consistent across showrooms and those within partner stores?

#### Average Items per Buyer

- Is furniture offered in sets, and are there special offers for multi-item purchases?
- Are add-ons like replacement fixtures, cushions, curtains, or tableware available



# V. Math Exhibits and Analysis

Question 3: (Provide Exhibit B) Your team analyst has prepared data on the largest showrooms within other stores. Which of the showrooms within a store has the lowest visit to sale conversion rate?

### Sample answer

SWS 3 has the lowest conversion rate, with only 1% of visits leading to sales (5% visits-to-registrations × 20% registrations-to-sales), while competitors achieve higher rates. Despite having the most locations, SWS 3's low conversion makes it inefficient. The company should either improve SWS 3's conversion rate significantly or consider closing some outlets.

# V. Synthesis and Recommendation

Question 3: The CEO is about to walk into the room, what are your recommendations for her?

### Sample Answer

**Recommendation:**After conducting analysis, we recommend increasing sales per showroom in-store to recognize the highest revenue generating growth.

Reason #1: Building additional showrooms is not a viable option. In building multi-brand furniture stores in cities with already dense networks could lead to revenue cannibalization of their own showrooms. A consequence impacting cities 1 and 2.

Reason #2: We have seen low conversion rates in SWS 3, only 1% of visits leading to sales.

#### Risks:

Aggressive sales tactics to boost per-store sales might impact the customer experience. Customers could feel pressured, reducing their likelihood of returning or recommending the brand.

#### **Next steps:**

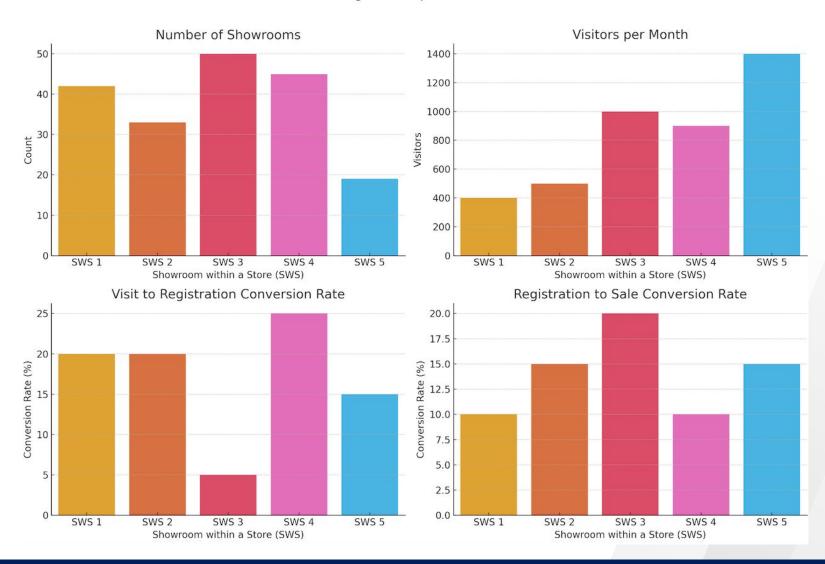
Conduct a customer sensitivity analysis to identify the pivotal points in the customer journey that leads to a conversion.

# Timeless Comfort - Exhibit A

| City   | City Area (km²) | Number of Own<br>Showrooms | Market Share of<br>Own<br>Showrooms (%) | Market Share of<br>Showrooms<br>Within Other<br>Stores (%) |
|--------|-----------------|----------------------------|---|--|
| City 1 | 300             | 12                         | 10%                                     | 20%  |
| City 2 | 180             | 9                          | 20%                                     | 20%  |
| City 3 | 350             | 14                         | 10%                                     | 5%   |

### Timeless Comfort - Exhibit B

Average Values per Showroom



# Case 14: Packaging Co.

Format: Interviewee-led case

Type: Unconventional

Difficulty: Medium

Industry: Manufacturing

Stretch Area: Case Math

BCG-inspired case



# Packaging Co. - Prompt

#### **Problem Statement**

The client is a US subsidiary of a packaging and shipment firm (e.g., Amcor, Sealed Air, etc.). They want to evaluate whether they should consolidate their package production operations, which currently are located at two separate plants. You have been asked to help them evaluate whether this is a good idea and, if so, which plant they should close.

### **Additional Information (Provide Upon Request)**

- Objective Evaluate if the plant consolidation makes sense and which plant can be closed
- Current plants are in New Jersey and Idaho
- Both plants have identical capacity and would be able to handle all required package production volume
- Material costs are identical for the two plants
- Package production costs are currently identical; however, larger plants are more efficient than smaller – doubling capacity reduces cutting costs and impacts distribution costs too
- Delivery of the packages is done by a national trucking company that takes the packages from both plants to distribution centers — costs would change if the plants were consolidated



# II. Framework Development & Explanation

### Sample Framework

#### 1. Variable Cost

- Cost of raw material e.g. cardboard, tape, ink, etc
- Cost of production e.g. labour
- Cost of distribution

#### 2. Fixed Cost

- Cost of production machinery
- Cost of plant land

#### 3. Benefits

- Cost reduction for production
- Standardization of packages
- Higher quality control

#### 4. Risks

- Regulatory limitations
- Employee compensation for layoffs
- Impact on brand image

#### **Hypothesis:**

- "As we know doubling capacity reduces package production costs, it is probably beneficial to combine plants unless it increases any other cost e.g. distribution or layoff costs. Do we have information on how these other cost levers change if we combine to one plant?"



