

USC Marshall

School of Business

Consulting & Strategy Club 2022–2023 Casing

CASEBOOK

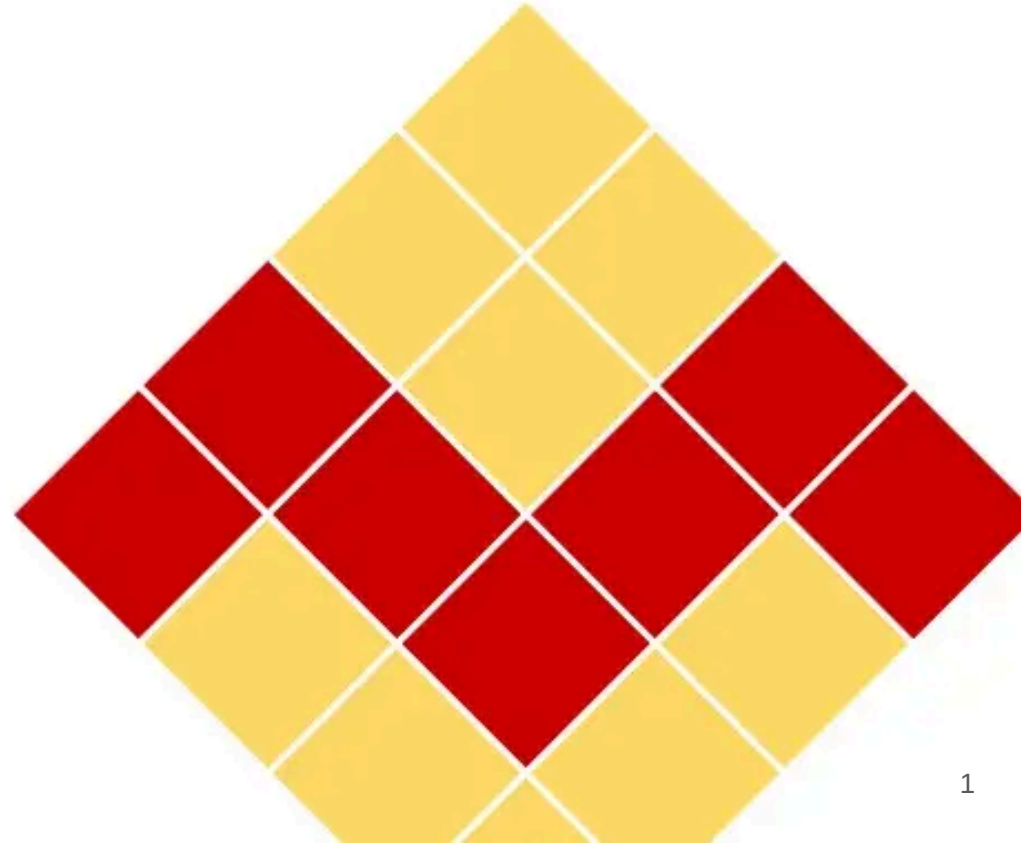
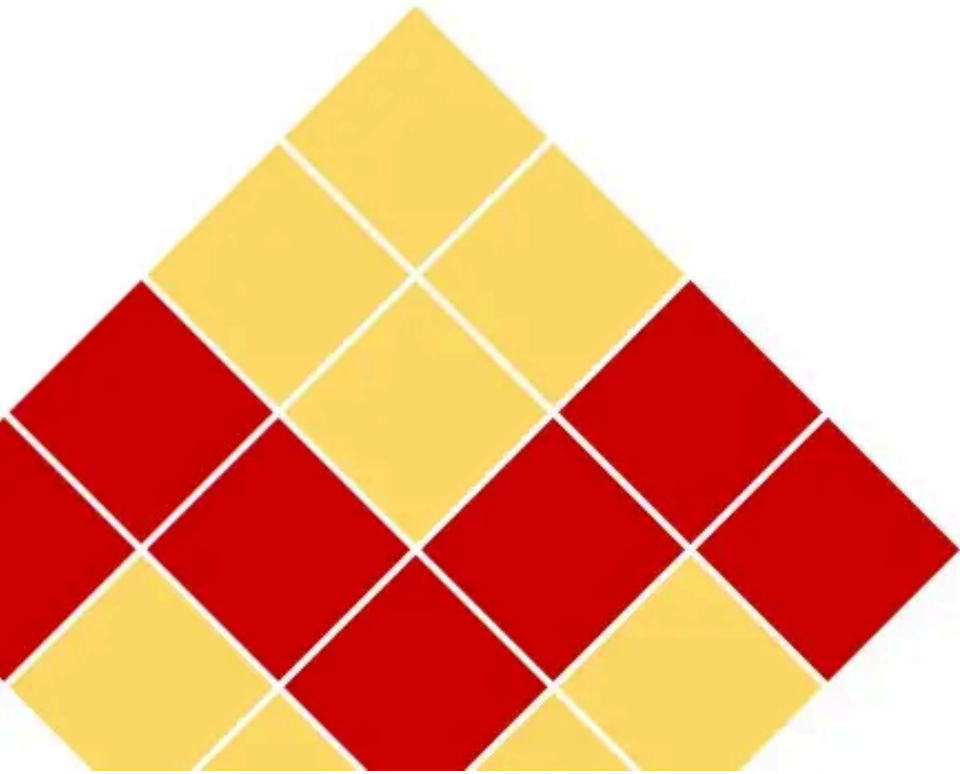


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Case Interview Format

- Case Structure
- Candidate Tips
- Interviewer Tips
- Prompt Dissection
- Sample Frameworks
- Conclusions

Case Interview Format & Structure (candidate-led)



How the Game is (Typically) Played

- Interviewer:** Reads the prompt out loud
- Candidate:** Repeats back the important details from the prompt, and asks clarifying questions to make sure they understand the scenario
- Interviewer:** Confirms to the candidate that they have understood correctly
- Candidate:** Asks for a minute or two to silently gather their thoughts and write out their framework. They write their framework on their blank paper
- Interviewer:** Waits patiently for 90-120 seconds while the candidate creates framework (Alternatively, asks the candidate to instead narrate as they write)
- Candidate:** Shares their framework and explains what areas of the problem/scenario they wish to investigate and what factors/data will be important
- Interviewer:** Listens politely, and asks questions (if they want) about the candidate's framework
- Candidate:** Begins to ask for specific information that will help them solve the problem, using their framework as a guide for what to ask
- Interviewer:** Shares details from the case when asked, or when instructed to do so by the case
- Candidate:** Analyzes/calculates/brainstorms, or generally does whatever the interviewer asks
- Interviewer:** Provides guidance as needed to steer the interview
- Candidate:** Once all information is gathered, asks interviewer if they should prepare a final recommendation
- Interviewer:** Asks the candidate to present their recs, or steers the candidate back to questions/analysis/calculations/brainstorms
- Candidate:** Asks interviewer for a minute to compose their recommendation, then silently gathers their thoughts for what to present
- Interviewer:** Waits patiently for 30-90 seconds while the candidate silently composes recommendations
- Candidate:** Presents their recommendation(s), along with Risks and Next Steps
- Interviewer:** Asks further questions, or thanks the candidate and concludes the case interview

*see pg 74 for sample case interview videos to watch this play out

Case Interview Format & Structure (candidate-led)



General Case Flow Timing

Understand
the Prompt
(~1-3 min)

- LISTEN (what is the key issue at hand here?)
- Summarize the prompt to make sure you understand the objective, personalize it (don't repeat verbatim)
- Ask 1-2 clarifying questions
- Don't jump into specifics just yet

Develop
your
Framework
(~1-2 min)

- Ask for a moment to plan your structure
- Develop 3-4 areas to analyze along with a few tailored sub-topics
- The framework should be structured to showcase the most important topic and provide a roadmap of where you plan to take the case
- Engage with the interviewer (look up, when speaking)

Work
through the
Case
(~15-30 min)

- Refer back to the framework as you move through each area (when applicable)
- Tie back each piece of analysis to the main objective
- Talk through the calculations
- Drive insights whenever possible (after each insight ask yourself, "so what?")

Form
Recommendation
(~1-2 min)

- Ask for a moment to organize your thoughts (note: some interviewers won't give it to you)
- State your recommendation clearly, don't be wishy washy
- Use data to support your statements when possible
- Include at least 2-3 potential risks associated with your recs
- Include next steps the client should undertake

Peer Practice: Tips For Playing the Candidate



Casing practice is most effective (and fun) when both the candidate and the interviewer come prepared to give it their all.

Note: There is rarely one answer to any case. Candidates can/should be creative in their approach towards the prompt.

Bring Supplies

- Pen
- Multiple sheets of blank, unlined paper
- Wristwatch or some method to track time (cell phones are generally discouraged in interview settings)

Make it Real

- Treat the person playing the Interviewer role as though they were a formal interviewer
- Be professional, but find opportunities to show some personality
- Avoid awkward silences

Step Wise Approach

- Follow the typical case interview structure, but be prepared to adapt depending on the specifics of the interview
- Think back to Porter's Five Forces if you get stuck and don't know what areas to ask about

Ask Questions

- Choose your "clarification questions" carefully. You want to understand the premise of the prompt being given to you, but don't ask for specific details
- Choose your "detail questions" carefully. You want to be direct and specific about what data would help you to solve the problem onhand.

Keep Your Composure

- Case interviews are intended to be challenging
- You can do poorly on a case interview, but still show skills that make you a desirable candidate
- Maintain positive body language

Organize Your Math

- Keeping math tidy is essential. Interviewers may ask to see your notes and keep a copy.
- Describe the calculations you plan to perform before starting them
- Narrate your math as you do your calculations

Still unsure?

- It is ok to ask for clarification if needed
- Asking for help isn't ideal, but it's better than blundering through something you don't fully understand.

Peer Practice: Tips For Playing the Interviewer



Casing practice is most effective (and fun) when both the candidate and the interviewer come prepared to give it their all.

Note: There is rarely one answer to any case. Candidates can/should be creative in their approach towards the prompt.

Prepare Yourself

- Read the case thoroughly beforehand
- Have any exhibits ready to go (if on Zoom, make screen share available)
- Be prepared to take notes for better feedback

Make it Real

- Take it seriously even if casing with your best friend
- Be tough - can the candidate handle pushback or negative vibes?
- Keep an eye on the time (try not to exceed 30-40 min)

Step Wise Approach

- Introduce the prompt
- Allow 3-5 mins for the candidate to share thoughts
- Answer any questions the candidate may have
- Guide accordingly if they are digressing from key case issues

Ask Questions

- Best way to make cases interesting is by asking (related) follow up questions, test the candidate's ability to think on their feet and apply real world content to the case.
- Follow the case flow as provided in the original format - helps to create objective assessment

Guide Only when Needed

- Give out information only when asked the right question (within reason)
- The idea is to push the candidate to think outside the box and get a feel for the client's real situation

Provide Honest Feedback

- Go back to your notes and think about strengths and weaknesses (it's in the candidate's best interest to hear both)
- Be honest, be specific, be constructive

Still unsure?

- Shadow two friends casing
- Check out the additional resources page for recommended casing videos to watch

Prompt Dissection - Hoops 'n Stu



This is a retailer, think about:
Number of Customers (past 3 yrs)
Customer Segmentation
Industry Trends
\$ spent per visit

Note: Small & local
Q: How do they compare to some of the big box competitors?

Note: Mostly brick & mortar
Q: Are those the best locations for their customer segment? Any online presence? Wholesalers?

Hoops 'n Stu is a regional chain of local sporting good stores located in numerous neighborhood strip malls and shopping centers. They have performed well over the last 10 years but have been experiencing declining profits over the past three years. They are concerned about their profitability and have hired you to explain their situation and provide recommendations to get them back on track.

Note: Get to the root of why this has been happening before moving on to suggestions

Note: Factor in profit formula
Profit = Revenues - Costs
Revenues = Price x Volume
Costs = Fixed & Variable

Frameworks - Increase Market Share



Sample Prompt

Power plants and chemical factories have already polluted 70% of China's lakes and rivers. Water quality is a major concern for Chinese consumers and they are increasingly turning to bottled water. The cities continue to grow, as does the bottled water market. How should Nestle grow their market share?

Sample Framework

Nestle

- Current Market Share
- Growth rate
- What constitutes success
- Brands
- Pricing Strategy

Chinese Bottled Water Mkt

- Size
- Growth rate
- Competitors/Market Share
- Barriers to Entry (ie, government regulation)
- Markets (ie, home, office, retail)

Growth Strategies

- Distribution channels (ie, Nestle stores, home delivery, office delivery)
- Increase and diversify product lines
- Marketing Campaign
- Acquire Competitor

**Are there other markets that Nestle could look at to grow market share?*

Frameworks - Increase Profitability



Sample Prompt

Smell U Later is an industry leader in the US personal hygiene market. It wants to do an IPO but has seen inconsistent profit & loss (P&L) over the last two years. How can it stabilize, and increase its profits?

Sample Framework

External Market

- Fewer people care about hygiene while stuck at home during Covid(?)
- Less disposable income
- Industry trends last 2 yrs
- New competitor entrants?

Revenues

- Sales Volume
- Profit Margins/Pricing
- Changes in Revenue over time?
- No. of Customers
- Product Mix
- Customer Segmentation
- Distribution Channels

Costs

- Changes in their Fixed or Variable Cost structures?
- Manufacturing
- Shipping/freight
- R&D
- SG&A or overhead
- Benchmark w/ competitors

Frameworks - Acquisition



Sample Prompt

A Sao Paulo company is acquiring US video game maker. What considerations should be made?

Sample Framework

Sao Paulo Company

- Why acquire?
 - Patents
 - Increase market share
 - Cost saving synergies
- What else does it own?
Other gaming companies?
- Can they afford it?

Video Game Industry

- Current Market
- Size & Growth Rate
- Competitors & Market Share
- Product differentiation
- Recent trends

Due Diligence

- Revenue/Cost Synergies
- How secure is target company's customers, suppliers, distributors, management?
- Company culture
- Competitive response

Frameworks - Pricing



Sample Prompt

The CEO of an Italian electronics company has come out with a new tablet which is much like the Apple iPad. How should they price its product?

Sample Framework

Italian Electronics Co

- Why enter this market?
- Size in revenue trends?
- Brand/Customers
- Product mix
- Distribution
- What Constitutes Success
- Product Differentiation

Electronics Industry

- Current market size
- Growth rate
- Changes in industry
- New competitors
- New technology

Pricing

- Company Objective (profits, market share, or positioning)
- Competitive Analysis
- Cost-based pricing
- Price-based costing

Frameworks - Market Entry/Investment



Sample Prompt

Client is considering entering a new market.

Sample Framework

Strategic Logic

- Why are they thinking of market entry?
 - Growth?
 - Mature current market?
 - Response to competitor move?
- Resources and capabilities
- What does the firm have that makes them think they can be successful?
 - Brand
 - Patents
 - Local expertise/partners

Economics of Decision

- New market conditions
 - Total Revenues
 - Total Profits
 - Growth (g)
- Competition in a new market and market share
- Economics
 - Investment required
 - Expected share of revenues
 - Expected share of profits
 - Profitable? Payback period?

Risks/Execution

- Execution/entry barriers?
 - Channel access?
 - Regulatory barriers?
 - Does firm have \$ to make investment?
- Risks
 - Implementation risk
 - Political risks?
 - Currency risk?
 - Macroeconomic risk?

Conclusions - How to Make a Formal Recommendation



Bring it all Together

Your Conclusion is often the final step of the case interview. Not all interviews will require you to do this, but it's a chance to leave a final impression on your interviewer that highlights your presentation skills.

Recommendation

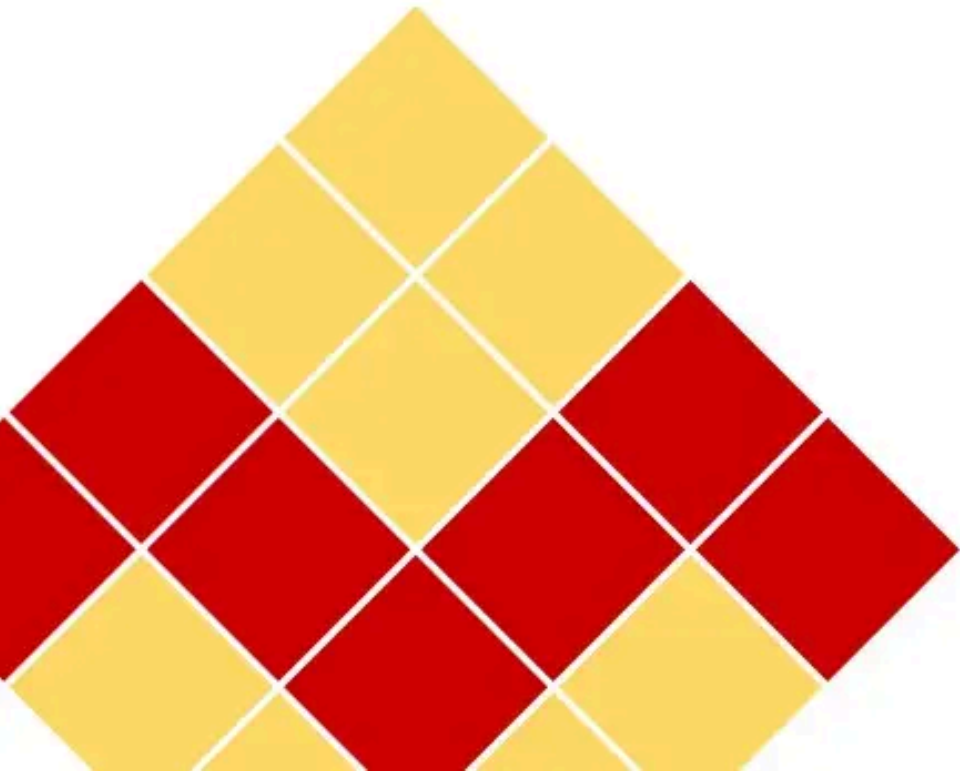
- Ideally you should have 2-3 specific points
- Make sure your recommendation answers the question(s) from the prompt. If the prompt is about profitability, your rec should address profitability.
- Address any important decisions that must be made by the client
- Include numbers from the case whenever possible to support your conclusions
- Be articulate, direct, and don't waste time

Risks

- List 2-3 risks associated with whatever you just recommended
- Anything you recommend probably comes with potential problems. This is your chance to acknowledge these, and demonstrate that you are aware of the "side effects" of your recommendation. Did you recommend staff reductions? Acknowledge impacts on morale.
- Be brief. You don't need to discuss an elaborate mitigation strategy for every potential risk.

Next Steps

- List 2-3 next steps the client should take in the future
- These can include: areas to gather more data, potential timelines, opportunities for future improvements, etc.
- This is fairly freeform, and your answers should be tailored to the case
- Be creative if you wish, but be realistic



Exhibits

- Data Tables
- Charts & Graphs
- Qualitative Information
- Data Dumps

Overview and Expectations



What to Expect - Exhibits Come in Many Forms

Identify what type of exhibit you've been given

- Exhibits come in many varieties
- They are designed to be confusing
- Understand what you're looking at, and what relevant information is likely to be contained

Narrate your observations

- As you review the exhibit, narrate your thoughts as you digest the information
- Point out anomalies, areas of interest, or whatever seems relevant to the case scenario
- Point out the obvious: if profits crashed during a specific period, call it out so the interviewer knows you saw it, no matter how obvious it may seem

Do math calculations (as directed)

- Exhibits are frequently used for the quantitative part of the interview
- Identify what key insights could be gathered with the data provided
- Think out loud: "I see a variety of revenues and costs in this chart. I could use this data to calculate profit margins across different fiscal quarters to see when the client's problems first arose"

Identify Key Insights

- Point out what key details from the exhibit are most relevant to the case scenario
- Link the key insights from this exhibit to any other exhibits when relevant
- Talk about what can be done with the insights from this exhibit, and what else might be important to consider next (this may prompt the interviewer to give you the next exhibit)

*Need some extra help with Charts, Graphs, Data? Head to Rocketblocks → Drills → Charts & Data

Data Tables



Unaudited, in millions		2015	2014	2013	2012
Operating Revenue					
Passenger		\$ 1,088	\$ 1,092	\$ 908	\$ 793
Non-ticket		\$ 1,055	\$ 958	\$ 862	\$ 766
Total Revenue		\$ 2,143	\$ 2,050	\$ 1,770	\$ 1,562
Operating Expense					
Fuel		\$ 589	\$ 583	\$ 625	\$ 718
Landing Fees		\$ 383	\$ 370	\$ 332	\$ 296
Maintenance		\$ 214	\$ 164	\$ 106	\$ 87
SG&A		\$ 428	\$ 309	\$ 185	\$ 171
Special Charges		\$ -	\$ -	\$ 225	\$ -
NI Pre Tax		\$ 529	\$ 634	\$ 297	\$ 310
Taxes		\$ 128	\$ 189	\$ 88	\$ 82
Net Income		\$ 371	\$ 445	\$ 209	\$ 218

	2015	2014
YOY CHANGE IN REVENUE		
Operating Revenue	~37%	20.26%
Passenger	8%	12%
Non-Ticket	4%	16%
Total Revenue		13%
EXPENSES AS A PERCENT OF TOTAL REVENUE		
Operating Expense	27%	26%
Fuel	18%	18%
Landing Fees	10%	8%
Maintenance	20%	15%
SG&A	0%	0%
Special Charges	25%	31%
NI Pre Tax	30%	30%
Taxes	17%	21%
Net Income		12%

Plain old data. They may try to hide important information amidst unimportant or “to be expected” facts.

The data will likely be needed for calculations, so be ready to work with these numbers. Scan through quickly and try to identify anything suspicious or unusual.

You are being tested on your math and business sense, but some industry knowledge could be relevant. Example: a fashion company with massive marketing costs is typical. An oil refinery with massive marketing costs is suspicious.