# III. Solution building

Question 1: (Provide Exhibit A) From this data, should we operate both plants or consolidate to one plant? Do not round the figures for calculations

### Sample Answer

- 1. Thank you for sharing this exhibit! There are two key observations:
- a. Doubling capacity reduces cutting costs by some %, potentially due to process efficiencies
- b. Distribution costs go higher due to limited distribution centers and larger distances

Both plants: Cardboard (\$4.50) + Cutting (\$4.5 x 20% = \$0.9) + Distribution (\$2.40) = \$7.80 / package

Given total costs = \$468,000

Total # of packages = 468,000/7.8 = 60,000 (30,000 in each plant)

New Jersey only (60k packages): Cardboard (\$4.50) + Cutting ( $$4.5 \times 16\% = $0.72$ ) + Distribution (\$2.78) = \$8 /package

Idaho only (60k packages): Cardboard (\$4.50) + Cutting ( $$4.5 \times 12\% = $0.54$ ) + Distribution (\$3.16) = \$8.20 / package

Insight: Both the consolidated options are more expensive than the two plant option

Advanced Comment: The increase in the distribution costs from one center overshadow the cost savings due to reduced cutting costs in the individual plants



# III. Solution building

Question 2: What are some other benefits of retaining the two plant structure for the package production?

#### Sample Answer

Two plants for package production help in certain ways:

- 1. Risk Mitigation: With two production centers, operations can continue at one location if there's a disruption (e.g., natural disaster, political instability, or equipment failure) at the other.
- 2. Increased Responsiveness: Two centers allow for quicker adjustments to meet regional demand spikes, reducing lead times and increasing customer satisfaction; Splitting production enables better handling of seasonal demand or large orders, with the option to scale production across both centers as needed; Different centers can focus on specific products or customization for different markets, improving efficiency and meeting localized needs.
- 3. Cost Efficiency: As noted in the case, the distribution costs were much lower in the two plant case due to closeness to customers
- 4. Environmental and Regulatory Benefits: Reduced transportation distances can lower carbon emissions, supporting sustainability goals and potentially improving public image
- 5. Talent: Different regions may provide access to skilled labor in specific areas, fostering innovation



# V. Synthesis and Recommendation

Question 3: The CEO is about to walk into the room, what are your recommendations for her?

### Sample Answer

**Recommendation:** Based on all the relevant costs, we determined that combining package production was NOT a good idea. This is because:

Reason #1: The single plant production costs at the New Jersey as well as Idaho plants are higher by almost 2.5-5% than the two plant configuration

Reason #2: We would lost out on the business continuation, talent access and responsiveness benefits of the two plant configuration

#### Risks:

Cutting costs in the two plant configuration still remains higher than the single plant configuration. Multiple management teams and accountability measures required.

#### **Next steps:**

Identify ways to reduce cutting costs within the two plant operation and re-assess alternate distribution options for single plant operation, if needed.

# Textbook Printing Consolidation - Exhibit A

### Average cost per package (\$)

|  | Both plants | New Jersey only | Idaho only |
|--|-------------|-----------------|------------|
| Cardboard                                      | 4.5         | 4.5             | 4.5        |
| Cutting (% of raw material costs)              | 20          | 16              | 12         |
| Distribution cost per package (< 50k packages) | 2.4         | 2.98            | 3.36       |
| Distribution cost per package (> 50k packages) | N/A         | 2.78            | 3.16       |

Note: The total costs for operating both plants is currently \$468,000 (equal capacity of both plants)

# Case 15: New Rubber Plant Investment

Format: Interviewee-led case

Type: Investment Decision

Difficulty: Hard

Industry: Public Sector

Stretch Area: Case Math



# Tips for interviewee-led case

- 1. Try to minimize hand-holding.
- 2. Try to let the candidate ask questions If the candidate isn't on the right track and seems lost, try to give a hint or ask a question from the slides
- 3. Feel free to manage the conversation to hit all the questions from the slides, e.g.:
  - "That's a great question! What do you think?"
  - "Sure. Before we dig into that, what are you thoughts on ... [question from the slide]?"
  - "Sure, we'll explore it. Before that, let me share some data from our analyst/client that we've just received and... [ask a Math question]"
- For growth cases, feel free to also ask more ideas for growth when the candidate is explaining their framework. This helps in testing brainstorming skills and pressure handling.
- 2. When the case time is running out, prompt the candidate to provide recommendation

# New Rubber Plant Investment - Prompt

#### **Problem Statement**

The federal government of a country in a certain part of the world is investigating whether to restart a rubber factory in the western part of the country. The factory was operational in the past, but has not been used for 7 years. The plant was closed due to terrorism in the area which has now come down significantly, though there are still skirmishes reported in the area. If rejuvenated, the plant may become a target for the rebels. All the equipment is considered usable but the government still estimates they would need to spend \$12M to rejuvenate the plant which would enable the plant to product up to 10M lbs of rubber per month. The demand of rubber worldwide is strong but rubber must be transported to an export port via trains; up to 2 trains per day can be used for this purpose.

### **Additional Information (Provide Upon Request)**

- Raw Materials Production of rubber requires gum resin. 3lbs of resin after processing results in 1lb of rubber.
- Operations The resin needs to be transported from the capital. Up to 4 trains can be used for the same. (Key question. Candidate may miss out on important info otherwise)
- Pricing Rubber can be sold at \$20 per lb. Gum resin costs \$5 per lb.
- Suppliers We have identified one supplier.
- Customers We would be selling the rubber in the commodity market to the entire world.