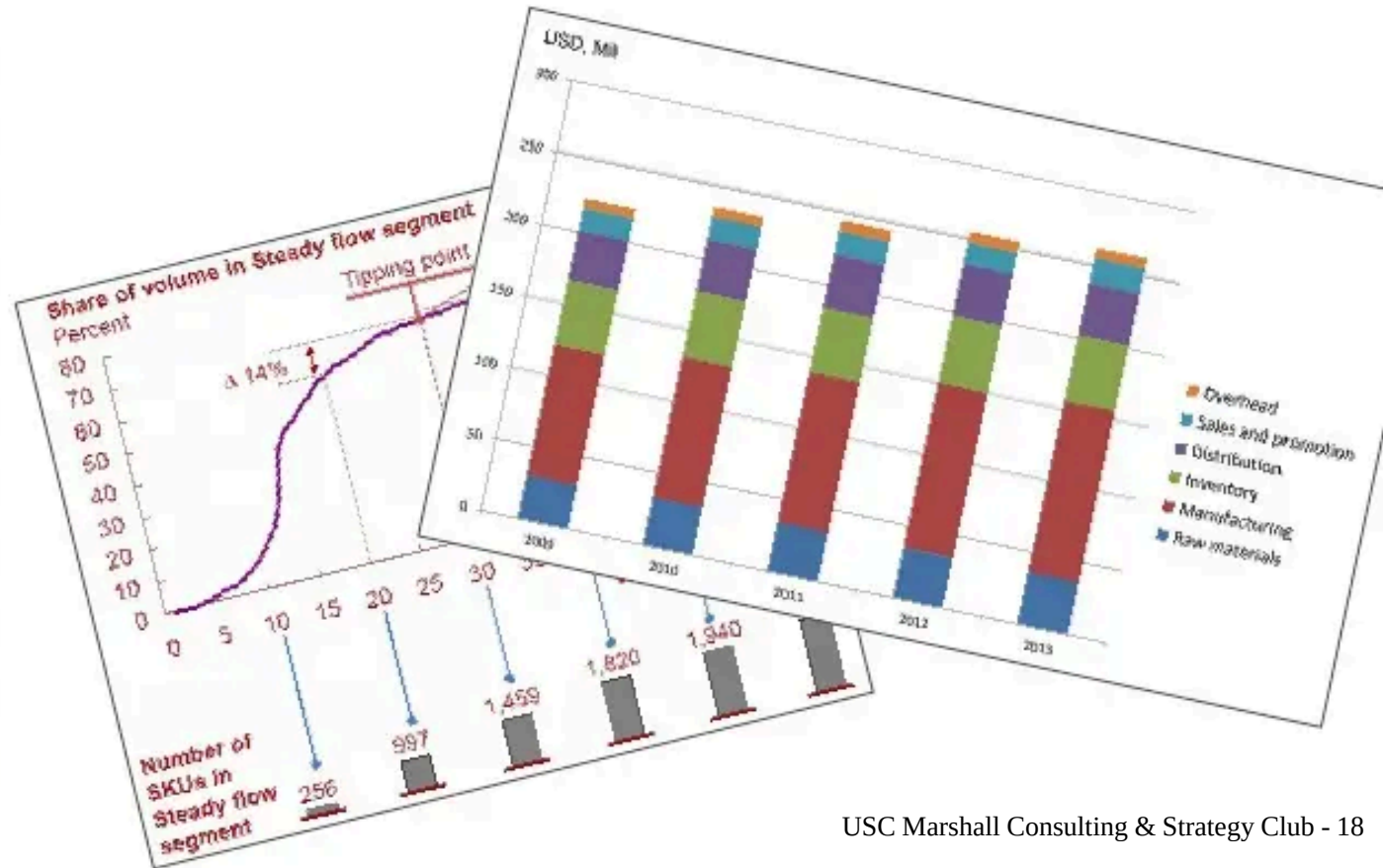
Charts and Graphs



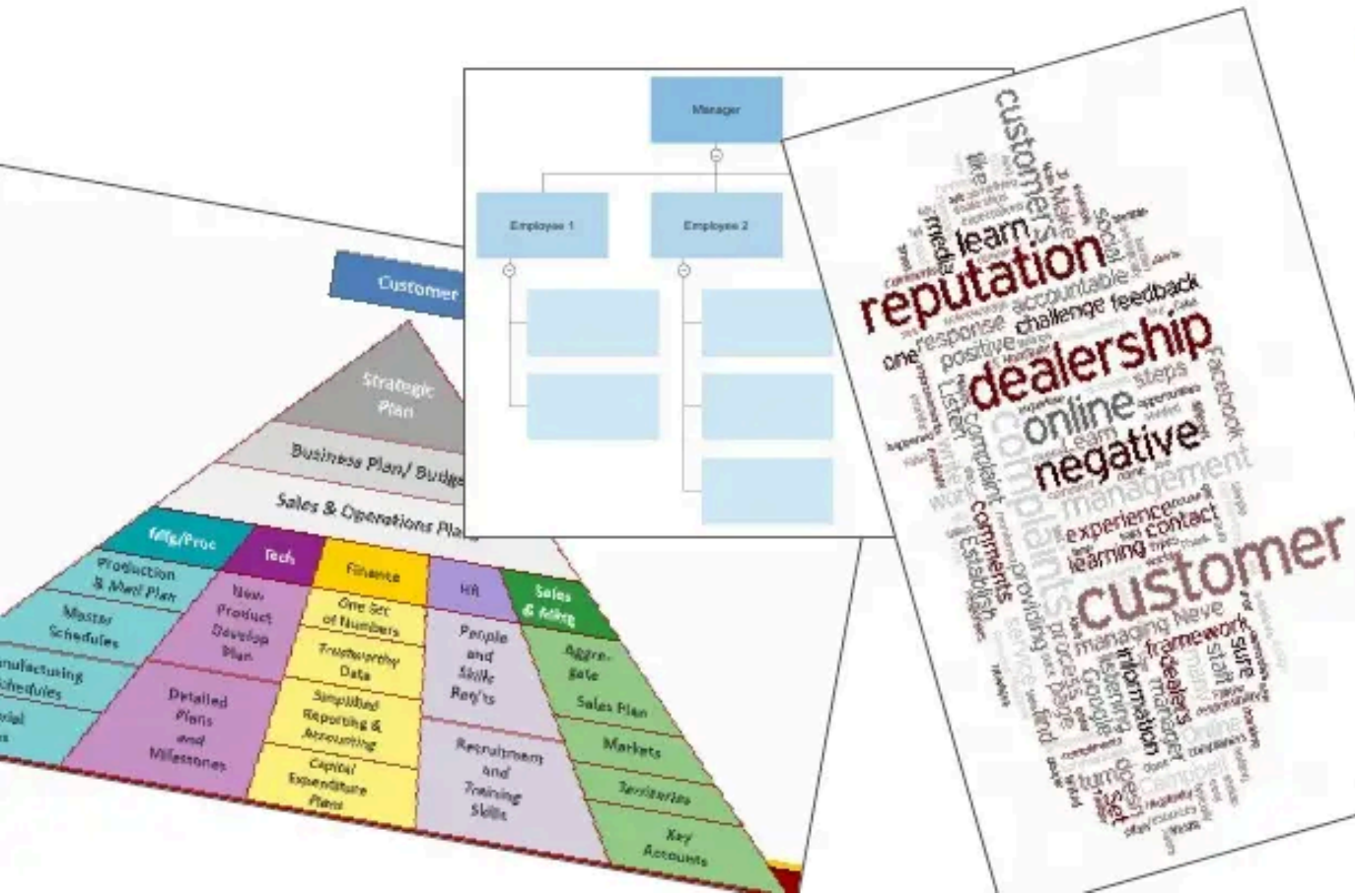
Many potential formats.

They will frequently use bad formatting, missing axis labels, misleading scales, or bad color schemes to make your life difficult.

You are being tested on reading/visual comprehension skills. Can you find useful information from poorly prepared data representations, then do math with the data to glean key insights?



Qualitative Information



Many potential formats, though less common to see in interviews.

They will frequently contain information without numbers, in a way that hints at areas that could be important to other details that were previously provided.

You are being tested on your ability to synthesize information from multiple sources. Try to find connections between these exhibits and other aspects of the prompt.

Data Dumps



Some companies, Deloitte in particular, like to present 3-4 exhibits worth of information into a single overwhelming slide.

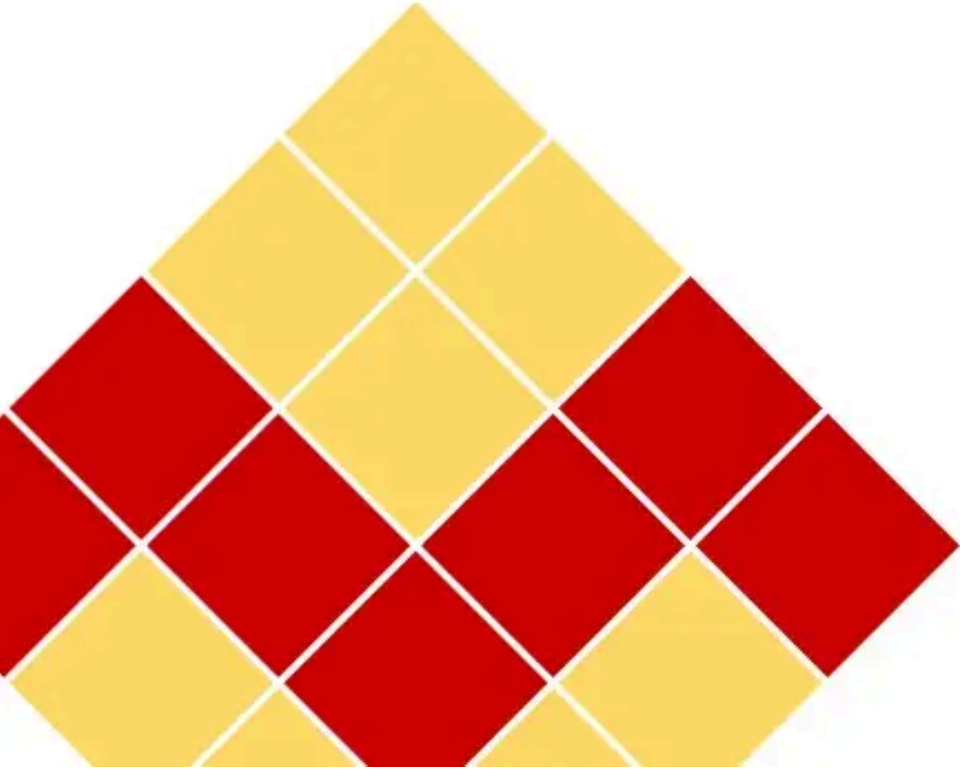
Review all aspects of the slide so you understand how the different details fit together into a cohesive “story”. Typically this will be your only source of data during the interview, and the interviewer will explicitly tell you what to calculate.

You are being tested on your ability to synthesize information from multiple sources, decide what information is important to answering the question at hand, then quickly move into math calculations.

Data Sheet		Financial and Operational Data				
	Material Cost (¥000)	Labor Cost (¥000)	Price (¥000)	Annual Production (units)	Capacity Utilization (percent)	Inventory (units)
Engine 1	100	40	200	400	80%	100
Engine 2	175	50	250	700		100
Transmission 1	75	25	150	600	60%	90
Transmission 2	90	85	250	500		105
Air Conditioning 1	35	25	100	650	100%	200
Air Conditioning 2	50	30	100	300		60

Sales Team Estimates	
Results of Territory Representative Interviews:	
• Territory A Representative: "I think we can sell about 150 units of either configuration per year."	
• Territory B Representative: "We should have no problem selling 200 units of either configuration per year in my territory."	
• Territory C Representative: "They think they're the best? Well put me down for 250 units of either configuration a year."	

Bus Configurations		
	Base	Luxury
Engine 1	X	
Engine 2		X
Transmission 1	X	
Transmission 2		X
Air Conditioning 1	X	
Air Conditioning 2		X



Key Vocabulary & Concepts

Key Vocabulary



Term	Definition
Benchmarking	A process of measuring the performance of a company's products, services, or processes against those of other businesses in the industry (can be based on industry averages or best-in-industry).
Break-Even	Total amount of revenue needed to offset the sum of a firm's costs (note: implies the firm's profit will be zero). <i>See example in Key Formulas section.</i>
CAGR	Compound Annual Growth Rate - calculates the rate at which a quantity grew over time (note: often seen in cases involving charts and graphs) <i>See example in Key Formulas section.</i>
Competitive Advantage	When a firm is able to deliver greater benefits than competitors or is able to deliver benefits equal to competitors but at a lower cost.
Core Competency	The activities that a firm does very well in order to create competitive advantage.
Customer Segmentation	Subdivision of a market into discrete groups that share similar characteristics. Ex. Age, Gender, Buying Habits, Income.
Discount Rate	aka the Cost of Capital. Rate used to determine the present value of cash.

Key Vocabulary - cont'd



Term	Definition
Economies of Scale	The average cost per unit for a business entity is reduced by increasing the volume of production.
Five C's of Marketing	Company, Customer, Cost, Channels, Competition.
Fixed Costs	Costs that do not change with an increase or decrease in the amount of goods or services produced. <i>See page 9 for a sample list of Fixed Costs.</i>
Four Ps of Marketing	Product, Price, Promotion, and Place.
Gross Margin	A company's total sales minus COGS (cost of goods sold), divided by the total sales revenue, expressed as a %.
Horizontal Integration	Acquisition of additional business activities at the same level of the value chain. Example: a gas station chain buying more gas stations.
Inventory Turnover	Ratio showing how many times a company's inventory is sold and replaced over a period. Should be compared to industry averages. Low turnover = poor sales/excess inventory. High Turnover = strong sales/ineffective buying.

Key Vocabulary - cont'd



Term	Definition
Intellectual Property (IP)	Information that is owned and legally protected by a company from outside use or implementation without consent.
Key Performance Indicator (KPI)	A measurable value that demonstrates how effectively a company is achieving key business objectives.
Law of Diminishing Returns	At some point in the production process, the addition of one more unit of output, while holding everything else constant, will eventually lead to a decrease in per unit returns.
Market Share	Percentage (%) of market size controlled by an individual firm.
Market Size	Total size of a population (either in # of people or \$\$ value) that would purchase a company's goods or services. <i>Note: Great clarifying question to ask about during an interview.</i>
Net Present Value (NPV)	Difference between present value cash inflows and present value cash outflows. Often requires you to know the discount rate (cost of capital) <i>See example in Key Formulas section.</i>

Key Vocabulary - cont'd

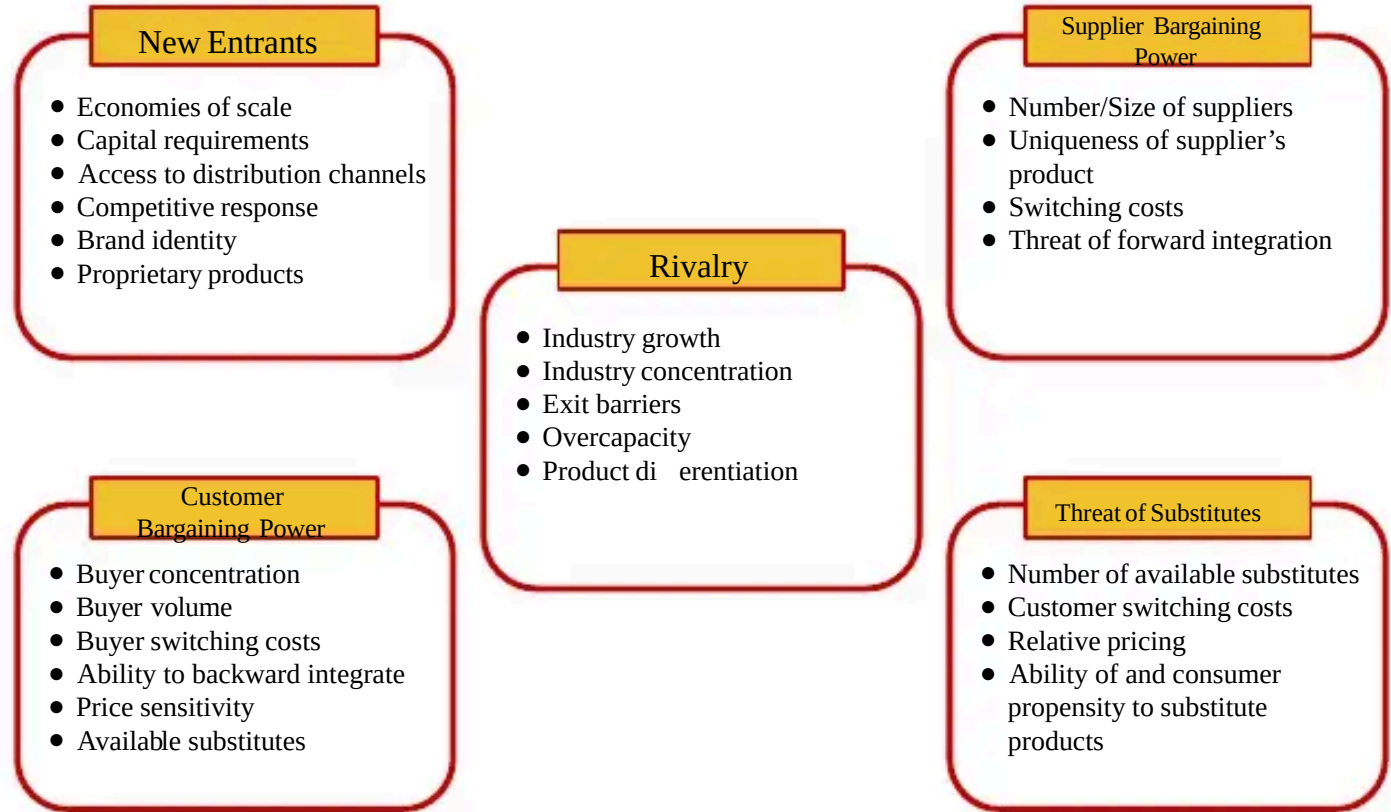


Term	Definition
PDCA	Plan, Check, Do, Act: An iterative, four-stage approach for continually improving processes, products or services, and for resolving problems.
Payback Period	Length of time required to recover the cost of an investment. <i>See example in Key Formulas section.</i>
Product Lifecycle	Four main stages: Market Introduction, Growth, Maturity, Decline.
Product Mix	Total number of product lines that a company offers to its customers. <i>Note: This is a good place to explore in profitability cases to identify loss-making products.</i>
R&D	Research and Development: Includes activities that companies undertake to innovate and introduce new products and services.
ROI	Return on Investment: A performance measure used to evaluate the efficiency or profitability of an investment or compare the efficiency of a number of different investments.
Vertical Integration	Acquisition of additional business activities up or down the value chain. Example: a gas station chain buying an oil refinery.

Porter's Five Forces



This is to help keep you get back on track if you start to run out of ideas during brainstorming portions of an interview. Strong candidates will consider these five issues to see if any of them help to solve the problem on hand.



Porter's Value Chain



*This can be used to analyze how a business creates value to the consumer through its activities.
Can be helpful when brainstorming.*

*Note: You should not use this verbatim as your framework in a case (too basic).
This is to help keep your thoughts organized when problem solving.*

Fixed vs Variable Costs



Why it matters: It's helpful to know the difference when casing and calculating profitability because Fixed costs ~~decrease~~ *remain constant* while Variable costs *increase with each additional unit produced*

Common Fixed Costs

- PP&E (Plants, Property, Equipment)
- Land/Rent
- Initial Investment (factory, office, lab, etc.)
- R&D Expenditure
- Marketing (assuming it is a one-time expense)
- Overhead (salaries, HR, IT)
- Insurance

Common Variable Costs

- Hourly Labor (not to be confused with overhead)
- SG&A (Selling, General, & Administrative)
- COGS (Cost of Goods Sold)
- Logistics/Transport/Shipping/Packaging
- Customer Service/Maintenance Repairs
- Utilities
- Taxes/Fees

Sample Income Statement Calculations



Some Random Biz, Inc. Income Statement For Year End December 31, 2030

Sales Revenue	\$13,000,000	
Cost of Goods Sold (COGS) Expense	\$ 2,500,000	Variable Costs
Gross Margin/Profit	\$10,500,000	
Selling, General & Administrative Expense	\$ 5,200,000	Fixed Costs
Operating Earnings	\$ 5,300,000	Also referred to as EBITDA (Earnings before Interest, Taxes, Depreciation, Amortization)
Interest Expense	\$ 400,000	
Earnings before Income Tax	\$ 4,900,000	
Income Tax (~16.5%)	\$ 810,000	
Net Income	\$ 4,090,000	

$$\begin{aligned}\text{Gross Profit Margin} &= \$10,500,000 / \$13,000,000 = 80.8\% \\ \text{Operating Profit Margin} &= \$5,300,000 / \$13,000,000 = 40.8\% \\ \text{Net Profit Margin} &= \$4,090,000 / \$13,000,000 = 31.6\%\end{aligned}$$

Quick calculations that
you may need to perform

Pricing Strategy



What is the pricing objective?

Profits

Emphasis on maximizing revenues and minimize costs

Ex. Apple iPad sold at a luxury-goods price point, but manufactured at low cost factories in China.

Market Share

Emphasis on getting your product/service in as many hands as possible.

Ex. Amazon Kindles sold at below cost in order to provide a pipeline of customers for ebooks.

Brand Positioning

Emphasis on differentiation from competitors and potential cross selling

Ex. Burt's Bees brand cosmetics offered as a natural alternative to conventional cosmetics, with offerings in many different product lines

How should we price the product/service?

Competitive Analysis

- Are there similar products or substitutes on the market?
- How does our product compare?
- What will the competitive response be (price war, lawsuits, etc.)?
- Do we know the competitor's costs?

Cost Based Pricing

- After totaling up all of the costs, what markup should be added? This is typically a percent, but may be a flat \$ amount.

Price-Based Costing

- What is the customer willingness to pay?
- What is your product worth to customers?
- What are the margins like in this industry?

Four Ps & Cs of Marketing



*Note: You should ~~not~~ use this as your framework in a case (too basic).
This is to help keep your thoughts organized when problem solving.*

Product

- Function
- Packaging
- Services

Price

- Costs
- Discounts
- Margins

Place

- Distribution
- Logistics
- Channels

Promotion

- Advertising
- Sales
- Publicity

Customer

- What are the wants and needs of the customer?

Cost

- What is the willingness to pay?

Convenience

- Is the product simple enough for the customer to attain?

Communication

- What's the best way to reach potential customers?

*Note: Another "C" to consider could be "Competitors"

Sample Synergies



*Refresher: Synergies are the potential benefits achieved through the combining of companies.
These are essential to know for M&A (Mergers and Acquisitions) Casing.*

Cost

- Improved supply chain
- Improved economies of scale
- Improved supplier bargaining power
- Opportunities to merge and/or lower headcount of similar roles between two companies (layoffs)
- Better access to Research & Development or patents

Revenue

- Complimentary products and cross-selling
- Increased product mix
- Increased customer reach
- Access to new markets
- Reduction of competition

Financial/Balance Sheet

- Tax benefits
- Increased debt capacity
- Reduced cost of capital (more common when larger firms acquire smaller firms)
- Improvement to the bottom line

Dis-synergies

- Regulatory (ie, potential for anti-trust issues)
- Integration risk (ie, completely different backend computer systems)
- Company cultures don't align (don't undervalue this)
- Core Competencies (putting too much focus on the merger may cause management to lose sight of CC)
- Rebranding (costly, heavy operational lift, etc)

More Key Concepts



Barrier to Entry

Name of the game: Positioning

Serves a unique customer group and/or provides a unique service/product (ie, Customer brand loyalty)

versus

Barrier to Imitation

Name of the game: Capability

Uses skills that others don't have (possibly providing same service/product, but better) (ie, economies of scale that competitors can't compete with at the same price point)

Considerations when evaluating company and product relationships with customers

Segmentation

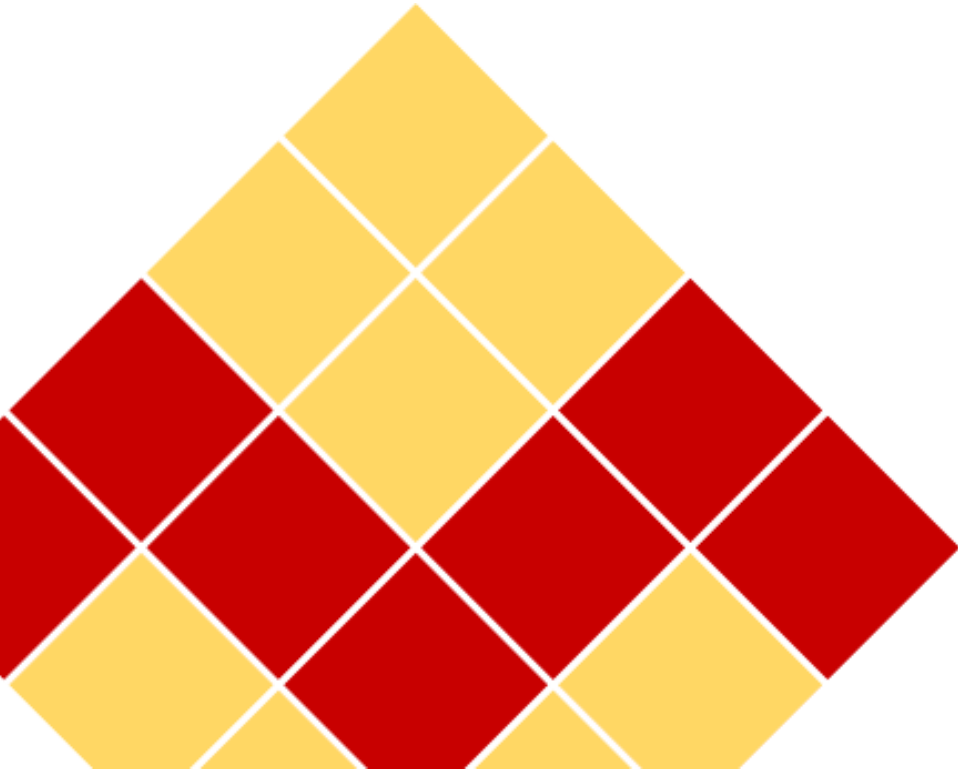
Are there meaningfully different groups in my customer base?
Segments must be large enough to matter, identifiable, predictable and accessible through marketing.