# I. Background, Setup, and Recap

### Make sure the candidate follows these steps:

| 01 | Restate the prompt            | Candidates are expected to restate the prompt briefly to make sure they are on the same page with the interviewer  |
|----|-------------------------------|--|
| 02 | Add colors (optionally)       | Candidates can react to the prompt by providing some quick thoughts which will demonstrate candidates' business acumen, e.g.: "It's great to hear that the terrorist activity in this country didn't result in the plant being totally useless; if our client can recoup the \$12M investment to rejuvenate, this may be a profitable choice for them." or "As a government investment, there will be some unique considerations here such as political perception and economic development that may not be applicable to a private sector actor." |
| 03 | Ask 2-3 clarifying questions  | It is common that candidates ask 2-3 clarifying questions before designing their framework. Typical questions include: - Geography of client's operations/sales - Client's goal/objective - Business model of the client   |
| 04 | Ask for a moment to structure | Typically, candidates ask for a couple of minutes to structure their approach  |

# II. Framework Development & Explanation

### Sample Framework

#### 1. Financial Benefits

- ROI for the investment
- Costs: Upfront investment required, raw material costs, transportation costs
- Revenues: Anticipated sales revenue (production capacity vs. demand, sale price)

# 2. Non-Financial Benefits

### Benefits unique to government investment:

- Employment
- Economic development
- Reputational benefit due to exports
- Govt authority indication
- Social cohesion

#### 4. Risks

- Political and security risk: Terrorism, Higher security costs, strikes
- Operational and Logistical risk: Obsolescent equipment, Transportation constraints
- Market Risk: Labor shortage, Rubber price volatility, Upfront investment capital

#### **Hypothesis:**

- "As discussed before, the client wants to understand whether rejuvenating this rubber plant is a worthwhile endeavor. To assess that question, I'd like to first determine how long it would take for the government to break even on its initial \$12M investment to get the plant back up and running. I'd also like to dig into the value chain more specifically to understand operationally whether the client can successfully execute on its anticipated rubber sales, or if there are any bottlenecks that may hold things up."



# III. Solution building

Question 1: (Provide Exhibit A) For the revenue calculation, we have some information on the incoming and outgoing trains to the rubber plant. Assuming the plant operates 25 days in any given month, please calculate how much rubber the plant can sell.

#### **Sample Answer**

- 1. Thank you for sharing this exhibit!
  - The capacity of the plant is 10 Mn lbs but there could be other bottlenecks due to the train movements
  - b. I would like to look at the production capacity and the transportation capacity to find the minimum number and ascertain the sales revenue
  - c. It looks like the plant can product 200,000 lbs of rubber in a day (e.g., 2\*8\*25\*500), and 5 Mn lbs in a month (e.g., 200k \*25).
    - a. Key Insight: This is half of the 10MM capacity given in the case prompt, implying underutilization of the plant
  - d. Based on the Incoming Train Information, the plant receives 640,000 lbs of resin (e.g., 4\*10\*25\*640) which should result in producing 5.33Mn lbs of rubber (using the 1:3 conversion given in the case prompt)
    - a. Key Insight: It appears there is a bottleneck here in outgoing train capacity

# III. Solution building

Question 2: Thanks for sharing your thoughts. We have more information about the operational costs of the plant. (Provide the following, and ask the interviewee to calculate the ROI and how long it would take to break even). Labor = \$8Mn per month; Other Fixed Overhead = \$10Mn per month; Cost per train trip = \$40,000 per month (both inbound and outbound). Assume for this exercise that the client imports 15Mn lbs of resin per month.

### Sample Answer

- Expected calculation:
  - a. Transportation Cost per month: \$40k\*(4+2, being the number of trains per day)\*25 = \$6Mn per month.
  - b. Revenue from Rubber Sales = \$5Mn\*20 = \$100Mn
  - c. Material Cost: 15Mn\* \$5 = \$75Mn
  - d. Labor: \$8Mn
  - e. Other Fixed Overhead: \$10Mn
- 2. Key Insights: The client would profit \$1MM per month and so it would take one year to break even on the \$12Mn up front investment. Profit Margins are razor thin at 1%.

# IV. Brainstorming

Question 3: What are some of the risks in this scenario and how could the government mitigate them?

### Sample answer

#### Low Margin, exposure to price fluctuations of resin and rubber

• Mitigation: Forward contract purchases of resin, Forward contract sale of rubber

#### Labor risks

Mitigation: Introduce automation, Facilitate migration of labor from other areas

#### **Terrorism Risk**

Mitigation: Involve community leaders in the process, Government or private security for the plant

#### **Supply Chain Risk**

 Mitigation: Maintain enough safety stock of resins and rubber, Ensure the rail tracks are protected sufficiently in sensitive areas, Crucial to diversify into other modes of transportation, Invest in building roads and if applicable pursue waterways.

#### **Single Supplier**

Mitigation: Diversified Supplier base

# IV. Brainstorming

### Make sure the candidate follows these steps (brainstorming):

| 01 | Take time or do<br>on-the-go             | Most interviewers feel comfortable when candidates take 30-40 seconds to think and write down their ideas before walking the interviewer through them   |
|----|--|---|
| 02 | Do horizontal<br>presentation (optional) | The best practice is to structure brainstorming and offer a 10-second top-down overview, e.g. "Interesting question. I would want to first address the potential bottleneck in our process and see if there is a way to optimize our operations. The first area I'd think about is" |
| 03 | Provide at least 4<br>ideas              | Feedback from consulting firms is that candidates offer only three ideas which is a bit on the lower end Push the candidate to provide at least 4 ideas Top-5% of candidates can usually suggest 7-8 ideas  |
| 04 | Add colors<br>(optionally)               | To impress the interviewer, the candidates can contextualize some of their ideas In this brainstorming each idea is presented as a story  |

# V. Synthesis and Recommendation

Question 4: The foreign diplomat representing this government is about to walk into the room, what would you recommend to them?

### Sample Answer

**Recommendation:** The government should invest in rejuvenating this rubber plant. This is because:

Reason #1: It is profitable. With production at 5Mn lbs of rubber, the government makes \$12Mn per year in profit, breaking even in one year.