Targeting

Am I focusing on the right customer group(s)?
Consider the potential value to the company to target consumers based on the company's ability to meet the needs/desires in the product.

Positioning

How am I viewed by customers?
Goal is for consumers to think of the firm and firm's product distinct from its competition.



Industry Analysis

Airline
Automotive
Health Care
Oil & Gas
Pharmaceutical
Private Equity
Restaurant
Retail



Takeaways

- Consolidation in industry
- Low cost carriers and fare competition on competitive routes
- Online booking and check-in
- Expansion of domestic and international routes
- Capacity optimization (Load Factor)

Revenue

- Ticket sales to both business and economy passengers
- Baggage and priority boarding services (up selling)
- Cargo transportation
- Credit cards
- Value added services (food/drinks/wi /etc.)

Costs

- Equipment leases (FC)
- Fuel (VC)
- Labor (VC)
- Marketing (FC)
- Terminal fees (FC)
- Insurance/legal fees (FC)

(VC) = Variable Cost. (FC) = Fixed Cost.

Customer Segments

- Leisure travelers – (generally price sensitive)
- Business travelers – (very important to airlines due to margins and services purchased)
- Freight/Cargo Transportation

Channels

- Internet online travel sites, airline websites
- Airline sales team: call centers, online or kiosk
- Travel management companies (TMCs) serving corporate clients, travel agents

Risks

- Changes in fuel prices have a major impact on profitability
- Macro economic conditions greatly impact amount of leisure travelers
- An intensely competitive market with many foreign airlines partly government subsidized

Economic Drivers

- World price of crude oil
- Trips by US residents
- Optimization of capacity
- Per capita disposable income

Additional Learning

- Latest Airline News <https://skift.com/transport/airlines/>
- Additional News Source <https://www.aviationnewsonline.com/>

Automotive



Takeaways

- Automakers, Original Equipment Manufacturers (OEMs), Replacement Parts Production, Rubber Fabrication
- Highly capital and labor intensive
- Extensive competition due to foreign automakers
- Unions
- Technology innovations such as electric vehicle and autonomous driving

Revenue

- New car sales
- Auto part sales
- Services offered with vehicle purchase
- Financing
- Extended warranties
- Leasing

Costs

- Labor (VC)
- Raw materials (VC)
- Advertising (FC)
- Financing costs (FC)
- Recall costs (VC)

(VC) = Variable Cost,
(FC) = Fixed Cost

Customer Segments

- Personal car buyers
- Rental car companies
- Commercial purchasers
- Government purchasers

Channels

- Automobile dealers
- Secondary automobile market
- Automotive parts/services outlets

Risks

- Globalization of the industry enables more ease of foreign competition
- Extensive competition impact on already low margins
- Changes in trends/tastes

Economic Drivers

- GDP growth
- Income growth/disposable
- Price of crude
- Steel prices
- Consumer confidence index
- Yield on Treasury note

Additional Learning

- Latest Automotive News: <https://www.auto-news.com/>
- Brand News: <https://www.caranddriver.com/news/>

Health Care



Takeaways

- Affordable Care Act
- Highly fragmented: Top 50 organizations account for 15% revenues
- Employers pushing health care costs onto employees
- Aging Baby Boomer population driving increased revenues

Revenue

- Hospital care
- Physician and clinical services
- Prescription drugs
- Nursing
- Dental services
- Research, Equipment, Investment

Costs

- Labor (VC)
- Dependent on segment
- Significant costs related to new technology implementation
- Often inefficient organizational structures

(VC) = Variable Cost,
(FC) = Fixed Cost

Customer Segments

- Patients/consumers
- All generations and segments of the population require different products/services

Channels

- Hospitals
- Doctors' offices
- Nursing homes
- Outpatient surgery centers
- Pharmacies
- Medical equipment

Risks

- New legislation (Impact of Affordable Care Act still uncertain)
- Funding availability

Economic Drivers

- Regulation for health medical insurance
- Federal funding for Medicare and Medicaid
- Aging population
- Advances in medical care and technology

Additional Learning

- Latest News: <https://www.modernhealthcare.com/healthcare-news-this-week>
- US Healthcare Overview: [Deloitte Study Linked Here](#)

Oil & Gas



Takeaways

- Cost per gallon
- OPEC
- GDP growth
- Renewable energy
- Fracking

Revenue

- Crude oil
- Gasoline
- Natural gas
- Refining products such as lubricants
- Gas stations: gasoline, food market, car wash

Costs

- Exploration: seismic studies, drilling rigs and labor (VC)
- Production: refining (VC)
- Pipelines (FC)
- Gas station: oil, labor, insurance, licenses (VC/FC)

(VC) = Variable Cost,
(FC) = Fixed Cost

Customer Segments

- Petroleum refiners
- Electricity generators
- Domestic and commercial users
- Other industries

Channels

- Retail
- Wholesale
- Commercial

Risks

- Access to reserves
- Energy policies
- OPEC decisions
- Political pressures
- Substitutes/renewable energy

Economic Drivers

- Government regulation
- International oil production and demand

Additional Learning

- Latest News: <https://www.rigzone.com/news/>
- Industry Overview: [Link to Deloitte Notes](#)

Pharmaceutical



Takeaways

- Affordable Care Act
- Aging population
- Patents and generics
- Research & Development
- Insurance
- FDA
- Market penetration
- Contract vs in-house salesforce

Revenue

- Insurance payments
- The federal government provides certain grants to subsidize R&D
- Due to significant R&D lead times revenue is highly volatile
- Seasonality is high on certain products (vaccines and cold medicine) and low on other products (pain medicines)

Costs

- Research & Development (FC)
- Manufacturing cost (VC)
- Marketing costs (FC)
- Wages (VC)
- Liability insurance and legal fees (FC)

(VC) = Variable Cost,
(FC) = Fixed Cost

Customer Segments

- Medical patients
- Prescribing doctors
- Government insurance programs
- Health insurance companies

Channels

- Over the counter
- Prescription drugs: Hospitals, pharmacies
- Mail order pharmacy: Express Scripts, Walgreens

Risks

- Generic manufacturers pose a major competitive threat following patent expiration
- Tariff barriers are no longer a relevant form of protection
- Unfavorable government healthcare regulations and CMS rates

Economic Drivers

- Median age of population
- Research and development expenditure
- Insurance and regulatory landscape
- Patent protection

Additional Learning

- Latest News: <https://www.merckpharma.com/>
- Industry Overview: <https://marketrealist.com/2019/12/easier-way-understand-pharma-industry/>

Private Equity



Takeaways

- Value creation: selling underperforming assets, pricing optimization, diversifying customer base, operations efficiency
- Exit: strategic or IPO
- Synergies
- Stability of cash flows (IRR, NPV)
- Strong management team
- Targeted returns ~ 40%+
- Un-invested capital vs. invested

Revenue

- Components of the revenue charge:
 - Invested capital
 - Transaction and advisory fees
 - Carried interest
- Divestitures

Costs

- Wages and profit sharing (VC)
- Administrative costs (regulatory filings, record keeping, accounting and travel) (FC)
- Outsourcing of capital-intensive IT functions for algorithmic trading (VC)

(VC) = Variable Cost,
(FC) = Fixed Cost

Investors

- Pension funds (largest share)
- Private investors (e.g. High net worth individuals)
- Banks, sovereign funds and life insurance companies

Industry Averages

- Large firms focus on deals ~\$1B; middle market firms cover deals between \$15M - \$1B
- Average holding period before sale has increased from 3 years to 6 years in the past 15 years
- Borrowing can typically range from 65% to 85% of the purchase price of the firm

Risks

- New regulations, compliance costs, rising competition, decreasing industry fees
- Competition also exists with sovereign wealth funds and corporate buyers
- Changes in tax structure

Economic Drivers

- Investor uncertainty/Pension demand
- Access to credit/interest rates
- Regulations
- Exit opportunities
- GDP/Investment returns

Additional Learning

- Latest News <https://pitchbook.com/news/private-equity>
- Industry Overview [Bain Capital 2019 Trend Report](#)

Restaurant



Takeaways

- Newer “fast casual” restaurants threaten to steal market share from both Quick Service Restaurant (QSR) and full-service sit down restaurants
- Implementation of efficiency tracking technology to increase profitability

Revenue

- Food and beverages (alcohol is usually the highest margin product)
- Merchandise
- Catering
- Franchising fees
- Licensing (for the licensor)

Costs

- Labor (VC)
- Raw materials (VC)
- Perishable ingredients (VC)
- Real Estate (FC)
- Marketing (FC)
- Licensing (for the licensee) (FC)

(VC) = Variable Cost,
(FC) = Fixed Cost

Customer Segments

- Preferred/loyal customers
- By location or neighborhood
- Purchase decision

Channels

- Dine-in
- In-house Delivery
- Outsource Delivery
- Pick up

Risks

- Maintaining a safe environment for employees, contractors, and other visitors
- Wage and hour lawsuits
- Liquor liability
- Food allergies
- Foodborne illness/contamination

Economic Drivers

- GDP growth
- Consumer Confidence index
- Per capita disposable income

Additional Learning

- Latest News: <https://www.qsrmagazine.com/>
- Industry Overview: <https://marketrealist.com/2019/09/the-restaurant-industry-an-overview/>

Retail



Takeaways

- Same store sales
- Sales per square foot
- Inventory turnover
- Seasonality/recessions
- Trends

Revenue

- Product sales (brick & mortar, online)
- Slotting fee
- Advertising
- Affiliate marketing
- Cross-selling additional products and services
- Loyalty and rewards programs

Costs

- Cost of Goods Sold (VC)
- Transportation (VC)
- Wages (VC)
- Rent and utilities (FC)
- Marketing (FC)

(VC) = Variable Cost,
(FC) = Fixed Cost

Customer Segments

- The industry is consumer oriented and its markets are generally segmented into different income, demographics, buying habits, and age

Channels

- Department Stores/Big box retailers
- Discount retailers
- Demographic retailers
- Shopping malls

Risks

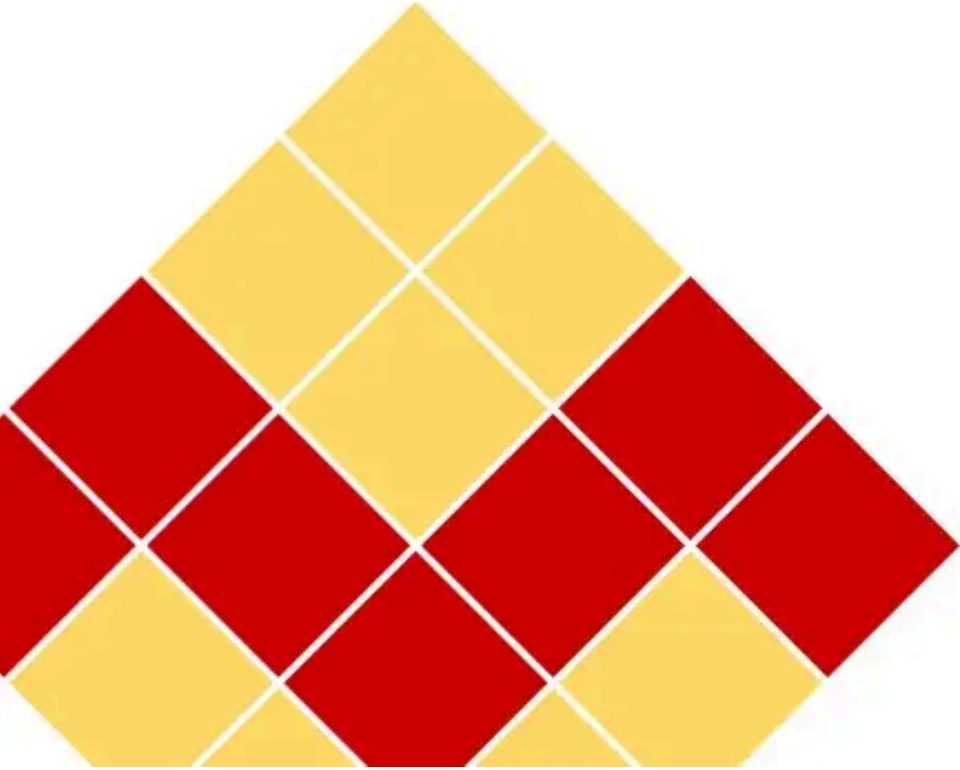
- Changes in disposable income
- Supply/Demand issues
- Overstock
- Few barriers to entry

Economic Drivers

- Consumer Confidence index
- Per capita disposable income
- International Export/Import
- Gross Domestic product/inflation
- Commodity prices (e.g. gold price for jewelry)

Additional Learning

- Latest News: <https://www.retaildive.com/>
- Industry Overview: [2021 Deloitte Analysis](#)



Key Math Formulas & Fast Math Tips

Key Math Formulas



Term	Formula
Rule of 72	$72/\text{Interest Rate} = \text{Number of years to double investment.}$ With a growth rate of 20% it will take $(72/20)$ 3.6 years to double the amount invested.
Breakeven	Ex. Marissa runs a Pizza shop. Fixed costs are \$5,000/mo. Variable cost per pizza is \$5 and they're sold for \$13. How many pizzas does she need to sell to break even? [Breakeven = Fixed Costs/(Price - Variable Cost) = $\$5000/(\$13-\$5) = 625$ Pizzas/Mo.] <i>Note: Every pizza after the 625th will generate a profit.</i>
Margin (Gross and Net)	Gross Margin = $(\text{Price} - \text{Cost})/\text{Price}$ Net Margin = $\text{Net Income}/\text{Sales Revenue}$
Payback Period vs. ROI - (Return on Investment)	Payback period = $\text{Investment}/\text{Profit per Year} = \text{No. of years until investment is paid o}$ $\text{ROI} = \text{Profit}/\text{Investment} = \text{Percentage of additional money a company generates relative to the size of its initial investment.}$ Ex: If \$10 grows to \$12, then ROI is 20%

Key Math Formulas



Term	Formula
CAGR (Compound Annual Growth Rate)	$\text{CAGR} = (\text{Ending Value} / \text{Beginning Value})^{(1/\text{Years})} - 1$ Ex: Your company generates \$144M in annual revenue. Two years ago, your company only generated \$100M. So, your CAGR was $(\\$144\text{M} / \\$100\text{M})^{(1/2)} - 1 = 20\%$. In other words, your company grew by 20% each year for two years.
Profit Margin	$\text{Profit Margin} = \text{Profit} / \text{Revenue}$ Ex: Last year, your company generated \$20,000 in revenue and had \$17,000 in COGS. Gross profit was \$3,000. Your company's gross profit margin is $\\$3,000 / \\$20,000 = 15\%$.
Market Share	$\text{Market Share} = \text{Company Revenue in the Market} / \text{Total Market Revenue}$ Ex: Your company sells shirts and generates \$100M in annual revenues. The market size of shirts is \$500M. Your company has a market share of $\\$100\text{M} / \\$500\text{M} = 20\%$.
Price Elasticity	$\text{Price Elasticity of Demand} = (\% \text{ Change in Quantity}) / (\% \text{ Change in Price})$ Measure of how much customer demand changes for a product given a change in the product's price (usually negative). Ex: Your company has decreased its product's price by 10%. As a result, the number of units sold has increased by 20%. The price elasticity of demand is $20\% / -10\% = -2$.

Net Present Value (NPV)



One Period

$$PV = \frac{FV_1}{(1+r)}$$

"t" Periods - Annuity

$$PV = \frac{FV_1}{(1+r)^t}$$

Perpetuity

$$PV = \frac{CF}{r}$$

Perpetuity (with growth)

$$PV = \frac{CF}{r-g}$$

Key

PV: Present Value
FV: Future Value
CF: Expected continuous cash flow
r: Discount Rate
g: Growth Rate
t: Number of periods (typically years)

Reminders

Net Present Value - compound annual return an investor expects to earn (or actually earned) over the life of an investment.

Positive or 0 NPV → Move forward with the project

Negative NPV → Decline the project

You will see this formula again and again. Memorize them. The information you are given in the case will dictate which formula to use.

Rocketblocks Fast Math Tips



Fraction	Decimal
1/2	.5
1/3	.333
1/4	.25
1/5	.2
1/6	.166
1/7	.14
1/8	.125
1/9	.111

Breaking math down
to the unit level

$$K * K = M$$

$$M * K = B$$

Ex. Multiply 45,000 by 60,000

$$= 45 * K * 6 * 10 * K$$

$$= 45 * 6 * 10 * K * K$$

$$= 270 * 10 * M$$

$$= 2,700 M$$

$$= 2.7 B$$

Simplify
Percentages

Ex. What is 34% of \$52M in top line revenues?

$$= (30\% * \$52M) + (4\% * \$52M)$$

$$= 3 * (10\% * \$52M) + 4 * (1\% * \$52M)$$

$$= 3 * (\$5.2M) + 4 * (\$.52M)$$

$$= \$15.6M + \$2.08M$$

$$= \$17.68M$$

Quick Math for
market size

If you know 5% of the market is X, you can multiply X by 20

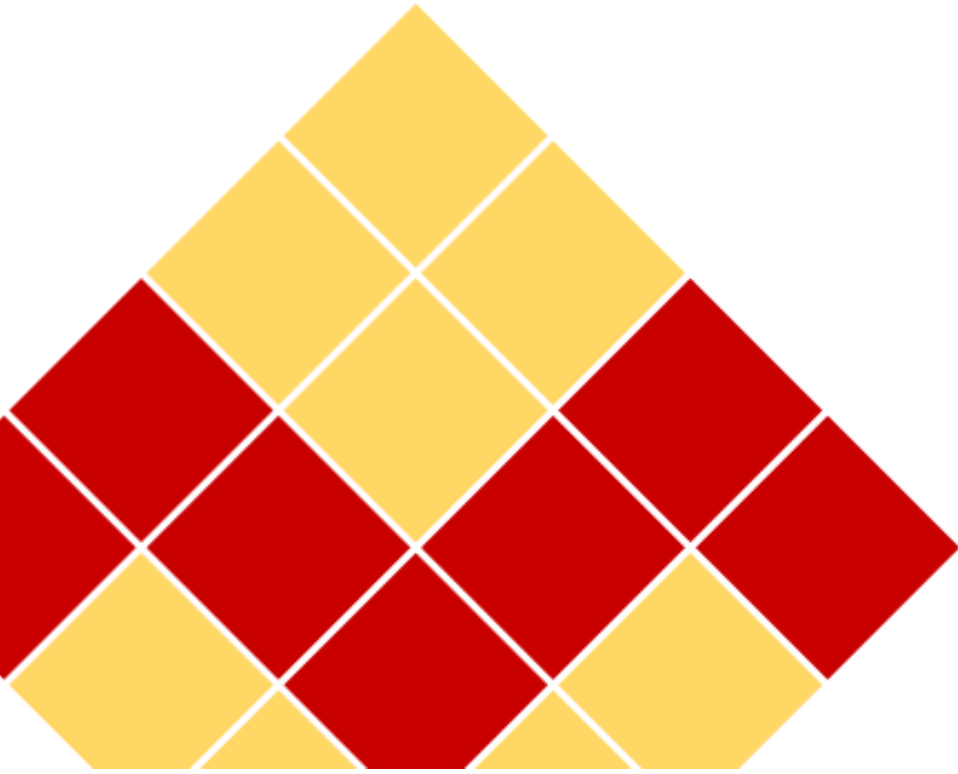
If you know 25% of the market is X, you can multiply X by 4

If you know 33% of the market is X, you can multiply X by 3

If you know 50% of the market is X, you can multiply X by 2

If you know 66% of the market is X, you can multiply X by 1.5

Note: Everyone does mental math a little differently, what's important is that you are fast and accurate without a calculator, decide for yourself what works best for you.



Market Sizing

Overview

Quick Facts

Practice Drills

Market Sizing is a Valuable Skill



Intent of Market Sizing Questions

You are sometimes required to do “market sizing” activities as part of a larger case interview. In some instances, market sizing could be used as a warm up question at the beginning of the interview. These questions test your thought process, your ability to break a complex problem down, to ask the right questions, and to make reasonable assumptions. This chapter includes some practice scenarios to help you hone your skills

What the interviewer is looking for

You are expected to approach an abstract and difficult question by breaking it into smaller chunks that are more manageable. Interviewers will watch your assumptions to see if they seem reasonable, and if you can justify your choices. A skilled candidate is organized with their numbers, and is comfortable with going back and revising assumptions as needed. The objective is not to come to a “correct” answer, but to make a series of common-sense assumptions that help you build to a reasonably accurate outcome. A strong candidate will maintain confidence and composure in the face of ambiguity.

Market Sizing Quick Facts



Location	Population*
World	7.5 B
US	320 M
Europe	750 M
China	1.4 B
India	1.4 B
Mexico	130 M
Los Angeles	4 M
New York City	8 M
Chicago	3 M

Metric	Value*
US Households	100M
Ppl per Household	3.2
Avg US Life Expectancy**	80 yrs
High Income**	30%
Medium Income**	50%
Low Income**	20%
% with Internet Access	90%
Corp Discount Rate	10%

*Largest population in 2001
**Based on estimates from the World Bank

Market Sizing Examples



Market Sizing Practice Drills

These are ve drills to be done with a partner.

They will help you to practice making assumptions about business scenarios that don't have an answer that can be readily fact-checked.