Reason #2: There are other benefits such as job creation indicated by \$8Mn monthly labor costs, as well as general economic development of the western part of the country.

Reason #3: The profits are limited due to production constraints, and these can be resolved in the long run

#### Risks:

There is low margin on the rubber product and there are security, operational and labor risks. However these risks can be mitigated

#### **Next steps:**

Assess how plant can be staffed and whether transportation bottleneck can be alleviated. Assess terrorism threat and steps to mitigate.

### New Rubber Plant Investment - Exhibit A

### **Outgoing Train Information**

| Number of Trains | 2   |
|------------------|-----|
| Bogies / Train   | 8   |
| Cases / Bogie    | 25  |
| Lbs / Case       | 500 |

### **Incoming Train Information (Carrying Resin)**

| Number of Trains | 4   |
|------------------|-----|
| Bogies / Train   | 10  |
| Barrels / Bogie  | 25  |
| Pds / Barrel     | 500 |

# Case 16: University Program

Format: Interviewer-led case

Type: Unconventional

Difficulty: Medium

Industry: Education

Stretch Area: Brainstorming

McK-inspired case



# Tips for interviewer-led case

- 1. Sometimes during interviewer-driven cases, the interviewers ask the first question and then the candidate takes time to build their framework
- 2. Try to ask the candidate questions If the candidate isn't on the right track and seems lost, try to give a hint or ask a question from the slides
- 3. Feel free to manage the conversation to hit all the questions from the slides, e.g.:
  - "That's a great question! What do you think?"
  - "Sure. Before we dig into that, what are your thoughts on ... [question from the slide]?"
  - "Sure, we'll explore it. Before that, let me share some data from our analyst/client that we've just received and... [ask a Math question]"
- 1. For growth cases, feel free to also ask more ideas for growth when the candidate is explaining their framework. This helps in testing brainstorming skills and pressure handling.
- 2. There is **no recommendation** in an interviewer-driven interview

# University Program - Prompt

#### **Problem Statement**

Your client is a university in an African country that is thinking of launching a new Global Bachelor of Management (GBM) Program. The university already has a small Bachelor of Management Program of its own that is only known locally. The goal is to create a program that attracts top students from abroad as well as the home country, and eventually earns a spot in global rankings. What steps should the university take to ensure a successful launch of the new program?

### **Additional Information (provide if requested)**

- Objective of the project What is the objective of the project?
   The objective is to ensure the successful launch of a global program with both domestic and international students
- Geography Where in Africa is the country located?
   The country is located in West Africa in a comparatively developed and semi-urban city
- Criteria for success Do we have any financial goal or other objective in mind?
   It would be good to have a 60-40 split between domestic and international students at the university
- Existing program Students from the original program would be shifted to the new GBM program



# I. Background, Setup, and Recap

### Make sure the candidate follows these steps:

| 01 | Restate the prompt            | Candidates are expected to restate the prompt briefly to make sure they are on the same page with the interviewer  |
|----|-------------------------------|--|
| 02 | Add colors (optionally)       | Candidates can react to the prompt by providing some quick thoughts which will demonstrate candidates' business acumen, e.g.: "This is very interesting! Studying at a global MBA program myself, I do have exposure to what the program could look like and would be happy to support its design!" or "Education program design is something very unique and it would be great to see the process followed to do the same!" |
| 03 | Ask 2-3 clarifying questions  | It is common that candidates ask 2-3 clarifying questions before designing their framework. Typical questions include: - Geography of client's operations/delivery - Client's goal/objective - Business model of the client  |
| 04 | Ask for a moment to structure | Typically, candidates ask for a couple of minutes to structure their approach  |

# **Case Questions**

### This is an interviewer-driven interview

| 1 | What do you think are the key factors affecting an applicant's decision of which Bachelor program to attend?                 |
|---|--|
| 2 | (Provide Exhibit A) What is the feasibility of achieving the domestic-international student split at the African university? |
| 3 | What might be some ways to attract applicants from foreign countries?  |
| 4 | (Provide Exhibit B) What other measures can the university take to ensure a good global ranking?                             |

# II. Solution building

Question 1: What do you think are the key factors affecting an applicant's decision of which Bachelor program to attend?

### **Sample Answer**

### Program content/curriculum

e.g. Types of courses, Pedagogy of learning (lecture-based or case-based method), Global nature of courses

### Program quality and faculty

e.g. Track record of professors, Visiting or industrial faculty from top universities/firms, Professor ratings and outlook of students, ranking/reputation of the program

### Recruiting/career services

e.g. Career advisory services, Internship and Full-time job search support, Employment outcomes (industries, firms and compensation), Access to firm offices and proximity to them

### Cost

e.g. Tuition and living expense cost structure of the program, Scholarships or Financial Aid, ROI of the program in financial and non-financial terms, Opportunity cost of giving up other education opportunities

### Student body

e.g. Domestic vs. International students, Admissions criteria, Friendliness of students and culture of school

### Location

e.g. Availability of basic amenities and infrastructure, Safety of campus and housing area, Affordability, Walkability, Temperature and weather conditions

# III. Solution building

Question 2: The universities have defined the goal of having an entry class of 400 students, with a 60-40 split between students from the home country and students from abroad. It is assumed that the 100 bachelor students currently enrolled in the local programs would attend the GBM program. The team's first task is to decide whether this is a feasible goal.

### Sample Answer

Total number of students needed=400 (240 domestic and 160 international)

Currently enrolled in existing programs: 100 x 30%=30 (international), 100 x 70%=70 (domestic)

Additional students needed: 130 (international), 170 (domestic)

Capture rate being 10% for international students, which means 1300 international student applications needed; capture rate being 50% for domestic students, which means 340 domestic student applications needed

This would equal: 1300/30,000=4.33% of the qualified international students; 340/50,000=0.68% of qualified domestic students

Feasible for domestic students, challenging for international students

# IV. Solution building

Question 3: What might be some ways to attract applicants from foreign countries?

### Sample Answer

- 1. Program-Specific Differentiators: Global exposure through curriculum, Faculty and research strengths in global topics, Global mobility programs such as exchanges, partner universities
- 2. Financial Incentives: Scholarships and Financial Aid, Part-Time work authorization, Post-Graduation Employment Pathways for global candidates
- 3. Cultural Integration Support: Onboarding Services, Diversity and Inclusion Initiatives, Local community interactions or industrial visits
- 4. Marketing and Outreach Strategies: Targeted Digital Marketing, Partnerships with Global Schools, Alumni and Ambassador Programs and country-wise chapters

# V. Solution building

Question 4: (Provide Exhibit B) What other measures can the university take to ensure a good global ranking?

### Sample Answer

In terms of gaps with the GBM goals, there are two areas that have a big gap in scores.

To increase these scores, the university can focus on:

- Research output
  - a. Increasing Research Funding
  - b. Collaborating Internationally
  - c. Encouraging High-Impact Publications
- 2. International Reputation The university would benefit from the international nature of the class composition but can also focus on:
  - a. Increasing Global Partnerships
  - b. Focusing on International Recruitment and Diversity
  - c. Offering Global Courses and Academic Opportunities to students

# University Program - Exhibit A

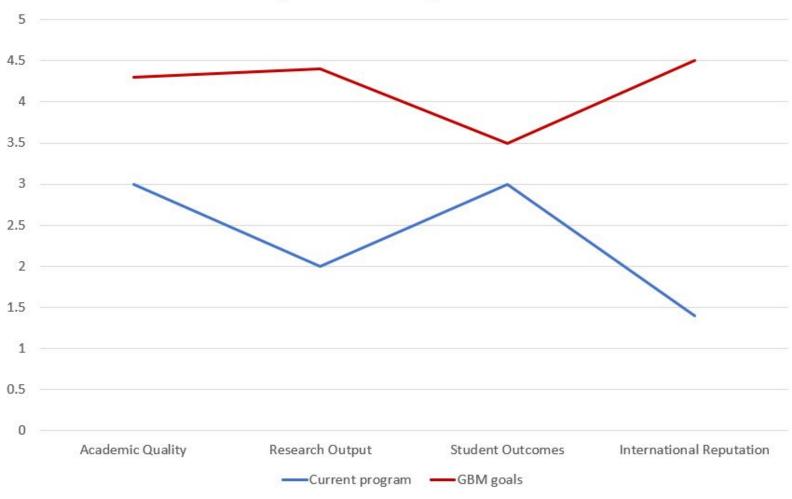
Current demographic distribution of the Bachelor in Management Program

| Geography     | Current % | Estimated number of qualified applicants |
|---------------|-----------|--|
| Domestic      | 70        | 50,000                                   |
| International | 30        | 30,000                                   |

Note: 50% of domestic applicant students and 10% of international applicant students will accept their seats in the program

# University Program - Exhibit B





# Case 17: Biopharma Outsourcing

Format: Interviewee-Led

Type: Unconventional

Difficulty: Medium

Industry: Pharmaceuticals

Stretch Area: Case Math

BCG-inspired case



# Biopharma outsourcing - Prompt

### **Problem Statement**

The client, Genome Bio, is a national biopharma manufacturer of the largest life-saving medicines for diseases and manufactures bio-materials in the USA. Due to the COVID pandemic, the costs of manufacturing these materials has significantly shot up and the client has been considering establishing manufacturing facilities in Mexico. Should the client outsource the supply of the biomaterial to Mexico facilities?

### Additional information (provide upon request)

Objective: To reduce costs of sourcing of the biomaterial and evaluate other benefits of establishing an alternate supply chain

Business: The client owns and operates the facilities for biomaterial production and has a network of biomaterial production

Customers: The biomaterials are manufactured and then sent distributed all over the US

# II. Framework Development & Explanation

### Sample Framework

### 1. Mexico facilities

- Similarity of facilities (operating procedures, labor requirements)
- Quality of production
- Regulations for biomaterial production
- Training requirements
- Shipment requirements (frozen shipping)

# 2. Cost considerations

#### A. Variable costs:

- Raw material costs
- Processing costs
- Shipping costs
- Lab testing costs

#### B. Fixed costs:

- Labor costs
- Factory setup and utility costs
- Regulatory approval costs

# 3. Other considerations

#### A. Internal:

- Capital requirements
- Labor requirements
- Macroeconomic conditions
- Operations + Distribution setup

### B. External:

- Regulatory considerations
- Customer response
- Other stakeholder response (health bodies, media)

### **Hypothesis:**

- "While in theory outsourcing to Mexico may make sense due to lower costs, we may have to evaluate the Mexico facilities and check if they would be able to meet our expectations in considerations related to operations, quality of production, regulation adherence. Do we have any information regarding the same?"



# III. Solution Building

Question 1: (Provide Exhibit A) Can you help us estimate what would be the savings due to manufacturing of biomaterials in the Mexico facilities?