- Case 1: How many Americans y domestically each day?
- How many dry cleaners are located in Philadelphia?
- Please estimate the number of passenger car tires sold each year in the United States.
- How many cigarettes are smoked in a year in the United States?
- You are going to visit a client who wants to sell golf balls in Japan. Having had no time for background research, you sit on the plane wondering about the size of the market for golf balls in Japan. How big is this market?

Market Sizing Case 1: Flying High



Prompt

How many Americans fly domestically each day?

Interviewer Guidance

Provide the following information if asked by the candidate:

Key assumptions

- Can ignore which day of the week/holidays
- Can ignore people who are flying through other means (helicopters, hot air balloons, sky divers, etc.)
- Passengers going through connecting flights, flying more than once a day, etc. can be considered unique passengers

Cargo

- Assume 6,000 flights per day
- An average flight has 10 crew members

Commercial

- Assume 3,000 domestic flights per day
- An average flight has 250 seats
- Average flight occupancy is 80%
- Average staff consists of 2 pilots and 8 flight attendants

Market Sizing Case 1: Flying High



Calculations

Commercial

- Total commercial passengers = (Flights per day) x (Number of seats) x (Occupancy)
= 3,000 flights x 250 seats x 80% = 3000 x 250 x 4 / 5 = 3000 x 50 x 4
= 3000 x 200 = 600,000 passengers
- Total commercial crew members = (Flights per day) x (Crew members)
= 3,000 flights x 10 crew = 30,000 crew members
- Total commercial fliers = 600K + 30K = 630K

Cargo

- Total cargo crew members = (Flights per day) x (Crew size)
= 6,000 flights x 10 crewmates = 60,000 crew members = 60K

Total

- Total Americans flying domestically = Commercial fliers + Cargo crew members = 630k + 60K =

Market Sizing Dry Cleaners in Philadelphia



Prompt

How many dry cleaners are located in Philadelphia?

Interviewer Guidance

After the candidate has written out their framework, ask them for their approach. After hearing their approach, ask the candidate if there is any other way to size the market (they should be able to list 2 total: top down and bottom up). Then proceed to have them size the market using the “top down” method. Make sure they drive the case. If they ask for any other information other than the population of Philly, respond with, “I don’t know, what do you think?”

Provide the following information if asked by the candidate:

The population of Philadelphia is 2M

Market Sizing Dry Cleaners in Philadelphia



Calculations

Approach: Number of dry cleaners = number of items dry cleaned per week/capacity of one dry cleaner per week

Assumptions for Demand: Population is uniformly distributed from 0-80 years old.

- 0-20 years: 0.5 MM
- 21-40 years: 0.5 MM
- 41-60 years: 0.5 MM
- 61-81 years: 0.5 MM

Number of clothing items dry cleaned per week in Philadelphia:

- 0-20 years: No one dry cleans
- 21-40 years: $0.5 \text{ MM people} * (30\% \text{ use dry cleaning}) * (5 \text{ articles of clothing/week}) = 750\text{K articles/week}$
- 41-60 years: $0.5 \text{ MM people} * (40\% \text{ use dry cleaning}) * (5 \text{ articles of clothing/week}) = 1\text{MM articles/week}$
- 61-81 years: $0.5 \text{ MM people} * (10\% \text{ use dry cleaning}) * (3 \text{ articles of clothing/week}) = 150\text{K articles/week}$
- Total Demand: 1.9MM articles/week

Market Sizing Dry Cleaners in Philadelphia



Calculations

Assumptions for Supply:

- The average dry cleaner has 10 washers and 10 dryers, each with a capacity of 30 articles
- 1 wash cycle = 1 hour. Dry cycle = 1 hour. Transporting clothes is instant.
- Machines are utilized 60% of the time. Dry cleaners are open 12 hours a day. 5 day weeks

Capacity of a dry cleaner per week in Philadelphia:

10 sets of machines x 30 articles/hour x 60% utilization x 12 hr/day x 5 days/week
= 10.8K articles/week

Total number of Dry Cleaners in Philadelphia

= Total Demand/Week ÷ Total Capacity per Cleaner/Week
= 1.9 MM / 10.8K
= ~175 Dry Cleaners in Philadelphia (real world numbers may differ from year to year and this approximation is not meant to be precise or fact-checkable).

Market Sizing Car Tires in the United States



Prompt

Please estimate the number of passenger car tires sold each year in the United States.

Interviewer Guidance

Passenger car tires are defined as tires used on regular cars (no motorcycles, semi-trucks, etc.). Push back on any assumptions that fall outside the scope of tires meant for a standard car. If candidate entertains any uses for tires outside of typical car usage, ask them to estimate the number (with logic) and then to not include them into the final calculations.

Provide the following information only if asked by the candidate:

Market Size

- 10M new cars sold each year
- 60M cars on the road
- Cars have a 7 year life-span
- Tires last 45k miles
- The average driver drives 15k miles/year

Key Assumptions

- People purchase new tires immediately when necessary
- When people replace tires, they replace all 4 at the same time
- No growth in “installed cars”

Other Considerations

- Some cars might come with a spare tire – this will affect calculations

Market Sizing Car Tires in the United States



Calculations

This is one way to do a “bottom-up” approach. There are several different ways to answer this question provided that the numbers and logic make sense.

Existing Cars

- Tires last for 45k miles and average car usage is 15k per year. Tire replacement frequency = $45K/15K = 3$ years
- Number of cars needing tire replacement every year = Number of cars on the road / tire replacement frequency
= $60M \text{ cars} / 3 \text{ years} = 20M \text{ cars/year}$
- Number of tires replaced every year for existing cars = $20M * 4 \text{ tires} = 80M$

New Cars

- 4 new tires: $10M * 4 = 40M$ tires (if no spare tires are considered)
- 4 new tires + spare: $10M * 5 = 50M$ tires (if every new car has a spare)

Total tires sold each year

- $80M + 40M = 120M$ (if no spare tires are considered)
- $80M + 50M = 130M$ (if every new car has a spare)

Market Sizing What a Drag



Prompt

How many cigarettes are smoked in a year in the United States?

Interviewer Guidance

Provide if asked: There are 320 million people in the United States

Aside from the size of U.S. population, allow the candidate to use any numbers that he/she chooses, provided that the sound logic is used. Allow the candidate to approach the problem independently before suggesting that they break this down by 4 distinct age ranges. If the candidate struggles with calculations – suggest that they use simpler numbers.

Market Sizing What a Drag



Calculations

This is a top-down approach. There are several different ways to answer this question, provided that the numbers and logic make sense.

Age Groups	Total people in the age range	% Smokers	Smokers in age range
0-20	80M	10%	8M
21-40	80M	25%	20M
41-60	80M	20%	16M
61+	80M	15%	12M

- Total number of smokers in the U.S. = $8M + 20M + 16M + 12M = 56M$
- Assuming that a smoker smokes 5 cigarettes per day on average every day of the year,
- Number of cigarettes smoked in the U.S per year = $56M \times 5 \times 365 = 560M / 2 \times 365 = 280M \times 365 \approx 300M \times 350 = 105B$ cigarettes per year
- Bonus: candidate considers alternatives/substitutes to cigarettes (ex. E-cigs & Cigars, etc)

Market Sizing Japanese Golf Ball Market



Prompt

You are going to visit a client who wants to sell golf balls in Japan. Having had no time for background research, you sit on the plane wondering about the size of the market for golf balls in Japan. How big is this market?

Interviewer Guidance

Provide if asked: The population of Japan is 120M

After the candidate has written out their framework, ask them for their approach. After hearing their approach, ask the candidate if there is any other way to size the market (they should be able to list 2 total– top down and bottom up). Then proceed to have them size the market using the “top down” method. Make sure they drive the case. If they ask for any other information other than the population of Japan, respond with, “I don’t know, what do you think?”

Market Sizing Japanese Golf Ball Market

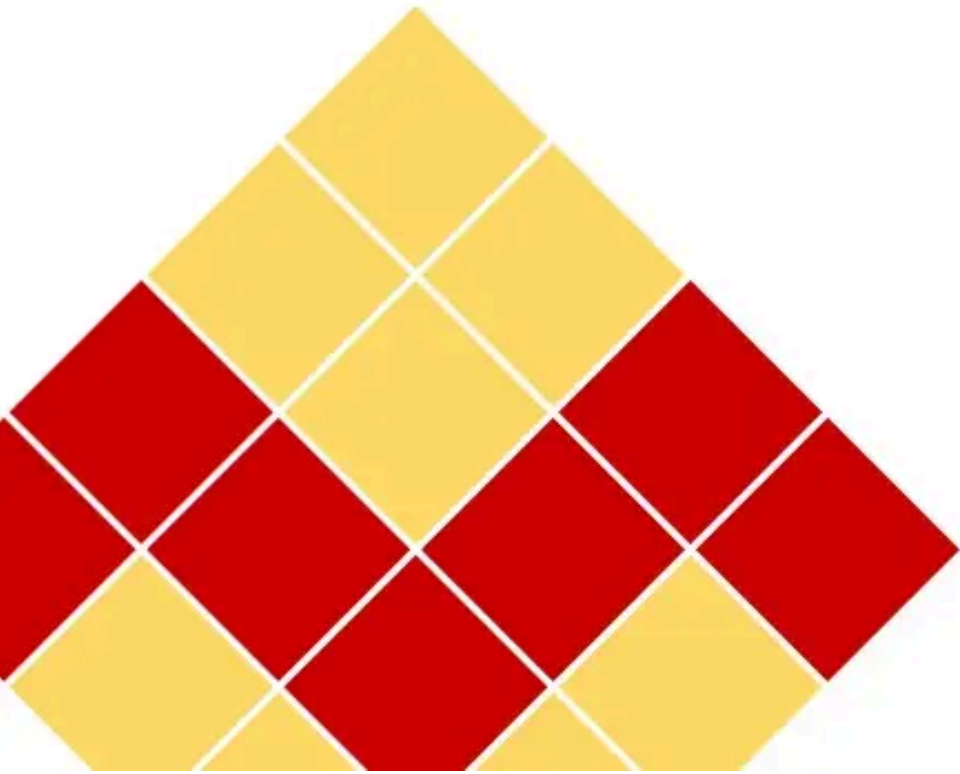


Calculations

This is a top-down approach. There are several different ways to answer this question, provided that the numbers and logic make sense. Columns B, C, E and F contain assumed numbers.

A	B	C	D = BxC	E	F	G = DxExF
Age Groups	People in the age range	% Golfers	Golfers in age range	Play Frequency (times/ year)	No. of balls used each time	No. of golf balls used/year
0-20	30M	5%	1.5M	3	4	18M
21-40	30M	10%	3M	6	3	54M
41-60	30M	15%	4.5M	10	2	90M
61+	30M	10%	3M	15	2	90M

- Size of Golf ball market in Japan = 18M + 54M + 108M + 90M = 252M golf balls per year



Behaviorals

Behavioral Interview Best Practices
Answer Structuring
Sample Behavioral Questions

Behavioral Interview Best Practices



Do

- Be on time (few minutes early is best)
- Appear professional: they're trying to imagine you with a potential client
- Give succinct and memorable responses in the STAR format
- Establish common ground (geography, family, interests, sports, etc.)
- Ask the interviewer friendly questions
- Be confident in your answers
- Make eye contact with the interviewer
- Talk about something other than your qualifications (you're interesting, so talk about it)
- Have an inventory of multiple stories in the STAR format for different questions in case you get "pressure-tested"

Don't

- Show up late
- Complain about anything
- Make up elaborate questions you know the answer to
- Repeat company slogans, mottos, tag-lines, etc.
- Speak poorly about other companies/ firms
- Use generic answers to "why consulting?", "why this firm?", make it memorable

Answer Structuring



Behaviorals are often the first impression you have with your interviewer. How you perform here can greatly affect the tone for the remainder of your interview. Be personable, genuine, don't ramble, make eye contact and use the STAR format. *Do not neglect these. This list is just the tip of the iceberg.*

Some questions to ask yourself when preparing Behavioral answers:

- Is it succinct or am I rambling?
- Is it memorable (interviewers may be interviewing upwards of 10-15 candidates in a given day)?
- Is the outcome positive?
- Does it relate to the role of consulting?
- If they ask me to give another example do I have a strong back up story?
- Is it structured in the STAR format?

Situation

Think of a situation in which you were involved that had a positive outcome.

Task

Describe the tasks involved in the situation.

Action

Specify what actions you took in the situation to complete the tasks and achieve your results.

Results

What results followed due to your actions?

Additional info:

<https://www.themuse.com/advice/star-interview-method>

Sample Behavioral Questions



Common Questions

- Tell me about yourself.
Best practice: Use a narrative that is easy to follow and highlight one overarching theme you want the interviewer to think about when they think of you. Be succinct so that the interviewer remains engaged.
- Why consulting?
Best practice: Think of how you can translate your previous skills and experiences into a career in consulting. Show rather than tell. Instead of saying that you love problem solving, bring up specific examples of how your problem solving skills have helped organizations in the past.
- Why this firm?
Best practice: This is another opportunity to show how your skills can specifically help the firm interviewing you. Don't waste the answer on generic praises of the company. Instead focus on what you bring to the company and how you align with their values/culture. Bring up interesting facts that you learned during your networking, which one can't find on the firm's website.
- What service line are you interested in joining?
Best practice: Provide 3 reasons why you would be the best fit for that service line.

Sample Behavioral Questions



Common Questions

- ➔ What are your top 3 strengths?
Best practice: Mention strengths which are relevant to the job and provide specific succinct examples of each strength. To be safe, keep an inventory of 5 strengths in case you get pressure tested.
- ➔ What are your top 3 weaknesses?
Best practice: Never say you have no weaknesses, don't bring up a weakness that is irrelevant to the job and don't disguise a strength as a weakness. For example, "I'm a perfectionist" is a bad example. Bring up weaknesses that show up in specific situations, mention how you are actively working on them.
- ➔ Tell me about a time you had to deal with a difficult person.
Best practice: This question tests your soft skills and may be tweaked to include "difficult colleague", "difficult boss", "difficult client", or "difficult subordinate". Have stories ready for each of these. Mention a specific technique you used, why that worked and what you learned from that experience.
- ➔ Tell me about a time you received difficult feedback.
Best practice: This question could be tweaked to include "feedback from your boss" or "feedback from a client". Mention why the feedback was difficult, how you addressed the feedback and an example of how you were able to put it into practice.

Sample Behavioral Questions



Common Questions

- ➔ How will you manage and balance the career of a consultant? How do you manage stressful situations?
Best practice: Think of various stressful situations that could arise in a consultant's job and provide an example of how you have managed a similar situation previously. Mention techniques/tools you generally use to manage stress.
- ➔ Tell me about your part in a team where you did something complex.
Best practice: This is specifically about what you did in your team. Mention why it was a complex endeavour - did it involve getting buy-in from many stakeholders? Did it require you to dive deep to understand the root cause?
- ➔ Talk about an experience where you helped empower others.
Best practice: Think of times you removed a roadblock for your team, trained employees, created a safe space to voice concerns and ask questions, etc. If you have used up your work stories, this may be a good opportunity to bring in examples from your volunteering experience.
- ➔ Give me an example of a time you influenced or persuaded a group.
Best practice: Good examples may include stories of how you influenced a team to take a new approach rather than a traditional approach.

Sample Behavioral Questions



Common Questions

- Have you ever failed at anything?
Best practice: The answer is always yes. Have at least 3 and ideally 5 failure stories ready for a pressure test. Mention what you learned from the experience.
- What accomplishments have given you the greatest satisfaction?
Best practice: This can also be asked as “What achievements are you most proud of?”. Examples could include, but not limited to leading a substantial process improvement with a high long-term impact on people, money, time, etc.
- Speak about your leadership experience.
Best practice: Start with a thesis statement of what leadership means to you and demonstrate those qualities with a specific example.
- Talk about some of your interests.
Best practice: Talk about a couple of interests you have cultivated over a long period of time and how they have made you a better person/employee. Bring up examples which will make you memorable.

Sample Behavioral Questions



Common Questions

- ➔ Why should I hire you?
Notes: This question may be asked if you don't touch on your skills enough in the earlier parts of the interview. Use this opportunity to highlight the skills that make you a great fit for the company and use a succinct concrete example to show your skills in action.
- ➔ Tell me about a time your productivity was affected because of someone's mood.
Notes: This question was asked at an A.T. Kearney interview. Ensure that your example does not include a major loss in productivity. A good example may reflect empathy and shows that you ensured no further loss of productivity when similar situations occurred.
- ➔ Tell me about a time you learned something you were curious about.
Notes: This question was asked at an A.T. Kearney interview since it is related to one of their values - curiosity. A good example could be a time you performed extensive research of a new industry to serve your client better.
- ➔ Tell me about something that is not on your resume.
Notes: This is an opportunity to talk about what makes you unique as a candidate. Interviewers are often looking for details that differentiate you from other candidates both personally and professionally.

Sample Behavioral Questions



Following is a list of additional behavioral questions that you should be prepared for:

Tell me about a time when...

- | | |
|---|---|
| <ul style="list-style-type: none">□ You had to deal with an ambiguous situation.□ You did not have sufficient data. What did you do?□ Your team disagreed with your idea.□ Your working style differed from that of a team member.□ You exceeded your team's goals.□ You burned bridges.□ You came up with a creative solution to a complex problem.□ You undertook a complex project. Why was it complex?□ You had a difficult conversation with a client.□ You analyzed mass data to make a consequential decision. How did you know you were looking at the right data? How did you approach your analysis? | <ul style="list-style-type: none">□ You felt your voice wasn't heard.□ You initiated a project.□ You took on a project which was beyond your job responsibilities.□ You led a team.□ You had a conflict with your manager.□ You gave someone feedback.□ You received good feedback.□ You received constructive criticism.□ You course-corrected when your project went off-track.□ You made a positive impact on a coworker. |
|---|---|

Sample Behavioral Questions



Tell me about a time when...

- What is your ideal role for the summer?
- What transferable skill sets from your background will be helpful for consulting?
- What is the proudest moment of your career?
- What is something that concerns you about consulting?
- What has been the biggest challenge you have ever encountered in your professional career?
- What would a successful project look like for you?
- What would your classmates/supervisor/friends say you need to work on/develop?
- How do you build rapport with a new team? Tell me about a time your approach has failed.
- How did you transition from one role to another?
- Explain your favorite bullet point from your resume
- What are you doing during your MBA to become a better leader?
- How do you manage a client that disagrees with or ultimately chooses not to move forward with your recommendation?
- If you ran into your past client today, what would they have to say about working with you?



Additional Resources

Additional Resources



Books

- [Case in Point: Complete Case Interview Preparation - Marc Cosentino](#)
- [Hacking the Case Interview - Taylor Ward](#)
- [Case interview Secrets - Victor Cheng](#)
- [Cracking Case Interviews - MaSerrano](#)

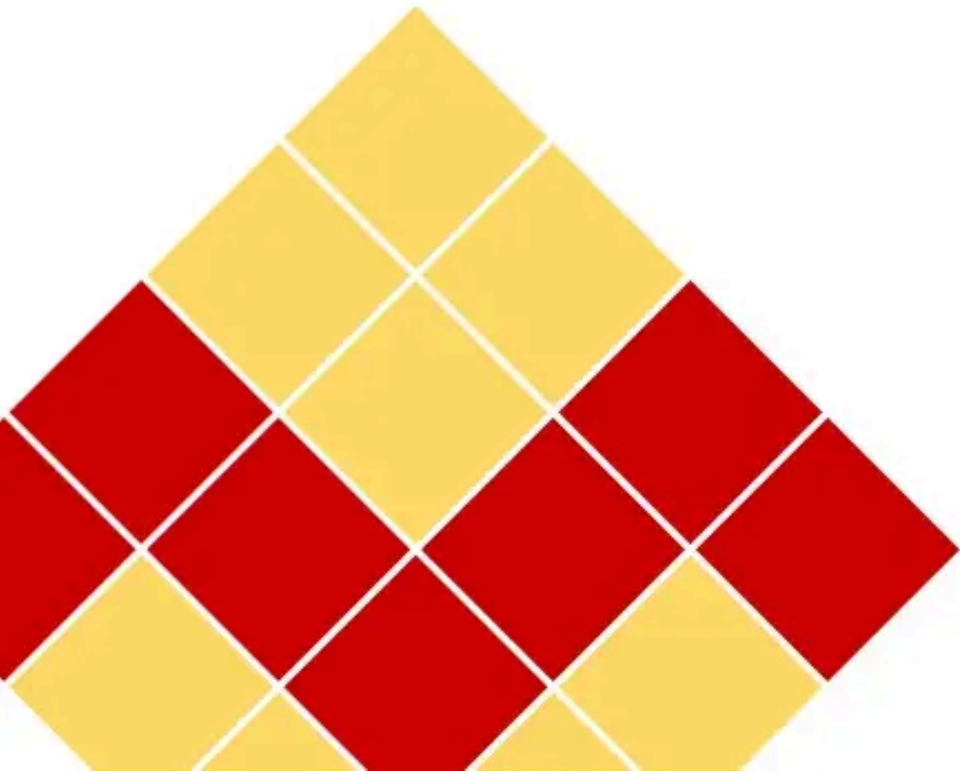
*Really no need to buy all four. Pick one that speaks to you and you'll be set. Free PDFs are sometimes available.

Links

- [26 Case Interview Formulas you should know](#)
- [Victor Cheng - Interview Prep](#)
- [Various frameworks](#)
- [More behavioral practice](#)

Videos

- [Yale SOM - Airline Credit Card Case](#)
- [Yale SOM - Self Checkout Case](#) (go down a rabbit hole, these are great)
- [Victor Cheng Case Interview Workshop \(1 of 12\)](#)
- [BCG Style Case Interview](#)
- [MBB Iced Coffee Case Interview](#)
- [Interview Tips](#)



Marshall Cases

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You've Got Mail!



Behavioral

Briefly walk me through your resume. (candidate should have a 1-2 minute answer)

Prompt

It is 2004, and a major greeting card company is considering a proposal from Yahoo to advertise its e-commerce product, a greeting card that is sent to the recipient as an e-mail attachment. Your client will get an exclusive position on the website's front page that will help drive traffic to its greeting card site. The Yahoo exclusivity costs \$4.5 million per year for the next two years. Should your client do it?

DESCRIPTION & Interviewer Notes

This is a classic profitability case.

The candidate should identify revenues and costs in the framework, but also not forget about other factors.

ADDITIONAL INFORMATION (IF ASKED)

DO NOT mention cannibalization unless candidate brings it up first
There is no right or wrong answer to this case. The candidate should be able to justify their recommendation.

(continued on next page)



Additional Information

Provide the following additional information only if asked by the candidate:

- The client has two products: traditional paper cards and electronic cards
- If they ask any questions about revenue, cost, profit, provide **Exhibit #1**.
- 50 billion visits to Yahoo's site (per year)
- Click-through rate from Yahoo to greeting card site = 1:1000
- 5% sell rate on greeting card site (ie: .05 cards sold per visitor)
- Cannibalization would be 25% of traditional greeting card business (number of visitors who would have bought traditional cards, but are buying ecards instead)



Exhibit: 1

Facts provided by client	Traditional Card	Electronic Card
Retail Price	\$4 per card	\$4 per card
All-inclusive costs (design, production, overhead, etc.)	75% of revenue	50% of revenue
Current Annual Revenue	\$10M	\$10M



Calculations

Customer Base from Yahoo:

- Total visits to Yahoo's site per year * Click through rate to greeting card site – $1:1000$ * 5% sell rate
- Result: $50B * (1/1000) * .05 = 2.5$ million sales via Yahoo (candidate calculation)

Cannibalization:

- 25% of traditional greeting card business = 625,000 people

Profit Margins:

- E-cards: Price = \$4, at 50% margin, profit = \$2 per card
- Traditional cards: Price = \$4, at 25% margin, profit = \$1 per card

Net Profit:

- Extra profit from electronic greeting cards = $2,500,000 \times \$2 = \$5,000,000$
- Loss from Cannibalization = \$625,000
- Less \$4.5 million exclusivity cost for Yahoo
- Total Net Loss from deal = \$125K in profit per year



Conclusion

If candidate suggests to accept the proposal...

Recommendation:

They should acquire because even if they lose \$125K per year, they gain on other fronts such as:

- Branding
- Possibility to introduce and cross sell products (introduce more products to customer through site)
- Prevent competitors from partnering with yahoo and stealing market share
- Increased e-commerce resulting in increased in-store foot traffic

Risks:

- Cannibalization is larger than expected
- Click traffic is smaller than expected
- Anything else that attacks the assumptions made

Next Steps:

- Talk with Yahoo
- Pilot test with other smaller websites
- Optimize landing page for this new venture
- Analyze demographic that will be coming to website and optimize accordingly

If candidate suggests to reject the proposal...

Recommendation:

They should not accept because they are losing \$125K per year. (No further justification is needed).

Risks:

- Competitor partners with Yahoo and steals market share
- Company brand could deteriorate
- Missing out on profits if any assumptions made are wrong

Next Steps:

- Find other small companies to partner with
- Find out what competitors are doing
- Renegotiate with Yahoo to see if they can get a better deal



Behavioral	Tell me about a time you had to manage up. (candidate should answer in the STAR format)
Prompt	A local hospital has been hurting. The 600 bed institution has seen consistently high patient volume growth, but is under operating margin pressure from the local government. Officials are requiring the hospital to reduce its budget by \$100 million over the next three years while maintaining its current services. What do you recommend about the budget, and what implementation challenges do you see in your recommendations?
DESCRIPTION & Interviewer Notes	ADDITIONAL INFORMATION (IF ASKED)
This case is fairly simple, and has no math, and relies on brainstorming. Encourage Candidate to think about many areas for potential improvements.	• The hospital provides a range of services - from simple examinations to complex high-end procedures (ankle sprains to brain surgery). There is growing demand for higher-margin services like emergency care. • Capacity: Highly specialized doctors are spending time on routine procedures, administrative tasks, and areas outside their medical specialties. • Major Variable Costs: Personnel and Supplies. Supplies usage and waste of medical supplies has been high and continuing to increase. • Major Fixed Costs: Utilities, SG&A, sales and marketing, and capital expenditures (equipment upgrades)



Analysis

Topics that a strong candidate ought to address during their brainstorming:

Capacity Issues

- Hire (lower salaried) generalists to deal with routine, low margin procedures.
- Re-align doctors to have them stay within their own practice to ensure they are working on what they trained for.

Cost Reduction

- Re-aligning medical staff towards more generalists and fewer specialist will reduce costs of paying specialists to perform routine procedures
- Negotiate with suppliers to reduce costs, consolidate suppliers to leverage scale economies and renegotiate existing contracts for lower costs
- Consider lower quality equipment for non-essentials like waiting room seating and items not directly related to patient care



Conclusion

Recommendation:

- Improve efficiency: Change talent pool to reflect service needs: hire generalists, re-align doctors, re-shift work focus
- Capacity: Put beds closer together, encourage home care to reduce turnover
- Costs: Reduce volume (work with nurses & doctors) and price of supplies (work with suppliers)
- Cut unnecessary equipment costs, reduce quality

Risks:

- Economic: Economic downturn may drive patients to forego some basic medical procedures
- Legal: Ramifications with local government?
- Internal: Unions / bureaucracy that make change difficult?
- Competitive response: How will other hospitals react?
- Community: PR issues with cutting quality in some areas

Next Steps:

- Patient surveys
- Workflow analysis to start realigning doctors
- Supplier analysis to consolidate and renegotiate contracts

Biometric Bank Cards



Behavioral

Tell me about a time you had to deal with a difficult person in a professional setting.

Prompt

Your client manufactures and sells biometric ID cards to banks at a price of \$1/unprogrammed card. They are the leading firm in this \$10M industry with 60% market share. There is only one other competitor. Federal regulations will decrease the industry size by 10% next year. Our client wants to maintain its profits to fund other projects. What options does the client have, and are any of these options appealing?

DESCRIPTION & Interviewer Notes

The candidate's framework should highlight revenues and costs, but should also consider competition, industry, and other external factors.

A strong candidate will consider competitive response. If this is not brought up, DO NOT provide candidate with this information.

ADDITIONAL INFORMATION (IF ASKED)

- Client's manufacturing cost is \$0.70 per card.
- If candidate asks any questions about the competition, say there is substantial evidence that the competitor uses outdated manufacturing processes, and their total cost is \$0.90 per card.



Analysis

Candidate should calculate current profitability

- Quantity sold = 60% market share x \$10M market size = 6M units sold
- Total Revenue = Quantity * \$1/card = \$6M
- Total Cost = Q * \$0.70/card = \$4.2M
- Profit = TR - TC = \$1.8M

Candidate should determine who would win a price war...

- Client cost of \$.70/card is lower than competitor cost of \$0.90/card, so client should win the war if they change their price to \$.90/card. Rational competitor should not price below cost.

...and whether client will maintain current profits after price war.

- The price war will end at P = \$.90/card. (Competitor would be selling at cost, they might leave the market)
- Q = 90M (assuming client has 100% of market now, but market has shrunk by 10% due to federal regulation)
- Total Rev = Q x \$.90/card = \$8.1M Total Cost = Q x \$0.70/card = \$6.3M
- Profit = \$1.8M → Profits are maintained → Go ahead with price war.

BONUS: Give only if the candidate asks about reasons the competitor may act irrationally

- The competitor has another division. Does this change anything?
- The competitor's other division comprises 75% of its revenues.
- This division manufactures a specialty product with additional values that are unknown at this time.
- This division is highly dependent on bank relationships built through the biometric ID card business.



Conclusion

Recommendation:

- There is no right or wrong answer. There is a good chance that your client could win a price war, but there is obvious potential for disaster. The candidate should take a position on this issue and defend it.

If candidate does NOT ask about competitor acting irrationally and selling at a loss:

- Client should engage in a pricing war to steal market share from the competitor. Even with the decline in market size, the client will maintain current dollar profits so long as the competitor leaves the market.

If candidate does ask about the competitor acting irrationally and selling at a loss:

- The competitor is more likely to sell biometric cards below cost if other profitable business divisions depend on it.
- Price war may be unwise due to brand perceptions.
- Client should pursue other means of increasing profits and revenues, such as diversifying into other products, selling to other customers, etc.

Risks:

- Competitor may act irrationally and continue in market despite running a loss.
- Capacity constraints: Manufacturing demands are increasing by significant amount (50%), so plant expansion may be necessary.
- Federal regulation may be a sign of future trends and lower industry profitability in future years.

Next Steps:

- Discuss pricing strategies with marketing and/or sales dept.
- Estimate costs associated with the increase in production capacity (if needed)



Behavioral

Tell me something about yourself that is not on your resume.

Prompt

Our client is a budget airline considering entering a new market for business class flights. They are considering running an all business-class service within Europe to increase the company's revenue. They want your advice on whether this is a good idea, and if so, how they should do it.

DESCRIPTION & Interviewer Notes

Math should be organized, quick, and easy to comprehend. The difficult part about this case are staying organized and staying composed under pressure.

Candidate will frequently be pushed until they run out of ideas. Make sure recommendation is succinct (under 1:30) and logical. Make sure Risks and Next Steps are present.

ADDITIONAL INFORMATION (IF ASKED)

Product

- Current flights are cheap, short haul flights from the UK to various European destinations
- Company does not offer business class flights at the moment
- The going rate for similar type business seats are \$1k/customer
- Various upgrades such as speedy boarding and greater legroom are available for purchase
- Brand perception is that this airline is extremely cheap, but also has very low quality service

Revenue

- Annual revenue is \$500M

Entry Method

- Company does not want to acquire a competitor
- Partnerships are possible
- Investing in new planes and using new/existing capabilities



Analysis

Do not move on to next section unless candidate has considered all of the following: Competitors, Method of Entry, Company, and Product. Ask the candidate “What else do you want to consider?” before moving on to Question 1.

Question 1: “Our first destination will be Vienna. How much would we have to charge to break even with 25 seats filled?”
(Ask the candidates to list as many cost items as possible. Keep pushing until they run out of ideas, and when they do so, verbally provide them with the following list of costs but allow them to do the calculations):

- Fuel: 6,000 gallons @ \$3.00/gallon = \$18,000
- Aircraft lease: \$2,500/flight
- Aircraft Servicing: \$600 / flight
- Aircrew Costs: 2 pilots @ \$700 & 3 crew @ \$400 = \$2,600
- Other Overhead: \$1,500 / flight
- Airport Charges (landing, passenger use of facilities): \$900 / flight
- Catering Costs: \$1,400 / flight

Answer:

Breakeven Revenue = \$27,500 (which is the total of all costs provided)

- \$27,500 in costs / 25 passengers = \$1,100 / passenger



Analysis

Question 2: "What challenges do you think the client will face?"

- The breakeven price is higher than similar business-class seats.
- Issues exist around the brand of a low cost airline, meaning the rebranding might be necessary
- Landing slots at hub airports are critical to business travel, and will be very hard to acquire
- They do not have the full set of capabilities required to deliver a business class service, so choice of partners is critical

Question 3: "What are some other ways the company can increase their revenue?"

- Explore complimentary travel services (partnerships with rental car companies, hotels, entertainment)
- Launch a rewards program that can personalize offerings to frequent flyers
- Focus on customer service initiatives that can improve the current experience (cabin improvements, customer service in the airport and when addressing customer concerns)

Once the candidate brings up service improvements, show **Exhibit 1**.

Question 4: "Which of the 2 options the airline should choose to invest in?"

Analysis:

- App: $(\$500\text{M annual revenue} * 1\% \text{ increase}) + (\$505\text{M} * 3\% \text{ increase}) - (\$250\text{k} + \$100\text{k}) = \$5\text{M} + \$15.15\text{M} - \$350\text{k} = \textbf{\$19.8M}$
- Cabin Upgrades: $\$500\text{M annual revenue} * 2\% \text{ increase} + \$510\text{M} * 2\% \text{ increase} - \$1\text{M} = \$10\text{M} + \$10.2\text{M} - \$1\text{M} = \textbf{\$19.2M}$



Exhibit: 1

Potential Service Improvements	Cost of Investment	Projected Revenue Increase (Year 1)	Projected Revenue Increase (Year 2)
Improved App for Frequent Flyers	\$250k upfront + \$50k per year for maintenance	1%	3%
Cabin Improvements	\$1M	2%	2%



Conclusions

Recommendations:

- A strong candidate will recap the breakeven analysis before recommending one of the service upgrades.
- The candidate should recognize that the breakeven for investing in business class flights is \$1,100, which is higher than the industry average. Given the company's current capabilities, the investment would be better elsewhere.
- The candidate can recommend either service upgrade opportunity, but should specify the reasoning for why they chose that investment along with risks and next steps.
- The app would have a bigger impact on revenue over the first 2 years but will require \$50k in upkeep every year after. The increase in revenue growth from year 1 to year 2 might indicate a continued increase in year 3 and beyond.
- The cabin upgrades would have a slightly lower revenue impact but the cabin improvements are a one time investment that could be sufficient for 10+ years, therefore requiring no additional yearly upkeep.

Risks

- Cost overruns
- Brand perception issues
- Incorrect assumptions could affect financial calculations

Next Steps

- Additional market research



Behavioral

What aspects of your career history will be useful to consulting/corporate strategy?

Prompt

Your friend has been approached by a restaurant owner who runs a diner in LA alongside his wife. They are reaching retirement age and would like to pass on the business to someone else. The restaurant has always been family-owned and is part of a strip mall near the freeway. This strip mall also has four other restaurants, and it sits across the street from two large office buildings. In the past four years, the restaurant has been losing money and the owners don't know why. What is impacting their profits, what do you recommend to improve profitability (if possible), and do you recommend that your friend acquire the business?

DESCRIPTION & Interviewer Notes

The candidate's framework should highlight revenues and costs, but should also consider market share and size, competition, and customers

Math should be organized, quick, and easy to comprehend

Make sure recommendation is succinct (under 1:30) and logical. Make sure Risks and Next Steps are present.

ADDITIONAL INFORMATION (IF ASKED)

Market Size and Share

- Customer traffic is based entirely on employees from the office towers seeking lunch
- Each office tower has 20 floors and averages 100 people per floor (all of whom eat lunch).
- On any given day, 5% of the people didn't show up for work, 50% of the remaining go out to lunch, and 90% of lunch-goers go to the various strip mall restaurants for food.
- The diner currently has 10% market share of visitors to the strip mall.
- No growth in business has been recorded.
- 4 other restaurants are all fast-food.

Restaurant

- When business declined 4 years ago, the owners had to fire 2 assistants, which put a strain on manager/employee relations.
- Sell all kinds of food – mostly a broad 'American' food place.
- Restaurant is like a sit-down diner, but can also package food to go.
- Average wait time at the diner is 7 minutes, average time at the competitors is 3 minutes.



Analysis

Guide the Candidate to do a Market Size Estimation

- $2 \text{ buildings} * 20 \text{ floors} * 100 \text{ person average per floor} = 4,000 \text{ people}$
- $4,000 * 95\% \text{ present} = 3,800 \text{ employees in buildings}$
- $3,800 \text{ present} * 50\% \text{ out to lunch} * 90\% \text{ who go to strip mall} = 1,710 \text{ person total market opportunity (daily)}$
- $1,710 \text{ market opportunity} * 10\% \text{ market share} = 171 \text{ customers each day}$

Question 1: "Given that our client only has 10% of the market, how would you find out why customers aren't coming to the diner?"

- Stand outside the office buildings and survey workers
- Ask customers who eat lunch at the strip mall
- Ask business center management
- Customers are workers looking for a quick lunch. (Candidate should deduce that our wait time is too long)
- Most customers take food back to business center and eat at desk (don't sit and eat at restaurant).

Question 2: "What if breakeven for restaurant every day is 200 customers? Do you think buying would be a good idea or not?"

- candidate should begin brainstorming ways to increase profits (increasing revenue and/or decreasing costs) and explain their methods. Push the candidate for revenue/cost savings ideas until they run out of ideas



Conclusion

Recommendations:

There is no right or wrong answer.

If they say to reject the offer:

- Market is not growing and there is a lot of strong competition present.
- Challenges in taking over a family-owned business

If they say to acquire the diner:

- Optimistic that they can improve operations to reduce customer turnaround time; may be able to bring down breakeven # of customers.
- Suggestions for viable ways to increase profits
- Brand more as quicker food option, advertise in business centers, offer delivery, offer more fast-food items on menu, identify restaurant bottleneck and provide more resources to decrease customer wait times.

Risks

- Competitive response
- Institutional/Branding challenges of taking over a restaurant from longtime owners
- Innate dependance on the two office towers for foot traffic, what if offices begin to allow a more relaxed WFH policy

Next Steps

- Review financial documents from diner owners
- Conduct market studies on lunch customer habits

Airline Air Filtration



Behavioral

Tell me about a time your team disagreed with your idea. (candidate should respond in STAR format)

Prompt

Our client is a major defense contractor for the United States government. There has been a growing threat of airborne pathogens in commercial airplanes and the government is demanding action. There is a potential solution to the problem: a high-tech detection, air filtration and scrubbing mechanism. These devices defend against a variety of bacterial, fungal, chemical, and viral agents that may be present in aircraft, thereby improving traveler safety. Congress has approached your client requesting that these systems be installed on commercial planes. Do you recommend they take the deal?

DESCRIPTION & Interviewer Notes

This case focuses on the profitability. Selling to gov may mean losing money but there are significant sales opportunities overseas.

Competitor dynamics are essential to this case. Duopoly is likely inevitable. Candidate should be wary of competitive responses.

ADDITIONAL INFORMATION (IF ASKED)

Market

- 3,000 commercial airplanes are eligible for installation
- The client can capture a maximum of 50% of the market – government law requires a competitive market

Product

- Mechanism is a small device installed beneath planes: does not affect the performance of aircraft
- Installation is not an issue from a cost standpoint
- Government will pay \$2M per installation
- System needs reinstallation every 5 years; Annual maintenance and repair costs are immaterial

Company

- Fixed costs: \$250M for factory, \$50M for management/employees, \$160M for R&D
- Variable cost per unit is \$1.7M



Calculations

Market Opportunities

- 3,000 eligible for installation * 50% market share = 1,500 planes
- \$2M price for installation
- $1,500 * 2M = \$3B$ Market opportunity

Profitability

- Revenue = \$3B
- Total Variable Costs = 1,500 planes x \$1.7M = \$2,550M
- Total fixed costs = \$250M factory + \$50M staff + \$160M R&D = \$460M
- Profits = \$3B - (\$2,550M + \$460M) = (\$10M) which is a moderate loss for the client



Analysis

Question 1: “How many additional units must be sold to other national governments in order to break even?”

- The interviewer should take the net loss (-10M) and divide by the gross profit per unit sold (300k). $100\text{m} / 300\text{k} = 33.3$ which rounds to 34 units.

Question 2: “What potential opportunities can improve the financial viability of this project?”

- Expand geographically: What other governments might be interested? (Most fixed costs stay the same if expand internationally, so marginal profit is positive.)
- Expand to the private sector: High net worth individuals, logistics companies, etc.
- Investigate cost and manufacturing efficiency improvements to improve profitability

Question 3: What can be done to manage competitors’ actions, as they will likely be considering these same issues?

- There are no right or wrong answers here. Make the candidate defend whatever they suggest.



Conclusion

Recommendation:

- Develop the domestic (U.S.) market before considering international expansion, even though the client will face a short term loss of \$10m

Risks

- What if competitor does the same?
- Political: What if the government changes its mind?
- Internal: Do have capacity for immediate production and installation of 1,500 systems?
- Who takes responsibility for pathogen disposal? What if people servicing the plane are harmed? (Ethical and PR issue)

Next Steps

- Develop contracts with the United States ensuring a certain volume or exclusivity
- Continue R&D that improves the device's ability to detect new threats

Home Alone



Behavioral

Tell me about a time you had to deal with an ambiguous work/project requirement.

Prompt

Your client is a financial investor interested in a nation-wide home security startup company. The security company sells and installs alarm systems and then provides monitoring service, patrolling the neighborhood and following up if the alarm goes off. The client has hired you to size the market and recommend if this is a good investment or not.

DESCRIPTION & Interviewer Notes

This case asks the candidate to look at a variety of exhibits to figure out whether the client should invest in the company or not.

The candidate should assess the attractiveness of the market (size and growth) and the competitive landscape (reach and environment) when deciding what to recommend to the client.

ADDITIONAL INFORMATION (IF ASKED)

Only provide exhibits after being asked for the information by the candidate.

- Consumers: **Exhibit 1**
- Competitors: **Exhibit 2**

Current Company Information

- 10M suburban households
- 1M new suburban households each year
- System Prices: \$1000 for installation & \$30/month for service

Market Information

- 1-2 large local players per market
- Large local players are entering national market and competing with large national player



Exhibit:1

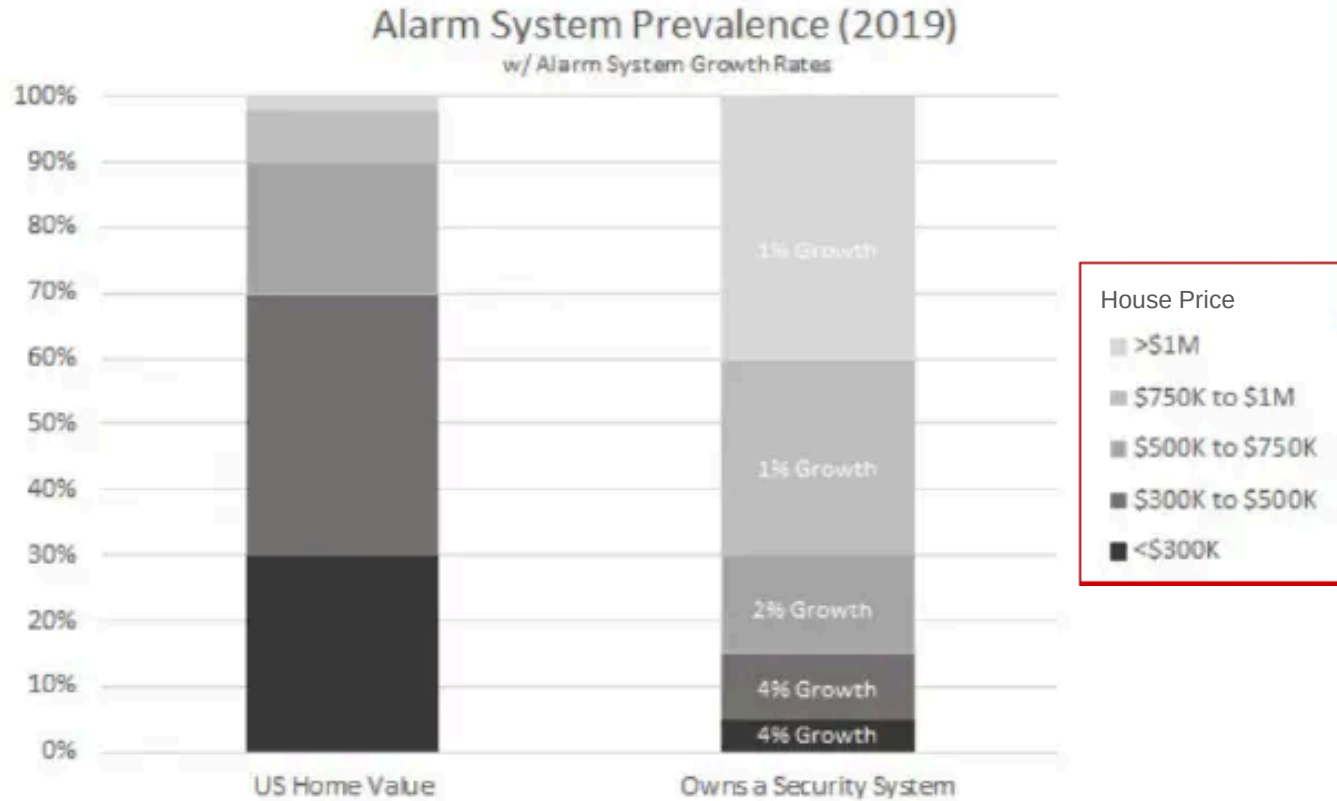
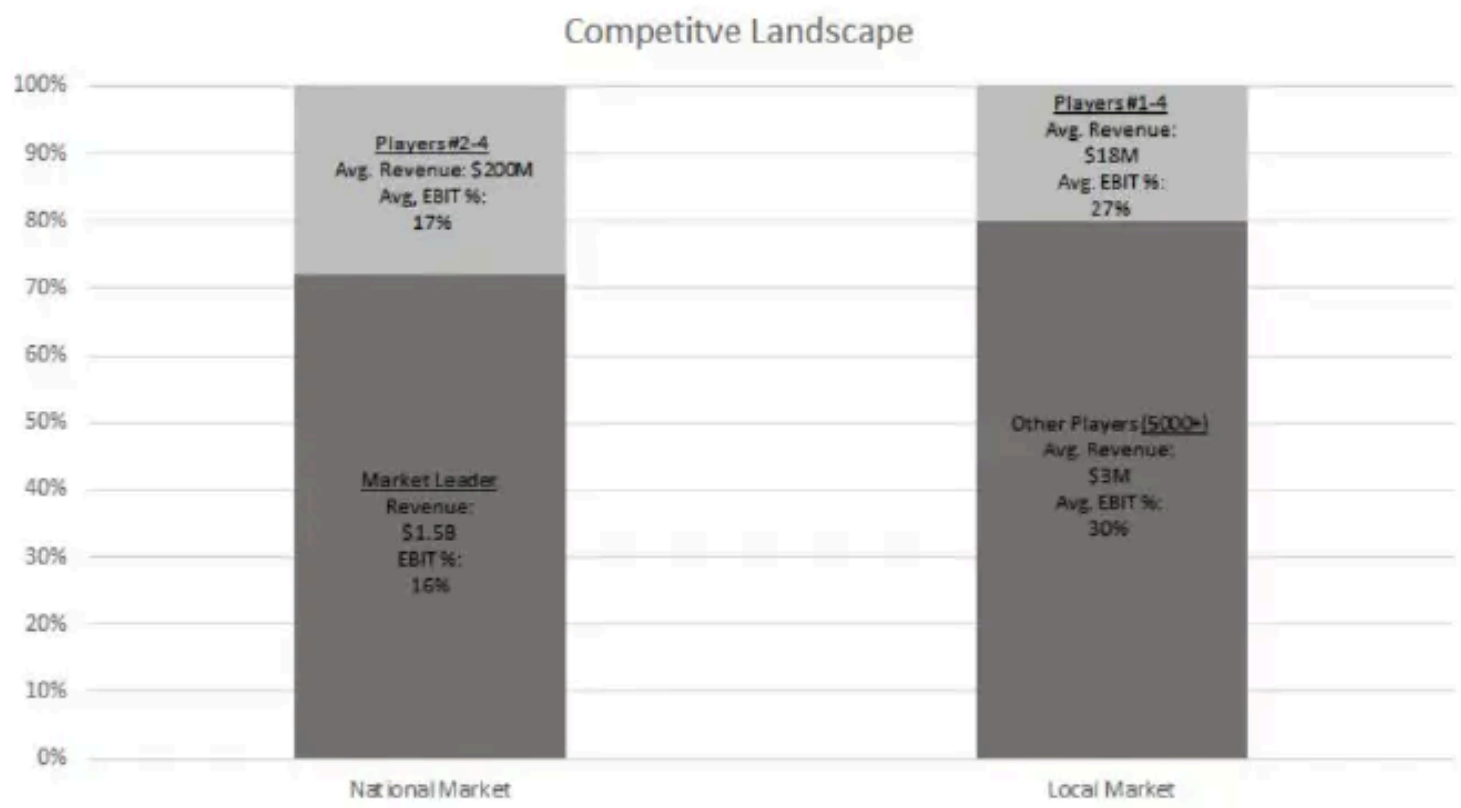