### Sample answer

| Variable Costs                   | Costs in U.S. (\$/unit) | Costs in Mexico as % of U.S. | Costs in Mexico (\$/unit) | Savings (\$/unit) |
|----------------------------------|-------------------------|------------------------------|---------------------------|-------------------|
| Labor                            | 70                      | 40%                          | 28                        | 42                |
| Material                         |                         |                              |                           |                   |
| Crystallized raw materials       | 16                      | 80%                          | 12.8                      | 3.2               |
| Other material (incl. packaging) | 20                      | 55%                          | 11                        | 9                 |
| Shipping costs                   | 50                      | 180%                         | 90                        | (40)              |

TOTAL \$14/unit

| Fixed Costs                                  | Costs in U.S. | Costs in Mexico | Savings                 | Savings (\$/unit)    |
|--|---------------|-----------------|-------------------------|----------------------|
| Facility establishment cost (10k units each) | \$ 0.2M       | \$ 0.1M         | \$0.2 - \$0.1M = \$0.1M | \$0.1M/10k = 10      |
| Regulatory approval cost (48 facilities)     | N/A           | \$3M            | (\$3M)                  | (\$3M)/480k = (6.25) |
|  |               |                 | TOTAL                   | \$3.75/unit          |

Therefore the total savings for ~500k units = \$17.75\*500k units = \$8.875M



# IV. Solution building

Question 2: What are some additional considerations that the client will have to consider before outsourcing the production to Mexico?

### Sample Answer

Additional considerations: Similarity of operations, Training requirements, Shipping nuances for frozen biomaterials, Regulatory concerns, Quality concerns

Provide below after the answer above:

The operations of the Mexico plants would be similar to the US plants and same procedures would be followed.

There would be some special rules for the production of the biomaterials but there is availability of trained professionals in Mexico + people who would agree to move to Mexico to take senior positions

The shipment of the biomaterials would have to be done in a frozen form and we would incur significant shipping costs due to the same. However our vendor estimates have been included in the costs

We have not yet looked into the regulatory requirements of shipping the frozen biomaterials from Mexico to the US but those requirements would have to be evaluated

There could be potential quality concerns for the biomaterials and testing a small batch is recommended



# V. Synthesis and Recommendation

Question 3: The CEO of the client is about to walk into the room, what would you recommend to them?

### Sample Answer

**Recommendation:** Genome Bio should outsource the manufacturing of the biomaterials to Mexico. This is because:

Reason #1: It helps in reducing the total costs of manufacturing by USD 8.875M

Reason #2: The Mexico facilities are able to follow the same operations as the US facilities and it would be easier to operate with the same operating procedures as the US

Reason #3: There is availability of trained professionals in Mexico who would be capable of running the facilities and people who would agree to move

### Risks:

There might be regulatory concerns around the shipment of the frozen biomaterials and that would need to be tested. There could be quality issues and some prior testing could be required

### **Next steps:**

Assess regulatory concerns around shipping from Mexico and ways to navigate the issues. Quality testing of certain samples from Mexico can be done before establishing all the facilities in Mexico

# Biopharma outsourcing - Exhibit A

| Variable Costs                   | Costs in U.S. (\$/unit) | Costs in Mexico as % of U.S. |
|----------------------------------|-------------------------|------------------------------|
| Labor                            | 70                      | 40%                          |
| Material                         |                         |                              |
| Crystallized raw materials       | 16                      | 80%                          |
| Other material (incl. packaging) | 20                      | 55%                          |
| Shipping costs                   | 50                      | 180%                         |

| Fixed Costs                                     | Costs in U.S. | Costs in Mexico |
|---|---------------|-----------------|
| Facility establishment cost (10k units each)    | \$ 0.2M       | \$ 0.1M         |
| Regulatory approval cost (across 48 facilities) | N/A           | \$3M            |

### Case 18: Voter Turnout

Format: Interviewee-led case

Type: Unconventional

Difficulty: Hard

Industry: Public Sector

Stretch Area: Exhibit Analysis



# Tips for interviewee-led case

- 1. Try to minimize hand-holding.
- 2. Try to let the candidate ask questions If the candidate isn't on the right track and seems lost, try to give a hint or ask a question from the slides
- 3. Feel free to manage the conversation to hit all the questions from the slides, e.g.:
  - "That's a great question! What do you think?"
  - "Sure. Before we dig into that, what are your thoughts on ... [question from the slide]?"
  - "Sure, we'll explore it. Before that, let me share some data from our analyst/client that we've just received and... [ask a Math question]"
- 4. For growth cases, feel free to also ask more ideas for growth when the candidate is explaining their framework. This helps in testing brainstorming skills and pressure handling.
- 5. When the case time is running out, prompt the candidate to provide recommendation

## Voter Turnout - Prompt

### **Problem Statement**

Over the last few election cycles, the city of Philadelphia has seen decreasing voter turnouts. Presidential elections happen every 4 years, and the next election is happening in about 1 year from now. The city commissioner's office is preparing for the upcoming elections and has asked you to recommend changes to ensure that as many people in Philadelphia vote as possible.

### **Additional Information (Provide Upon Request)**

- Objective There isn't a specific metric that the commissioner's office wants to reach; they just want to maximize voter turnout as much as possible
- Business All funding for the commissioner's office is allocated as a portion of the city's overall budget; for ethical reasons, no additional funds will be raised
- The Philadelphia City Commissioners oversees all elections processes for the City of Philadelphia, including voter registration, setting up polling places, and tallying votes
- Only US citizens 18 years or older can vote in elections; Philadelphia is home to about 1.6 million people, of which 90% are US citizens
- People can vote either in person or by mail-in ballots

# I. Background, Setup, and Recap

### Make sure the candidate follows these steps:

| 01 | Restate the prompt            | Candidates are expected to restate the prompt briefly to make sure they are on the same page with the interviewer  |
|----|-------------------------------|--|
| 02 | Add colors (optionally)       | Candidates can react to the prompt by providing some quick thoughts which will demonstrate candidates' business acumen, e.g.: "I know increasing voter turnout has been a huge issue in the past election cycles. A lot of the efforts that I've seen recently revolve around increasing awareness of elections and improving access to voting by holding early voting days. I'd be curious to see if our client has attempted either method." |
| 03 | Ask 2-3 clarifying questions  | It is common that candidates ask 2-3 clarifying questions before designing their framework. Typical questions include: - Client's goal/objective - Business model of the client  |
| 04 | Ask for a moment to structure | Typically, candidates ask for a couple of minutes to structure their approach  |