Exhibit: 2





Analysis

Market Sizing/Opportunity

- 1M New Homes * \$1000 New System = \$1B
- 10M Existing Homes * \$30/Month Service * 12 Months = \$3.6B
- Expected Annual revenue = \$1B New Systems + 3.6B Existing Systems = \$4.6B

Market Growth

- 70% of the alarm buying market is growing at 1% per year, with the overall alarm buying market growing at or less than population growth
- This makes market growth unattractive

Competitive Reach

- The national market is dominated by one player with several other strong players making entry very difficult
- The local market is highly fragmented with apparently 1-2 major players in each market, making entry in this space equally difficult with local de-facto monopolies

Competitive Environment

- Large national players appear to be operating with rather low EBIT numbers – this may be due to spread out infrastructure and inefficient utilization of resources
- Smaller local players have stronger EBITs and this leaves them in a strong position to compete on price, so entry will be difficult



Conclusion

Recommendations:

- The candidate should recognize that the market (both national and local) are unattractive. The competitive landscape creates barriers to entry on both national and local levels as well. Ultimately, they should advise the client to not invest in the start-up.

Risks

- With minimal information on the company's capabilities vs their competitors, there could be a risk in not investing if the start-up is bringing innovative security hardware and service to customers.

Next Steps

- Further research into the startup and how their products and services are benchmarked against market leaders could provide further insight into the potential success and market disruption.

Summer Olympics



Behavioral

Can you tell me about a time when you failed at something and how you responded?

Prompt

Los Angeles is considering placing a bid to host the upcoming Summer Olympic Games. Our client, the bidding committee, approached us to ask for our opinion on what the major considerations should be. Of major concern is how to convince the state and federal governments to provide financial support. How would you recommend they go about doing this?

DESCRIPTION & Interviewer Notes

This case is designed to test the candidate's ability to develop unconventional frameworks.

Math should be well organized.

ADDITIONAL INFORMATION (IF ASKED)

See next page



Additional Information

- The Olympic Committee is a private organization with no public funding
- The Committee will be relying on the city and state to pay for freeway and airport upgrades to support the games (Make the candidate draw this distinction between public and private funding)
- The Olympics will last for 15 days

Costs (to be given all at once when candidate asks):

- \$2.8 billion for operation of the games (opening and closing ceremonies, security, Olympic Village services, etc.)
- \$6.0 billion for new and upgraded venues
- \$1.1 billion for athlete facilities
- \$2.6 billion for freeway upgrades
- \$2.5 billion for airport upgrades

Revenues (ask candidate what revenues they believe might be available before sharing this list)

- \$1.1 billion International Olympic Committee support
- \$15 billion for TV rights for Winter and Summer Games combined, with Summer Games taking 80% of this amount. Of this amount, 25% goes to the organizing committee.
- Corporate sponsorships - \$75 per occupied seat (Do not prompt the candidate to think about seat occupancy rate!)
- Ticket sales - Share **Exhibit 1**. For ticket sales, do not prompt the candidate to think about what percentage of available seats will be filled. If the candidate fails to mention this, tell them they failed to consider it but that 95% of A tickets are expected to be sold and 60% of B tickets are expected to be sold.



Exhibit: 1

Seating Type	Price Per Ticket	Total Number of Seats per Day
A	\$200	420,000
B	\$120	700,000



Calculations

Calculate Costs

- $\$2.8\text{B} + \$2.6\text{B} + \$6\text{B} + \$2.5\text{B} + \$1.1\text{B} = \$15\text{B}$, of which $\$5.1\text{B}$ are freeway and airport upgrades to be funded by the city and state, leaving the Committee with $\$9.9\text{B}$ in costs

Calculate Revenues

- TV rights: $15\text{B} * .8 * .25 = 3\text{B}$
- Tickets: $\$200 * 420,000 * 95\% + \$120 * 700,000 * 60\% = \$1,953,000,000$ (can be rounded to $\$1.95\text{B}$)
- Sponsorships: $75 * (420,000 * 95\% + 700,000 * 60\%) = \$921,375,000$ (can be rounded to $\$0.92\text{B}$)
- Total: $\$1.1\text{B} + \$3\text{B} + \$1.95\text{B} + \$0.92\text{B} = \$6.97\text{B}$



Analysis

This portion is focused on brainstorming rather than calculating. Less formal and more conversational.

Question 1: “We have \$9.9 billion in costs but only about \$7 billion in revenues and still need to convince the city and state to pay for \$5.1 billion in infrastructure upgrades. Is the bid a bad idea?”

Question 2: “How do we close the financial gap? What are other ways of generating revenues?”

- Official merchandise
- Higher seating prices or marketing to fill more seats
- Using existing venues.

Question 3: “The \$8 billion gap can likely be closed by another \$2 billion. Are there are any other ways to fund construction of sports venues or the Olympic Village?”

- Public funding for stadiums. If the government closed the remaining gap by funding stadiums, the Olympics could be viable.

Question 4: “What are your thoughts on ways to convince the city and state to pay \$5.1 billion to upgrade the airport and freeways, and put in money to subsidize building stadiums and other athlete facilities?” (If needed, point out that the Games often lose money and ask why cities might want the Games anyway?)

- Present to the city focusing on benefits beyond profit/loss accounting such as job creation from construction, increased tourism, general benefits from improving public infrastructure that last beyond the duration of the Games, sense of civic pride



Conclusion

Recommendations:

- The Games probably will not be profitable without substantial public funding of infrastructure and venues. The city and state could be convinced to provide that funding if the benefits of hosting to the broader economy were substantial.

Risks:

- The city and state do not support the Games and the Committee is stuck paying for everything.
- Ticket sales and sponsorships come in lower than expected

Next Steps:

- Begin identifying corporate sponsors for seat licenses and other activities
- Develop an analysis of the Games' economic impact that could convince the city and state to provide financial support.

Agency Issue



Behavioral

Tell me about a time you received difficult feedback.

Prompt

Your client is a travel agency that collects a 10% commission on all of their bookings. Their current profit before taxes is \$1M, while the industry average ranges from \$2M to \$3.5M. Why are they making less than the industry average?

DESCRIPTION & Interviewer Notes

This case asks the candidate to look at the client's business compared to competitors. By breaking down the customer segment, opportunities to increase profitability become apparent. Suggestions of how to do so may vary and should include appropriate risks and next steps.

ADDITIONAL INFORMATION (IF ASKED)

- Client's annual gross revenue: \$10M
- Competitors have similar revenue figures
- Agency only books plane tickets for customers (no other sources of revenue)
- Revenue Breakdown by customer segment
 - 60% Business Travel
 - 40% Leisure Travel
- Total number of transactions is approximately 1M per year.
- On average, about 300K go to the business segment, and 700K to the leisure.
- Costs are \$9 per transaction, regardless of segment.



Calculations

Candidate should recognize they have all the information needed to “crack” the case. Let them flounder, and if needed, push them to consider what calculations can be done with the available information. Candidate’s calculations should look like this:

Segment	Share	Volume	Total Revenue	Revenue/ Transaction	Cost/ Transaction	Profit/ Transaction	Gain
Business	60%	300,000	\$6,000,000	\$20.00	\$9.00	\$11.00	\$3,300,000
Leisure	40%	700,000	\$4,000,000	\$5.71	\$9.00	\$(3.29)	\$(2,300,000)
			<u>\$10,000,000</u>				<u>\$1,000,000</u>

Key Findings

- The leisure travelers are draining your profitability. Either the cost per transaction is too high or the revenue per transaction made on the leisure is too low.



Conclusion

Recommendations:

- Benchmark the cost structure of other travel agencies.
- Negotiate with the airlines on the possibility of charging a premium for leisure tickets or capture a larger commission through cost charged to the customer.
- Look into the possibility of reducing cost per transaction for the leisure travelers.
- Offer the leisure traveler other products to increase revenue per transaction such as hotel bookings and travel packages.
- Become a niche player and focus only on the business travelers.

Risks

- No right or wrong answers here, as long as the candidate justifies their argument.

Next Steps

- No right or wrong answers here, as long as the candidate justifies their argument.

Make Up Your Mind



Behavioral

Tell me about a time you analyzed lots of data to make a consequential decision. How did you know you were looking at the right data?

Prompt

BeautyAsia (BA) is a health and beauty consumer products company headquartered in Malaysia. It manufactures and sells a line of cosmetic products ideally suited for the Malaysian marketplace. Although it has been a successful company for over twenty years, it has been losing money for the past two years and its market share has declined. The CEO has asked you to assist in diagnosing the problem and generating possible solutions.

DESCRIPTION & Interviewer Notes

This is a strategy & marketing case.

No math. All brainstorming.

ADDITIONAL INFORMATION (IF ASKED)

See next page. This is a qualitative case and there are no calculations.

The candidate will not require all of the provided details to successfully navigate the case, but should ask about all the key areas to determine where the client's problems may be. Once all details have been discussed (or time is running out) prompt the candidate to compose their formal recommendations.



Additional Information (if asked)

Company

- Manufacturing is excellent
- Inventory management systems are unsophisticated and ineffective, resulting in excess inventory and order fulfillment problems

- No new products have been launched in the past eight years

- BA's products appeal to price-conscious consumers
- The health and beauty products industry is growing approximately 15% per year

Competitors

Consumers

Products

- BA has multiple product lines ranging from lipstick to skin creams
- BA's products appeal to price-conscious consumers
- The health and beauty products industry is growing approximately 15% per year

Channels

- BA products are currently sold through small proprietary shops
- Supermarkets are becoming increasingly popular in Malaysia
- Supermarkets have high order fulfillment and stocking requirements



Interviewer Notes

This case is low stress, and all about freeform brainstorming and brand strategy considerations. The interviewer should feel free to improvise, ask probing questions, and encourage the candidate to consider different issues.

Use this time to observe the candidate's composure, body posture, tone, and general professionalism. Provide feedback on these items when the case is complete.



Conclusion

Good Conclusions:

- Multinational competitors are creating a new distribution channel for health and beauty products. The channel shift is causing BA to lose market share. BA needs to update its inventory systems to compete in the new channel and reduce its costs.
- Competitors are driving changes in consumer tastes toward greater product variety and quality. BA has not kept pace with new product introductions. BA needs to improve its marketing/market research.

Excellent Conclusions:

- BA's manufacturing expertise gives it an opportunity to sell high quality private label products at a discount to current prices in the supermarkets.
- There is danger in challenging multinational competitors by offering a wider assortment of products in the supermarket channel.

Alternatives for BA include: strengthening its position in the local shop channel; focusing on profitable customer niches (premium, low price, etc.); targeting only certain product categories like lipstick and blush for distribution through supermarkets.

- The cost to BA of regaining its lost market share is extremely high. BA may be better off preventing further loss in market share and focusing on improving its current profitability instead of regaining share.

Risks:

- No right or wrong answers here, as long as the candidate justifies their argument.

Next Steps:

- No right or wrong answers here, as long as the candidate justifies their argument.



Behavioral

What class at Marshall took you the furthest outside of your comfort zone?

Prompt

Your client is a private equity group considering an acquisition of a company that produces ground transportation for gas tankers. Imagine the sort of trailers that hold big containers of fuel and delivers them to gas stations, for example. How large is the market for these trailers in the United States?

DESCRIPTION & Interviewer Notes

This is mostly a market sizing case, with some creative work at the end.

ADDITIONAL INFORMATION (IF ASKED)

- The PE Group is interested in buying companies that can be sold again in 5 years.
- The trailer company sells the trailer apparatus that holds the gas. They do not sell the truck that pulls the trailer.
- There are no data points to provide. Candidate will make all assumptions.



Analysis

Question 1: "What variables drive the need for fuel trailers?"

Potential answers:

- Distance: How far fuel needs to be transported
- Volume: Total fuel needed for delivery in a year
- Frequency: How frequent are deliveries

Question 2: "Please estimate the market based on those drivers. Use gallons as your units of volume."

(Ask for candidate to make each assumption, then correct them if assumption is drastically different from the list below)

- Assumption for gas usage: 200B gallons of gas in the U.S. per year
- Assumption for amount requiring transport: 5% does not need transportation
- Assumption for methods of transport: 20% are transported in ways besides trailers
- Assumption for carrying capacity of a truck: 7,500 gallons average per trailer
- Assumption for longevity: Replacement is every 10 years

There is no right or wrong answer. If the candidate uses their own assumptions, their final answer will be different from the calculations below. Once they have a final answer for number of trailers sold per year, challenge the final number and see the candidate's reaction to pushing on different assumptions.

Based on these assumptions: 200B gallons - (5% + 20%) = 150B gallons needing transport. $150\text{B} / 7.5\text{k gallon capacity} = 20\text{M}$ trailers needed. $20\text{M trailers} / 10 \text{ years} = 2\text{M new trailers needed each year}$.



Analysis

Question 3: “During the due diligence process, the private equity group has been told by the trailer company that demand has been surging recently. Your client is suspicious about this sudden growth. What might cause a change in demand for fuel trailers?”

Potential answers:

- Increased gas supply in the U.S.
- Greater rate of gas consumption
- Fuel is travelling further
- Average size of tankers is declining
- Legal regulations that may affect the quality of trailers (so replacement time is decreasing)
- Roads being maintained worse (so replacement time is decreasing)
- Shippers switching from other forms of transportation to trailers

Question 4: “9 years ago, legal regulations required upgrades to trailer fleets, and so at the time, there was a sudden spike in purchases. Now that we are approaching the 10-year average replacement time, purchases are spiking again. How does this affect your recommendation to the private equity group?”

There is no right or wrong answer here, but a strong candidate will become skeptical about the 10yr demand cycle and note that sales will likely plummet once all the fleets complete their replacements.



Conclusion

Recommendation:

- No right or wrong answer, but rejecting the deal is the safer option. Demand is likely to drop after the fleets replace their 9 year old vehicles, so this should be taken into account. This makes the investment unsuitable for the PE group's goal of selling businesses after 5 years.

Risks

- Variance in annual demand for trailers
- A fair acquisition price must consider the imminent drop in demand

Next Steps

- No right or wrong answers.



Behavioral

What is your leadership style like? What kind of leader are you?

Prompt

Your client produces strawberry jam for the US market. In the last year, they have been experiencing declining profits. You have been hired to investigate the causes in decline in profitability and what the response should be.

DESCRIPTION &
Interviewer Notes

This is a qualitative profitability case.

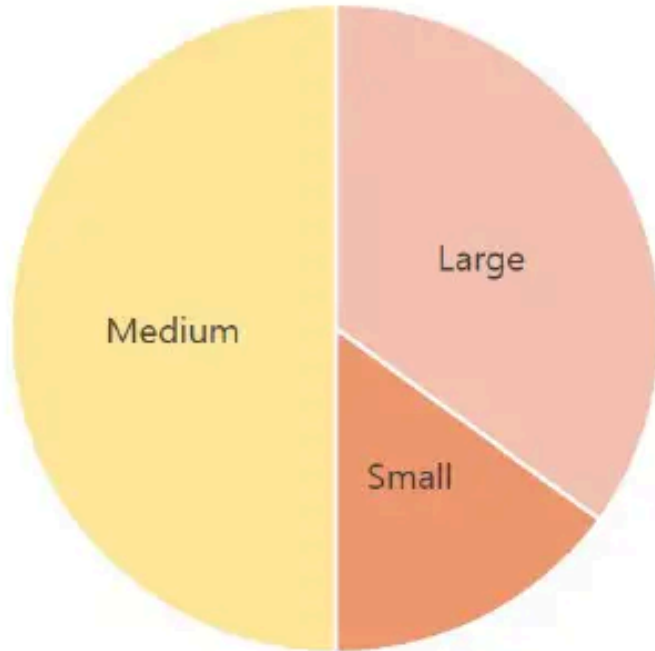
ADDITIONAL INFORMATION
(IF ASKED)

- Industry: Industry profitability has been stable, there are no new major entrants
- Client: Client is a market leader. They were profitable until 2020. Their profitability has been declining since early 2021. Ignore the effects of the pandemic.
- Customers: Customers are price sensitive but typically brand loyal.
- Product mix: provide **Exhibit 1**.

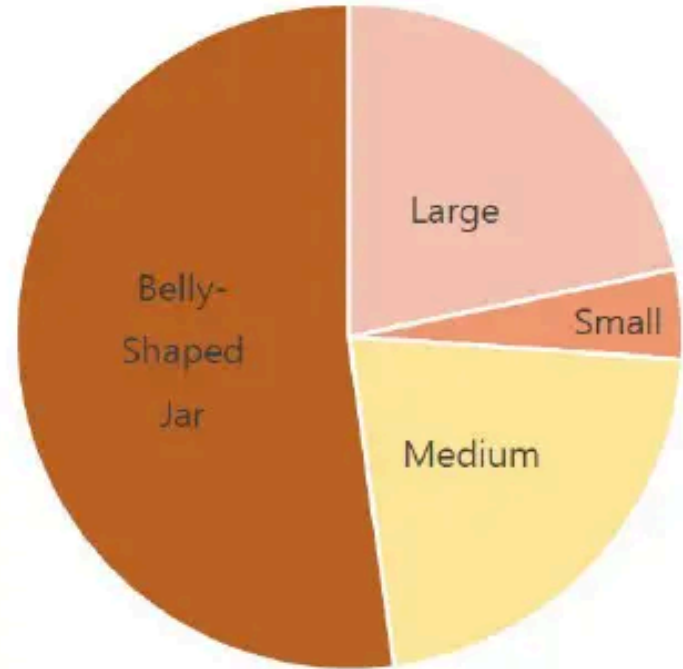


Exhibit:1

Product mix in 2020



Product mix in 2021





Analysis

The information below should only be given after Exhibit 1 has been shown and the candidate comments on the belly jar:

- Until 2020, the client only produced standard shaped jars (Small, Medium, Large). In 2021 the client introduced “Belly Shaped” Jar (imagine something similar to the little bears of honey).
- Belly shaped jar contains the same volume and sells at the same price point as the medium standard jar.

Question 1: “What are possible reasons for the decline in profits?”

Provide the following information when the candidate mentions issue(s) in the supply chain:

- Production: Belly shaped jars are slower to fill, so production speed must be reduced. Staff working on the belly jar production line frequently make more in overtime pay.
- Distribution: The irregular shape of the jar necessitates additional room on the truck to fit orders. Jars are more likely to break during transportation.

Candidate should identify that profit margins for belly shaped and medium sized jars are intended to be identical, but that supply chain issues make the belly jar problematic.



Conclusion

Recommendations:

- Eliminate belly shaped jars as customers are brand loyal and will switch back to medium jars
- Increase the price/profitability of jars (with awareness of price sensitivity)
- Adjust production/distribution of belly shaped jars

Risks:

- Risk losing brand leadership if competitors introduce similar shaped jars.
- Customers may have higher price sensitivity than predicted.

Next Steps:

- Consider ways to create sturdier belly-shaped jars
- Negotiate with jar suppliers to reduce costs
- Investigate more efficient boxing/packing methods that reduce carton volume or improve durability during transportation



Behavioral

Tell me about a failure that taught an important lesson.

Prompt

The state of Oklahoma has contracted your firm to help them establish a plan to combine various state government departments. In order to reduce costs and increase effectiveness at serving citizen's needs, they are considering combining four different departments into either two or three new entities. What information would your firm need to gather in order to help make a recommendation to the state?

DESCRIPTION & Interviewer Notes

This is a fairly simple case. It is intended to make a candidate consider where synergies may be found, and how to consider various predictors/risks.

ADDITIONAL INFORMATION (IF ASKED)

- Agencies being considered:
 - Oklahoma Commission on Aging
 - State Youth Services and First Five Board
 - Senior Services Advisory Board
 - Oklahoma Dept of Housing for The Elderly
- Timeframe:
 - State will allow up to 2 years for data gathering and planning
 - State wants reorg to be completed in 2-5 years
- All political parties support this move to combine dept entities, so there is likely to be popular support if a reasonable plan can be made.