# II. Framework Development & Explanation

### **Sample Framework**

### 1. Accessibility

### A. Election day logistics

- Number and distribution of voting locations
- Transportation to voting locations
- Voting hours
- Early/absentee voting options

#### **B. Process**

- Registration complexity
- Voter ID requirements
- Language support

### 2. Awareness

### A. Voter education

- Candidate and issue education
- Community engagement
- Media campaigns
- Targeted outreach to underrepresented groups

#### **B. Reminders**

- Election day reminders by text/email
- User-friendly informational app/website

### 3. Motivation

### A. Incentives

- Non-monetary rewards (e.g. "I Voted stickers)
- Election day events or festivities
- Recognition for consistent voters

### **B.** Civil responsibility

- Emphasizing impact of each vote
- Personalized reports of election outcomes

### **Hypothesis:**

- "When it comes to voting, I usually prioritize convenience over anything else. I suspect a potential problem here could be the accessibility of voting centers. We can either encourage more absentee voting or improve the convenience of in-person voting. Do we have any data on which method of voting people prefer?



# III. Solution building

Question 1: (Provide Exhibit A) The commissioner's office has shared data on voter turnout over the last 4 years, including information from the election that happened in the past month. What are some insights you could draw?

### **Sample Answer**

- 1. About ~90% of eligible people are registered to vote, so increasing voter registration efforts would not significantly increase voter turnout
  - 1. From the additional information, we know that about 1.15M people in Philadelphia are eligible to vote (total population × % US citizens × % over 18 = 1.6M × 90% × 80%); have the interviewee round to 1.2M
- 2. The elections in November 2020 and November 2022 saw about 2x in-person voter turnout compared to other cycles. The election in November 2020 saw about 3-4x by-mail voter turnout compared to the other cycles.
  - 1. The November 2020 election likely had a much larger turnout because it was a presidential election; all else staying equal, we should expect to see similar turnout for the upcoming presidential election in November 2024. There were likely a higher percentage of mail-in ballots because of the pandemic.
  - 2. For future non-presidential elections, we should explore how accessibility to voting centers and mail-in ballots and awareness of election day differed between the November 2022 election and other elections

# III. Solution building

Question 2: (Provide Exhibit B) Philadelphia is sectioned into 10 districts, each with roughly equal population. Based on the information provided, what could the city commissioner do to increase voter turnout?

### **Sample Answer**

- 1. On the except for side of the screen, I see that in the last election cycle, there was less voter turnout in districts 6 and 7 compared to the other districts. It seems like there might be an opportunity to double voter turnout in these two districts, increasing the overall voter turnout average by up to 5% during a lower voting cycle and potentially 10% in a higher voting cycle.
- 2. On the right hand side, I see that districts 6 and 7 have fewer voting centers than other districts, which may explain the lower voter turnout, but it's not a direct correlation. For example, district 5 has the most voting centers but the highest voter turnout.
- 3. Each district also spent \$20k on each voting center, with the exception of districts 2 and 9, which spent \$25k on each voting center. If we're able to reduce the amount spent on each voting center in districts 2 and 9 to be in line with the other districts, we can reallocate some of the budget to open additional voting centers in districts 6 and 7.
- 4. In addition to increasing the number of voting centers in districts 6 and 7, we should examine other factors that affect voter turnout.

| District | Number of<br>Voting<br>Centers<br>(May<br>2024) | Total<br>Amount<br>Spent on<br>Voting<br>Centers<br>(\$M) | Amount Spent per<br>Voting Center |
|----------|---|---|-----------------------------------|
| 1        | 150   | 3   | \$3M/150 = \$20K                  |
| 2        | 200   | 5   | \$5M/200 = \$25K                  |
| 3        | 200   | 4   | \$4M/200 = \$20K                  |
| 4        | 150   | 3   | \$3M/150 = \$20K                  |
| 5        | 240   | 4.8   | \$4.8M/240 = \$20K                |
| 6        | 100   | 2   | \$2M/100 = \$20K                  |
| 7        | 120   | 2.4   | \$2.4M/120 = \$20K                |
| 8        | 160   | 3.2   | \$3.2M/160 = \$20K                |
| 9        | 200   | 5   | \$5M/200 = \$25K                  |
| 10       | 200   | 4   | \$4M/200 = \$20K                  |
|          |   |   |                                   |

# IV. Brainstorming

Question 3: What are some factors that the commissioner's office should consider when opening new voting centers?

### Sample answer

- There are several factors the commissioner's office should consider, both related to increasing voter turnout and unrelated to voter turnout:
- Increasing voter turnout:
  - Accessibility and Convenience: new voting locations and voting hours would need to accommodate people who have not been voting
  - Technological Facilitation: upgrade technology to make voting easier and more secure
  - Outreach and Awareness: targeted outreach would need to be conducted to make voters aware of a new voting center
- Unrelated to voter turnout:
  - Staffing: recruit and train a team of skilled poll workers who can commit to working extended hours
  - Equipment and Supplies: voting booths will need to be ordered and secured
  - Facility requirements: buildings must have adequately sized rooms to set up equipment, voting booths, and check in stations

# IV. Brainstorming

### Make sure the candidate follows these steps (brainstorming):

| 01 | Take time or do<br>on-the-go             | Most interviewers feel comfortable when candidates take 30-40 seconds to think and write down their ideas before walking the interviewer through them  |
|----|--|--|
| 02 | Do horizontal<br>presentation (optional) | The best practice is to structure brainstorming and offer a 10-second top-down overview, e.g. "That's a great question. Factors that our client should think about fall under two different categories: things that relate to increasing voter turnout because that's our client's main objective, and things that are unrelated but would fall more under logistical factors" |
| 03 | Provide at least 4<br>ideas              | Feedback from consulting firms is that candidates offer only three ideas which is a bit on the lower end Push the candidate to provide at least 4 ideas Top-5% of candidates can usually suggest 7-8 ideas   |
| 04 | Add colors<br>(optionally)               | To impress the interviewer, the candidates can contextualize some of their ideas In this brainstorming each idea is presented as a story   |

# V. Synthesis and Recommendation

Question 4: You're about to have a meeting with the city commissioner's office to discuss initial recommendations for increasing voter turnout for the next election. What would you tell the group?