Analysis

Allow candidate to share their framework, and give them **Exhibit 1** to help facilitate the following brainstorming questions.

Question 1: “What are your initial thoughts based on these departments?”

(let candidate brainstorm for ~3-4 minutes and ask probing questions when needed. Youth Services would be difficult to combine with the other three, and the Commission on Aging could plausibly be merged with either of the other senior-related depts. Rolling all three Seniors Depts together would be highly challenging)

Question 2: “What types of data will you need in order to evaluate the viability of this recommendation? What synergies between departments are most relevant to your decision process?”

(Let candidate brainstorm aloud for ~5 minutes, they should have no fewer than 5 data points and 3 synergies, and ask probing questions when needed. Keep pushing them for create ways to gather data insights.)

Question 3: “Gathering data comes at a high cost to taxpayers, and Governor Gavin McCuorno has provided a reasonable but limited budget. How would you go about prioritizing the types of research you would need to make a recommendation grounded in data?”

(Let candidate brainstorm aloud for ~5 minutes, unlike Question 2 this answer should be more structured and organized in its approach)

Question 4: “Based on your initial thoughts for potential merges, what dollar amount or range of savings would you expect could be achieved?”

(Let candidate brainstorm for ~5 minutes and ask them to justify any of their financial assumptions. Savings of over \$20M are highly unlikely.)

Once the conversation has run its course, ask the candidate to present a formal preliminary recommendation. Ask them to include timeline elements for the 2-5 year transition period.



Exhibit: 1

Entity Name	Budget	Headcount (employees)	Objectives/scope
State Youth Services and First Five Board	\$175M	~ 6000	Support the improvement of circumstances for children
Senior Services Advisory Board	\$120M	~ 2000	Support the improvement of circumstances for seniors
Oklachusetts Dept of Housing for The Elderly	\$250M	~ 3500	Senior living facilities and medical care for needy citizens
Oklachusetts Commission on Aging	\$45M	~ 450	Medical research and policy advising for adults aged 50+



Conclusion

Ask candidate to give a formal recommendation, and be prepared to challenge them on anything that seems unreasonable.

Recommendation:

- Youth Services would be difficult to combine with the other three, and the Commission on Aging could plausibly be merged with either of the other senior-related depts. Rolling all three Seniors Depts together would be highly challenging.

Risks

- This will be based entirely on their recommendation. If they omit any obvious risks, challenge them on it.

Next Steps

- Candidate should create a reasonable timeline for data gathering
- Candidate should create a reasonable timeline merger activities



Behavioral

How would you explain a complex technical issue to a client? (candidate should respond in STAR format)

Prompt

A U.S. based investment group client is considering an acquisition of the bullet train vehicle manufacturer, Motoristish. The manufacturer has a design team in Germany and factory locations in China and Vietnam. The US East Coast and the state of California have recently completed many of the infrastructure investments necessary to support these vehicles, and the client sees significant opportunities in US markets, as well as in Europe and Asia. Should the client acquire Motoristish based on their current asking price?

DESCRIPTION & Interviewer Notes

Valuation case,
quant heavy, with a
data dump exhibit.

ADDITIONAL INFORMATION (IF ASKED)

- None. All required information will be presented in the data dump exhibit similar to a Deloitte style interview.



Analysis

A good framework will:

- Consider a method to calculate the value of the company:
 - DCF calculations
 - Comparables/multiples
- Take into account market factors:
 - Market size and structure
 - Regulations
 - Growth/decline of market
 - Recent consumer trends
- Look at financials
 - Revenue/costs

Once the candidate has provided their framework, give them **Exhibit 1**.

Interviewer cheat sheet for Exhibit 1:

Top Left: All regions care about passenger capacity. Asia cares about price and size, USA cares about aesthetics, Europe cares about size. No regions care about durability.

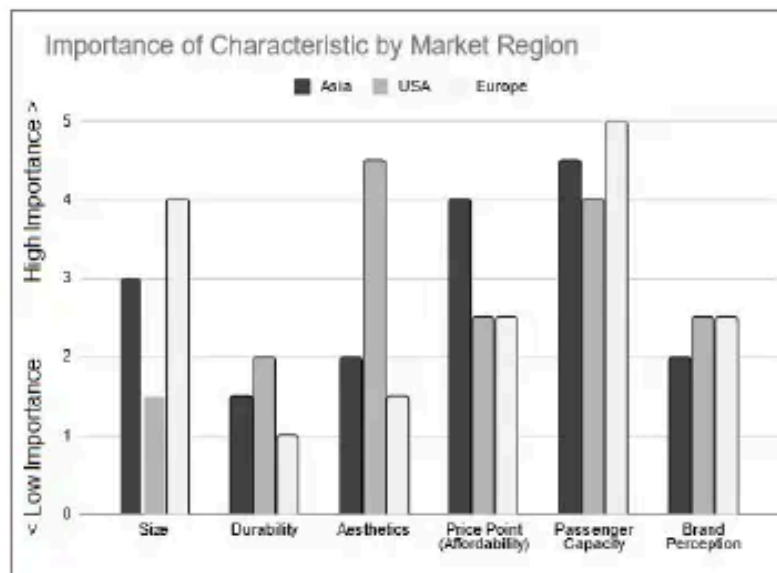
Top Right: All details are critical for calculations.

Bottom Left: Asia has lots of competitors, Europe is the largest market but it is shrinking, USA is growing, and has few competitors

Bottom Right: Motoristish's products are well suited for Europe and USA, but not Asia.

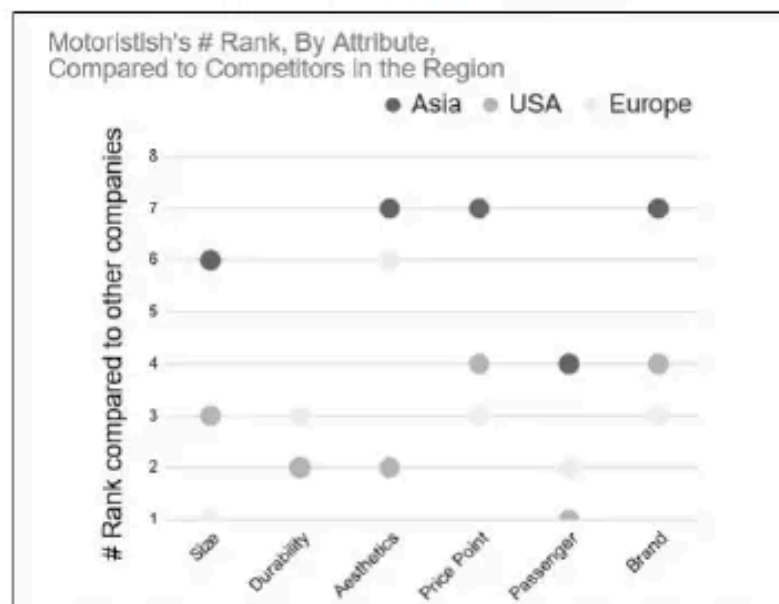


Exhibit:1



Market Region	Predicted Annual Demand (in Batches)	Market Growth Projections	Motoristish Market Share
Asia	4.2	5%	10%
USA	5.5	10%	50%
Europe	6.5	-15%	40%

Motoristish's Acquisition Asking Price	Cost of Capital	Train Cars per Batch
\$700,000,000	10%	100
Annual Manufacturing Capacity (By Car)	Price Point (Per Train Car)	Profit Margin
500	\$1,000,000	15%





Analysis

Question 1: "Walk me through your impressions from this exhibit"

Question 2: "Which market region is the most attractive for Motoristish?"

Answer: USA, based on attributes/competition/growth. If candidate answers differently, guide them to this answer.

Question 3: "How many units would you predict Motoristish could sell in each of the three markets next year?"

Market Region	Predicted Annual Demand (in Batches)	Cars per batch	this year's market size (cars)	Market Growth	next year's market size	Potential Market share	Predicted Sales for Motoristish next year
Asia	4.2	100	420	5%	441	10%	44.1
USA	5.5	100	550	10%	605	50%	302.5
Europe	6.5	100	650	-15%	552.5	40%	221

Question 4: "Should the investment group accept the asking price?"

Answer: Candidate should use a simple Discounted Cash Flows calculation. Formula is (annual profit) / (growth rate - discount rate) = a "fair" valuation. Since the production capacity is less than the demand across all three regions, the most that could be sold next year is 500 cars.

500 cars * \$1M per car * 15% profit margin = \$75M in annual profit

\$75M annual profit / 10% discount rate = \$750M valuation (assuming no growth)

This valuation is higher than the asking price, which implies that this a desirable acquisition.



Conclusion

Recommendation:

- Acquire Motoristish. Expect to do better in USA and Europe than in Asia.

Risks:

- Competitive response. If other Asian companies enter Europe, it will dilute European market share.
- Differences in regions may increase operating costs beyond what the case provides
- Transportation issues, etc. as a result of only having manufacturing facilities in Asia
- The asking price being below the DCF value is suspicious. The manufacturer may know something that they haven't revealed to the prospective buyer(s)

Next Steps:

- Conduct Due Diligence
- Set timeline for acquisition, marketing, etc.

In Pursuit of Business Casual



Behavioral

Tell me about a time you had to help a teammate who was falling behind.

Prompt

A friend from the Marshall Entrepreneurship program is launching a fashion line for women's professional clothing. She needs to plan the sourcing for her garment production as the business grows in size. Sales volumes are low but are starting to increase. Vendor selection is a complicated process, and she's asking for your advice.

DESCRIPTION & Interviewer Notes

Interviewer led. This is a strategy case that pretends to be a math case. The math is simple, but the strategy is more nuanced.

This case primarily tests a candidate's ability in two ways:

1. Business sense and risk analysis
2. Quantitative skills for planning purposes

ADDITIONAL INFORMATION (IF ASKED)

- [REDACTED]
- Products sold: "Business casual" garments for professional women. There are lots of competitors in this market, but her products are unique in their own way.
- Revenue & Sales channels: ecommerce website, and occasional pop-up sales. Revenues and brand awareness are low, but growing. Current sales are 60 garments per month.
- Customer profile: Undergraduates entering the business world who need a professional wardrobe but have a limited budget
- Possible Vendors: Many, but she has narrowed down a list that suit her needs. (This will be shared later in exhibit 1).
- Funding/Capital: Friends and coworkers are available to help the startup raise capital to meet setup cost obligations, but they aren't "angel investors".



Analysis

Once the candidate has provided a framework, move on to the questions below.

Question 1: “Your friend will need to start with small-time garment manufacturers and work her way up to bigger vendors as her business volume scales. What types of KPIs or factors should she consider when deciding to move from vendor to vendor?”

Candidate should mention things like:

- Costs; fixed and variable
- Vendors with different capacity levels
- Minimum order quantities
- Vendor geographic locations
- Sales growth trends
- Sales/marketing initiatives, etc.

Question 2: Give the candidate **Exhibit 1** to walk through. Push the candidate to comment on areas of interest or concern.

- This exhibit is not intended to demand any calculations. If the candidate tries to do math, encourage them to think strategically instead of quantitatively.
- Push candidate to consider what factors in this data table create the highest risks for the fledgling clothing business.
- A strong candidate will note:
 - Issue with the capacity max for vendor A and the MOQ for Vendor B
 - Long startup cycle for Vendor D
 - Issue with the capacity max for vendor B and the MOQ for Vendor D

*MOQ = Minimum Order Quantity



Exhibit: 1

Vendor Name	Angelese Artistic Seamstress (A)	Basic Blouse Bootcamp (B)	China Clothes Compound (C)	Dominican Dress Dominion (D)
Minimum Order Quantity (units per month)	None	100	10,000	2000
Monthly Production Capacity	75	2000	100,000	30,000
Setup cost (\$)	none	2000	10,000	2000
Setup period for new customers	Minimal/fast setups	Moderate length	Moderate length	Severe startup/lead time
Cost per unit (\$)	50	40	20	40



Analysis

Question 3: "If she uses Vendor B for 10 months, averaging 200 units per month, what will her total spend on this vendor be, and what will her average garment cost be?"

Calculations:

10 months * 200 units = 2000 garments total

$(\$2000 \text{ startup} / 2000 \text{ garments total}) + \$40 \text{ per unit} = \$$

Question 4: "If Vendor D offers to reduce the startup costs by 50% and raise the unit cost by \$.10, should she take advantage of this promotion?"

Calculations:

50% * 2000 =

\$1000 discount / \$.10 discount = 10,000. This promotion is and harmful after this point.

If she plans to have Vendor D produce more than 10,000 garments, this promotion will hurt her business in the long term. At most, this gives her 5 months (based on the MOQ of 2000) to grow the business enough to move on to Vendor C (who has an MOQ of 10k).

Question 5: "Thinking through what you've seen from the exhibit and calculated already, what would be some additional guidance you'd provide your friend to help them expand their business?"

Candidate should address ideas such as considering new sales channels, consumer surveys, joint ventures, negotiating lower costs from vendors as they begin to scale up, and how that might potentially require changes in manufacturing vendors to meet with increasing demand.



Conclusion

Recommendation:

- [REDACTED]
- Taking vendor D's promotion would be problematic unless accompanied by a HUGE marketing push.
- No right or wrong answers. Candidate should mention business opportunities that can help accommodate the vendor requirements at each stage in the scaling process. A strong candidate will recommend using promotions and marketing surges to help the business scale quickly to 100 units per month.

Risks

- Moving from vendor A to vendor B will require careful planning due to the production capacities and MOQs.
- Moving from vendor B to vendor D will require careful planning due to the setup period time, production capacities, and MOQs. Your friend may be forced to buy and warehouse unneeded inventory just to meet the vendor's production requirements.

Next Steps

- No right or wrong answers

Kombucha Brewery Abroad



Behavioral

Tell me about a success that you shared with a team (use the STAR format)

Prompt

A kombucha brewer in Portland Oregon has hired your firm. Beard&Barrel is a “craft” kombucha company with a loyal following, and currently exports their products across the world. They have identified an opportunity to enter the EU market by starting in France. They want to know which flavor style of beverage to sell, and if it would be a worthwhile opportunity.

DESCRIPTION & Interviewer Notes

This is a longer case, so push the candidate to move quickly.

The candidate's framework should include entry method, company, customers segments, segment, and external factors

Make sure recommendation is succinct (under 1:30) and logical. Make sure Risks and Next Steps are present.

ADDITIONAL INFORMATION (IF ASKED)

- Kombucha is health beverage made using fermented tea and fruit juices
- Current annual Revenue of approx. \$100M
- B&B's goal is to grow revenue; profit is an afterthought
- The French kombucha import market is in disarray
- Beard&Barrel makes a wide variety of kombucha, sodas, beers, and teas sold as sixpacks. The recipes that appear the most viable for the French/European market are Lemon, Peach, Berry, and Ginger
- Beard&Barrel currently sells in Australia, UK, and some parts of Asia.
- If candidate asks about competition, give **Exhibit 1**
- If candidate asks about demand, give **Exhibit 2**



Exhibit:1

Kombucha Brands and Competitors

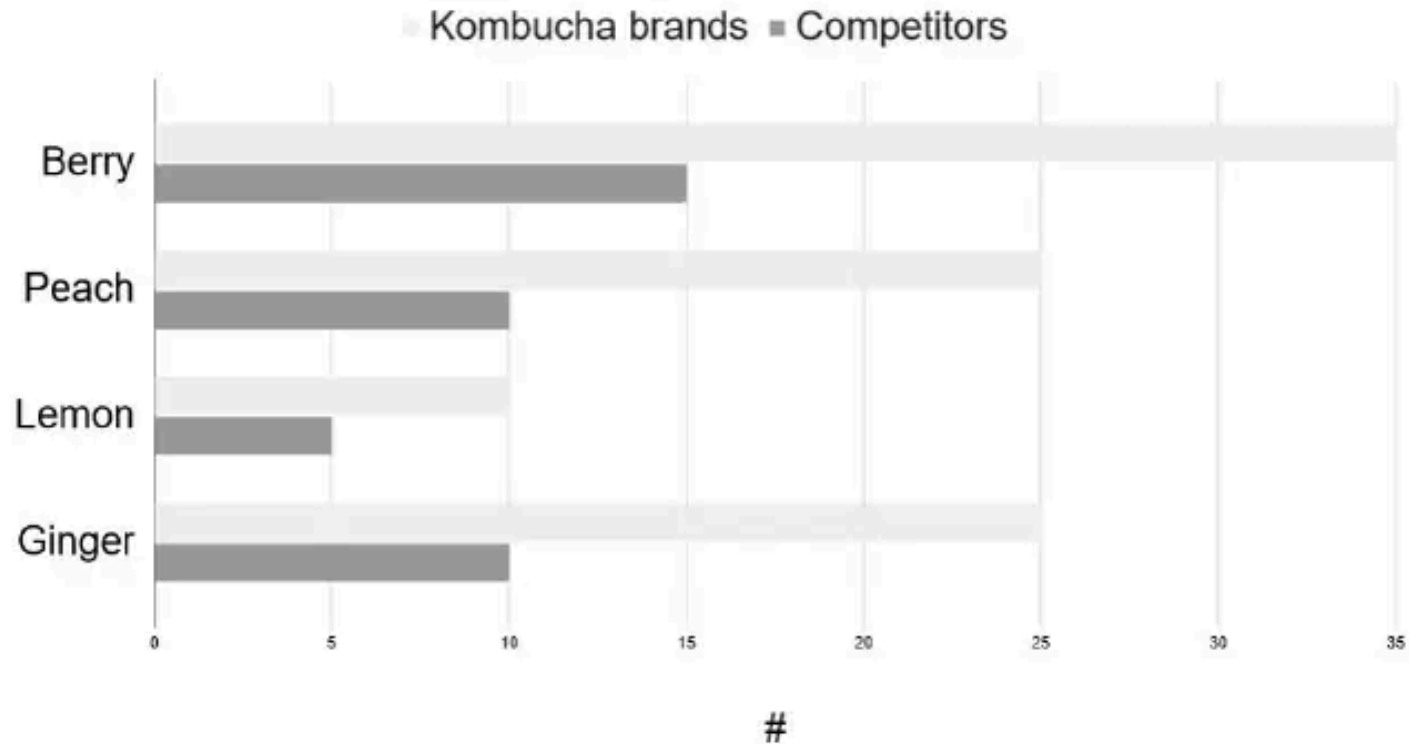
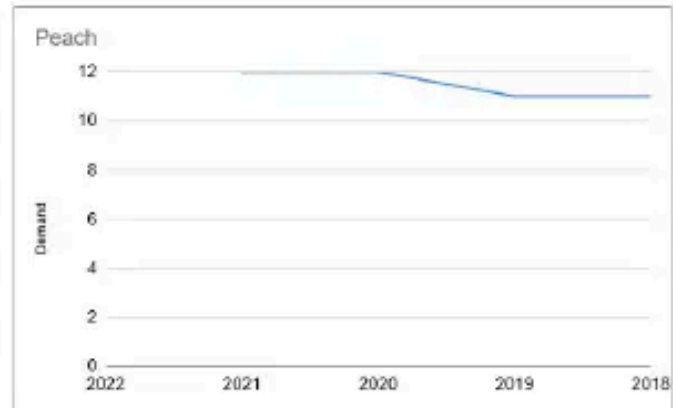
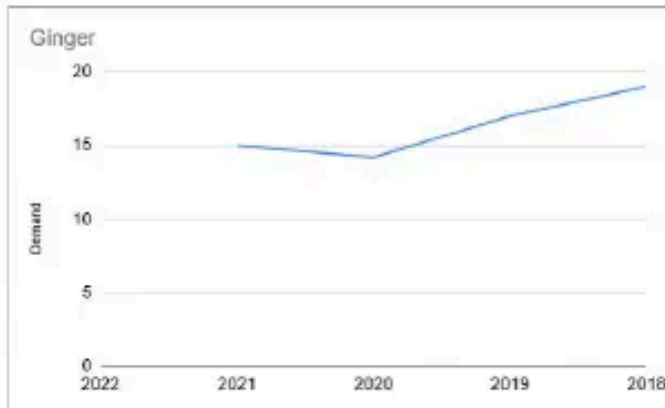
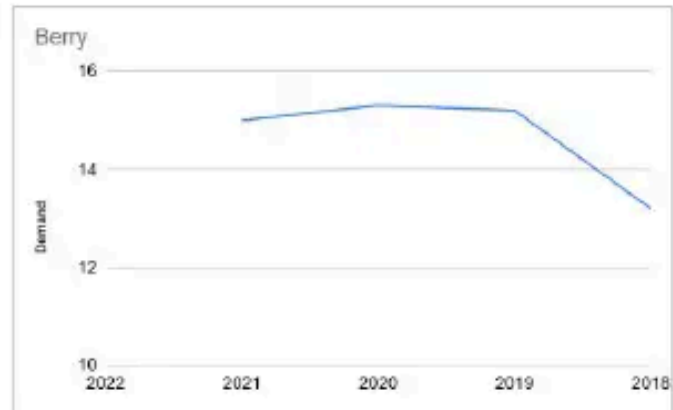
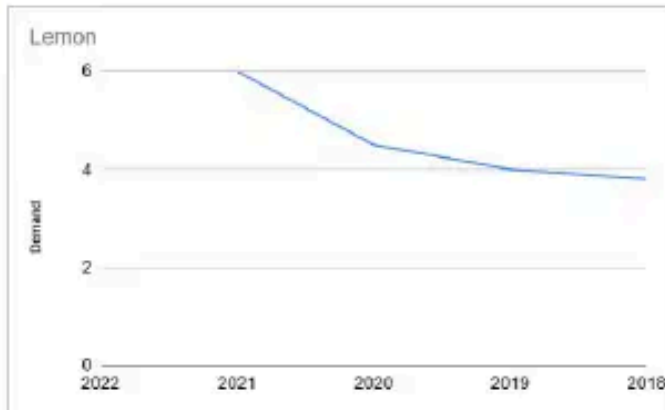




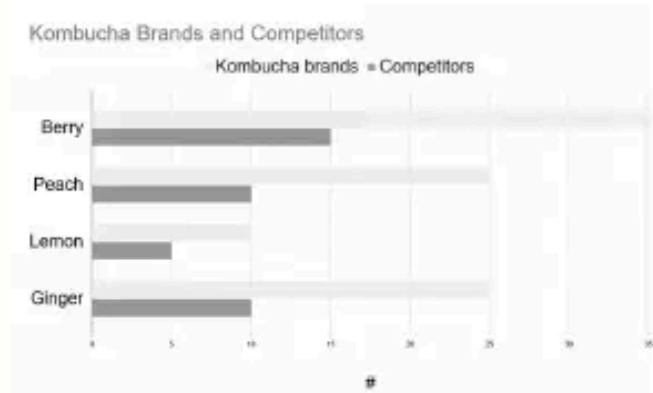
Exhibit: 2



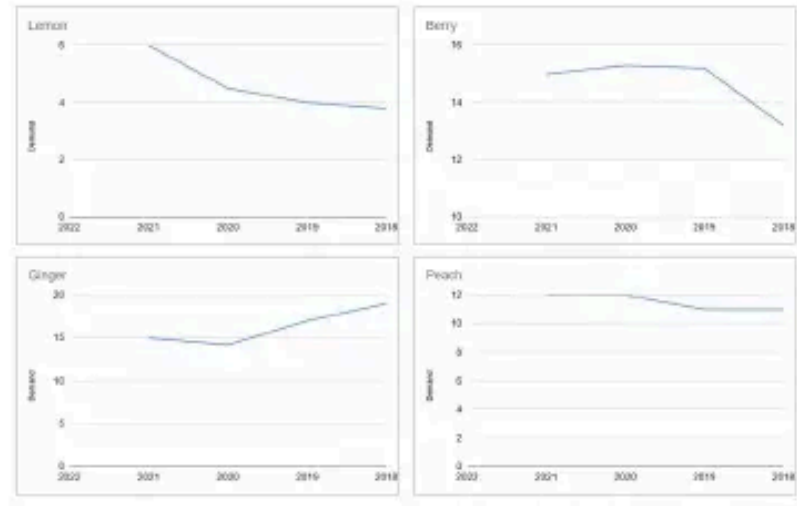


Analysis

Interviewer Exhibit Guidance



Don't let them take long on this one. They should notice that Lemon has the least competition, and the best ratio of brewers:brands indicating most breweries haven't invested heavily in this category



Candidate should identify that demand for Lemon is increasing at the highest rate of the four.