### Sample Answer

**Recommendation:** The city's commissioner office should look into increasing the number of voting centers in districts 6 and 7 by reallocating budget from districts 2 and 9.

Reason #1: The majority of voters prefer to vote in person, so targeting in-person voters would have a higher impact than targeting mail-in voters.

Reason #2: Districts 6 and 7 have both the lowest voter turnout and the least number of voting centers. Districts 2 and 9 are both spending on average \$5k more per voting center than the other districts. This budget can potentially be reallocated to open a total of 100 more voting centers.

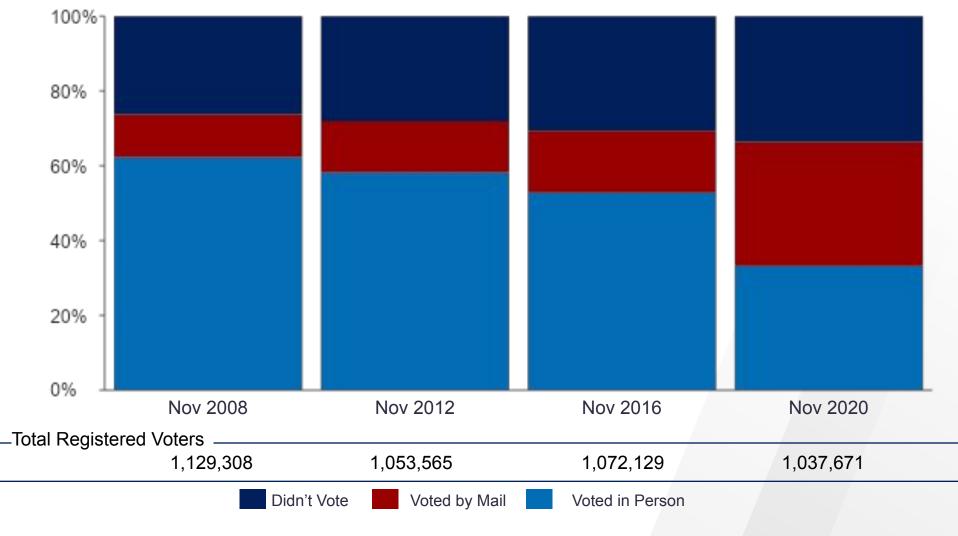
### Risks:

Additional costs would likely be incurred from this reallocation effort
Opening new centers may not completely solve the problem of low voter turnout

### **Next steps:**

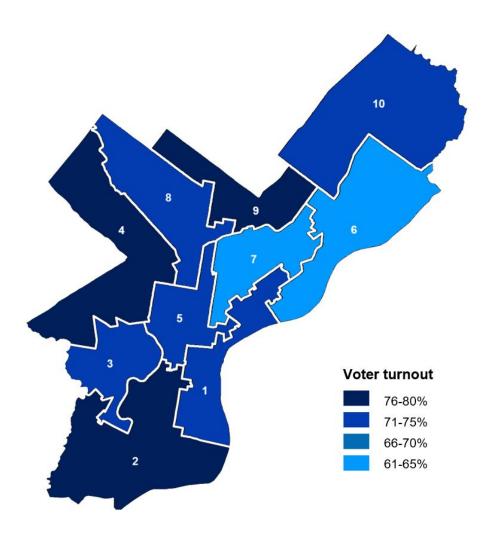
Examine other potential solutions to increase voter turnout, like increasing awareness of or motivation for voters

### Voter Turnout - Exhibit A



Note: This data is for presidential elections only

# Voter Turnout (November 2020) - Exhibit B



| District | Number of<br>Voting Centers<br>(Nov 2020) | Total Amount<br>Spent on<br>Voting Centers<br>(\$M) |  |
|----------|---|---|--|
| 1        | 150                                       | 3   |  |
| 2        | 200                                       | 5   |  |
| 3        | 200                                       | 4   |  |
| 4        | 150                                       | 3   |  |
| 5        | 240                                       | 4.8   |  |
| 6        | 100                                       | 2   |  |
| 7        | 120                                       | 2.4   |  |
| 8        | 160                                       | 3.2   |  |
| 9        | 200                                       | 5   |  |
| 10       | 200                                       | 4   |  |

# Other Recommended Cases (from the authors)

### Other recommended cases (from the authors)

| SI.No. | Item                | Case type    | Case level |
|--------|---------------------|--------------|------------|
| 1      | Unicloth            | WCC 2017     | Medium     |
| 2      | Phighting Phillies  | WCC 2017     | Hard       |
| 3      | Penn & Teller       | WCC 2017     | Medium     |
| 4      | Medical Devices Co. | WCC 2017     | Hard       |
| 5      | Chicouver Cycles    | Kellogg 2023 | Medium     |
| 6      | Soap Co.            | WCC 2023     | Medium     |
| 7      | Coyotes             | Fuqua 2014   | Hard       |
| 8      | Circling the drain  | WCC 2023     | Medium     |
| 9      | Dark Sky            | Kellogg 2023 | Medium     |