These charts are designed to be a mess. Year dates are reversed, scale of demand is deliberately misleading. The chart for Ginger is designed to trick unwary candidates into thinking demand is growing



Analysis

Question 1: "What must be considered when entering the EU, and France specifically?"

- Internal factors: Cash on hand for startup costs, knowledge of the EU/French market, marketing strategy
- External factors: Competition, barriers to entry, distribution channels, tariffs, regulatory concerns, converting a traditional wine culture into a more craft kombucha-oriented culture, shipping costs if brewed in the US, costs if brewed locally in the EU, US price points vs. French price points, added costs to expand the supply chain (more perishable ingredients, bottles, packaging, etc.)
- Other: Consumption habits and health trends in France/EU, USD to Euro conversions and volatility, etc.

Question 2: "What product should the client launch in France?"

(Lemon is the correct answer. If they recommend one of the others, ask leading questions and push them to consider the low competition and high growth rate for Lemon)

Question 3: "The CEO has made the decision to move forward with Lemon, and we want you to analyze two methods of market entry. Should the client brew locally then export to France, or should they establish brewing in the EU directly, which Spain being a viable option for citrus based products?"

(see next page of demand info and costs associated with each option. Only provide the data that the candidate requests. Encourage candidate to do their math using sixpacks as the unit)



Analysis

Only share if the candidate asks. If they forget to ask about anything from the list below, push them to think about what factors they might be missing.

Demand Data:

- Demand in year 1 is estimated to be equivalent to 1000 barrels
- Retail Price is \$10 per sixpack
- 300 bottles worth of beverage fit in 1 barrel

Import from US option:

- Cost of brewing: \$.25 per bottle
- Cost of shipping: \$.75 per bottle
- Tariffs/fees for a 6 pack: \$2 per sixpack

Brew in Spain option:

- Cost of brewing: \$.50 per bottle
- Cost of shipping: \$.50 per bottle
- Annual cost to lease any/all PPE for Spanish brewery: \$100,000



Calculations

Demand Data:

- $1000 \text{ barrels} * 300 \text{ bottles} = 300\text{k bottles} = 50\text{k sixpacks}$
- $50\text{k sixpacks} * \$10 \text{ retail} = \$500\text{k Revenue}$

Import from US option:

- $(\$0.25 \text{ brewing} * 6 \text{ bottles}) + (\$0.75 \text{ shipping} * 6 \text{ bottles}) + (\$2 \text{ tariff per sixpack}) = \text{costs of } \$8 \text{ per sixpack}$
- $\text{Total cost is } \$8 * 50\text{k sixpacks} = \$400\text{k}$

Brew in UK option:

- $(\$0.50 \text{ brewing} * 6 \text{ bottles}) + (\$0.50 \text{ shipping} * 6 \text{ bottles}) + (\$100\text{k PPE} / 50\text{k sixpacks produced}) = \text{costs of } \$8 \text{ per sixpack}$
- $\text{Total cost is } \$8 * 50\text{k sixpacks} = \$400\text{k}$



Conclusion

Recommendation:

- Enter the French Market with Lemon as the first product
- No right or wrong answer for production location. Candidate should recommend whichever option they think has less risk, and justify this choice.

Note: Despite the costs ending up similar, push the candidate to choose a manufacturing option and stick with it using qualitative information to back it up. Come interview season candidates should have an open mind but have a clear & definitive recommendation. As you the interviewer you may want to push back on the candidates answer to test their ability to stay cool under pressure.

Risks

- Brewery rental costs in Spain are very cheap. Will they increase in the future?
- Import duties may change as the political situation updates: if France or Spain were to leave the EU, costs may become prohibitive

Next Steps

- No right or wrong answers
- Implementation strategies, market tests, marketing campaigns



Behavioral

Tell me about a time your team disagreed with your idea. (respond in STAR format)

Prompt

Your client, Chris' Clothes, is a retailer that sells casual clothes such as t-shirts and jeans through several channels. Channels include branded retail stores, third-party department stores, and their brand's ecommerce website. Although Chris' has been a popular brand for most of the past two decades, it has seen declining margins in the last few years. The CEO has asked you to help her understand why profitability has declined, and determine what Chris' should do moving forward.

DESCRIPTION & Interviewer Notes

This case is complex, and the interviewer should read it carefully ahead of time to understand the premise.

This case primarily tests a candidate's analytics and math. Focus on whether the candidate can conclude that the client's profitability issue is due the recent opening of unprofitable stores in less desirable locations.

ADDITIONAL INFORMATION (IF ASKED)

- Areas served: United States
- Products sold: Casual clothes such as T-shirts and jeans. Think H&M.
- Locations: 100 retail stores, 1 ecommerce website, and an ever-changing number of wholesale partners.
- Customer profile: Think H&M. No data available.
- Competitors: Think H&M. No data available.



Analysis

The candidate should begin by developing a framework that includes the following, at a minimum:

- **Profitability:** Examine revenues (price * volume) and costs (fixed costs and variable costs) to determine the cause of declining margins. This can include a consideration of Chris' product line, changes in customer tastes, revenues and costs by channel, and its value chain.
- **Competitors:** The candidate should indicate that we need to benchmark against the client's competitors to understand where it may have fallen behind the curve.

Part 1: Identifying the need to examine profitability

- If the candidate does not bring up revenues and costs after 1-2 minutes, guide him/her to ask about them. Once the candidate does, provide **Exhibit 1** and ask what they observe.

Part 2: Exhibit 1 walk-through. Identifying that costs are the issue

- If the candidate focuses on:
 - The website or wholesale business: Dismiss the notion by asking whether those are significant portions of the business (they are not).
 - Sales volume: Dismiss the notion by asking why he/she is focusing on sales since they're increasing.

Key Insight: If the candidate is unable to identify that retail costs have grown twice as quickly as retail sales in the last five years, guide the candidate to compare growth in sales and growth in costs. Retail costs have grown by 20% ($(\$300M - \$250M) / \$250 = 20\%$) while retail sales have only grown by 10% ($(\$550M - \$500M) / \$500M = 10\%$).

- Once the key insight is reached, ask the candidate what the causes of this could be. Push the candidate several times to think of different possible reasons (to test the candidate's ability to think under pressure).
- Ask the candidate what data he/she would want in order to dig deeper into the retail cost issue.
- If the candidate does not ask for revenue and cost data for the retail stores, guide him/her to do so. Once the candidate does, provide **Exhibit 2**.



Analysis

Part 3: Exhibit 2 walkthrough. Identifying that recently-opened stores are the issue. Encourage the candidate to walk you through the graph. If asked, clarify that this data is for Chris' 100 stores and that the figures are annual.

Key Insight: If the candidate is unable to identify that recently-opened stores (those opened within the last 5 years) are the cause of declining profits, ask what kind of stores seem to have the lowest margins. The candidate should realize that the stores opened within the last 5 years have the lowest margins.

- Once the key insight is reached, ask the candidate what the causes of this could be. Push the candidate several times to think of different possible reasons.
- Ask the candidate if he/she has any ideas on what the client can do to solve the profitability issue. Push the candidate to think of as many ideas as he/she can (keep asking "what else?"). If the candidate does not include a suggestion to close less profitable stores, guide the candidate to do so after several attempts. Then, ask what considerations the client should take into account when going through the process of closing stores.



Exhibit:1

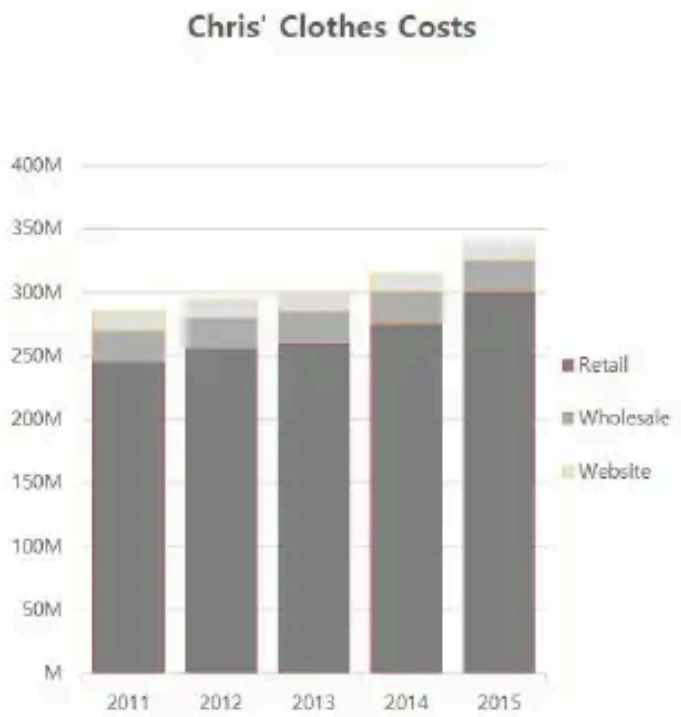
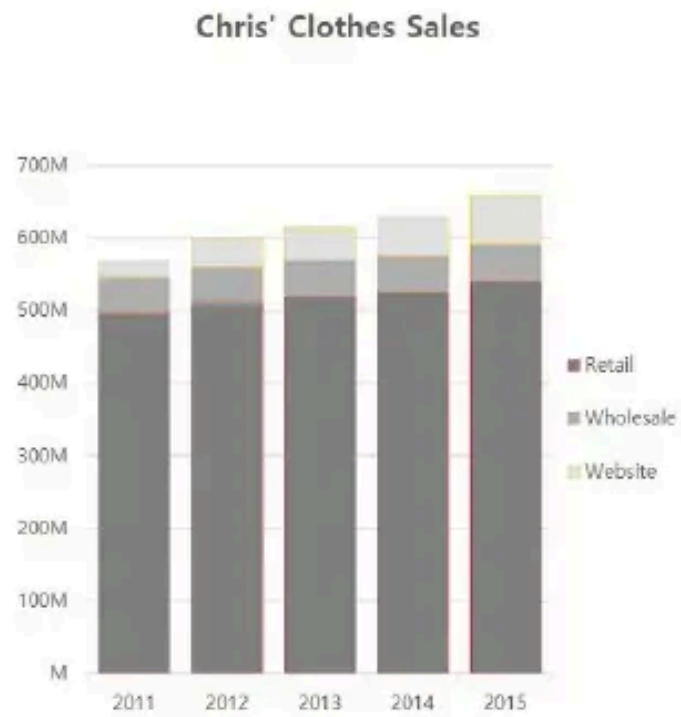
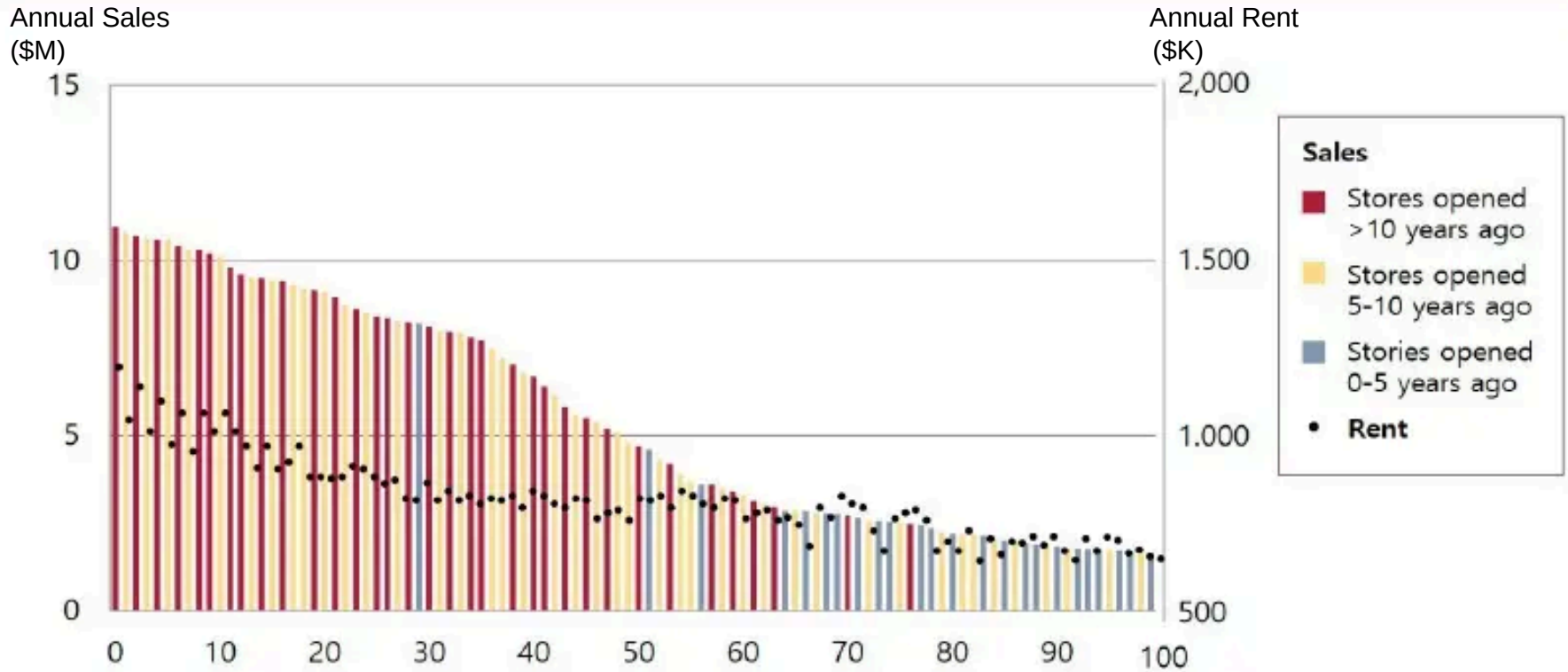




Exhibit: 2



100 store locations, arranged by sales revenue



Analysis

Part 4: Quantitative Test

•Tell the candidate that Chris' has three main types of stores that appeal to different customer segments. Type A stores have the highest quality products and highest prices, followed by Types B and C. There are also a few flagship stores. Provide the following information all at once:

- Annual sales per store: Type A: \$9M; Type B: \$5M; Type C: \$2M
- Annual COGS per store: Type A: \$5M; Type B: \$3M; Type C: \$1.5M
- Annual cost of rent per store: Type A: \$800K; Type B: \$700K; Type C: \$600K

Tell the candidate that the client has identified 40 less profitable (or unprofitable) Type C stores that can be closed without incurring significant one-time closing costs. Ask the candidate to calculate the impact of the closures on the client's annual profits. Also indicate that the client expects that 60% of the annual sales of each closed store are expected to continue to be made at a nearby store (basically, 60% of sales will continue to be bought each year by customers that travel to another location to make their purchase).

If needed, guide the interviewer through the calculations:

- Cost Savings: $\$600\text{K}/\text{store in annual rent} \times 40 \text{ stores} = \$24\text{M}$
- Loss of 40% of Purchases (since 60% of purchases will continue to be made at other stores):
- $\$2\text{M annual sales} - \$1.5\text{M annual COGS} = \$500\text{K annual profits}$, then
- $\$500\text{K} \times 40\% \text{ lost} = \$200\text{K in lost profits}$, then
- $\$200\text{K} \times 40 \text{ stores} = \$8\text{M}$
- Total Impact: $\$24\text{M in savings} - \$8\text{M in lost profits} = \$16\text{M}$

After the candidate completes the calculation, ask if closing the stores seems like a good idea. A good candidate will observe that the \$16M in savings is about 6% of the client's annual profits (a quick glance at Exhibit 1 reveals a profit of \$250M (\$550M in revenues - \$300M in costs)).



Conclusion

Recommendation:

- Close 40 Type C stores
- Alternative: If candidate wants to recommend changing the 40 Type C stores into higher performing locations, make them justify their answer with specifics.

Risks:

- Closing 40 out of the client's 100 retail stores would significantly reduce its brick & mortar presence. Client could suffer from decreased exposure to potential customers
- This strategy only increases total profits by 6%

Next Steps:

- Perform a more detailed analysis of both the short-and long-term impacts of closing the 40 stores
- Perform an analysis of why the recently-opened stores are not doing well, and explore ways to make them profitable (i.e. management changes, adjustment to product mix to better align to customers in those stores' locales)



Behavioral

What accomplishments have given you the greatest satisfaction?

Prompt

Our client, Motel 5, provides customers with affordable lodging for travelers. For the past 3 years, Motel 5's profit margins have been decreasing. Our client has asked you to determine why its profit margins have declined over the past three years and how to improve this issue.

DESCRIPTION &
Interviewer Notes

This requires the candidate to first identify the cause for the decline in profit margin, then to seek a resolution.

ADDITIONAL INFORMATION
(IF ASKED)

(if not asked for, share the information once they have exhausted their questions):

- The overall industry has not suffered a decline
- There are 120 Motel 5 locations across Southern California
- There are 3 types of locations based on proximity (Beach, Freeway, Mid-City)
- Motel 5 wants to increase profits by \$1M in the next year
- The company has raised the nightly price of their motels to counteract rising rent costs at their properties (up ~\$3M over the last 3 years)
- Variable costs have remained stable and are not a major concern for the client.
- Financial information: give candidate **Exhibit 1** and **Exhibit 2**. After presented with the data, they can take a few minutes to sift through it to identify the problem and then be prompted to offer solutions.



Exhibit: 1

# of Locations	
Beach	24
Freeway	54
Mid City	42

Motel Prices (Per Night)			
Location	2017	2018	2019
Beach	\$70	\$75	\$75
Freeway	\$65	\$65	\$70
Mid City	\$55	\$65	\$70
(Note: Prices have increased to account for property rent increases)			

Occupancy Rate				
Location	2017	2018	2019	
Beach	85%	80%	82%	
Freeway	85%	85%	80%	
Mid City	90%	75%	65%	

Note: All Motel 5 locations have 50 rooms.



Exhibit: 2

Motel Revenue by Type of Location

Location	2017	2018	2019
Beach	\$26,061,000	\$26,280,000	\$26,937,000
Freeway	\$54,448,875	\$54,448,875	\$55,188,000
Mid City	\$37,941,750	\$37,366,875	\$34,875,750

Condensed Financial Statement

	2017	2018	2019
Revenue	\$118,451,625	\$118,095,750	\$117,000,750
Costs	\$99,872,489	\$101,578,229	\$102,898,334
Profit	\$18,579,136	\$16,517,521	\$14,102,416
(note: Costs are expected to stay flat from 2019 to 2020)			



Analysis

The candidate should combine information from questions asked in their framework with the data in the two exhibits. This should bring them to the conclusion that increasing prices in the Mid-City motels has had an adverse effect on revenue and profitability, with the decreased occupancy rate. Once the candidate recognizes this, ask...

Question 1: "What are some ways Motel 5 can achieve their goal of increasing profit by \$1M?"

Potential Answers:

- Revert the Mid-City price to 2018 levels, which could potentially increase revenue by ~\$2.5M if able to recapture all customers. Even 50% recapture would see the company hit its goal, with costs expected to stay flat in the coming year.
- Keep prices where they are, but focus on marketing tactics that could drive more customers in the Mid-City motels. If they bring up this options, ask them to list as many marketing ideas as they can think of. Then press them for even more ideas.
- Focus on cost reduction, despite the client's insistence that variable costs are not a major issue. According to the data and information, variable costs have remained stable despite lower overall hotel occupancy. This could also include closing some Mid-City locations, or attempting to negotiate lower rent on the motel properties.



Conclusion

Recommendations:

- The best solution to the client's problem involves a way of putting numbers behind ideas. The candidate's recommendation should include discussion of the financial data and how it relates to the client's goal of increasing profit by \$1M in 2020. This can be done by discussing the drop in profits, increase in costs (due to higher rent), or stable variable costs despite a decrease in occupancy.
- The case is meant to have an overwhelming amount of data all presented at once. A good candidate will identify which information is most important and organize it in a way that presents the problem and potential solutions.

Risks:

- Depending on the candidate's recommendation, risks should include barriers to the client hitting their goal.

Next Steps:

- Should include ideas of how to communicate changes to customers that Motel 5 has lost over the last few years.
- If the candidate chooses to revert prices, they should discuss the risk that occupancy rates might now increase and what steps can be taken to mitigate that risk and win back customers.



Behavioral

Why are you interested in the consulting industry?

Prompt

Our client, Fresh Basket, is a multinational food company. They have multiple lines of products in various geographic locations, and their sales and profit margins are considered good by industry standards. However, they wish to explore if they can increase the profitability of the company from the existing lines of business, and in the geographies in which they are already present.

DESCRIPTION & Interviewer Notes

This is an interviewer led case.

No math, and exhibits are critical.

ADDITIONAL INFORMATION (IF ASKED)

Market Dynamics:

- The growth in wholesale food segment typically keeps pace with the GDP in most economies.
- This market also has high entry barriers as brand, distribution network and production require significant time and capital investment.

About the client:

- Fresh Basket has a varied range of products across the high end and the low end of the spectrum.
- Hotels and restaurants are their primary customers.

Competition Dynamics:

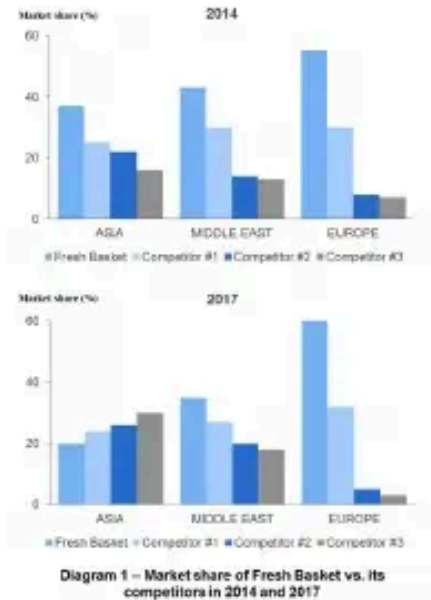
- The company primarily operates in three regions - Europe, Middle East, and Asia.
- There is competition in each of these regions. In most cases the market is fragmented or at least is a duopoly.



Analysis

Share **Exhibit 1**

Question 1: “What major factors can be inferred from this data?”



The following information can be inferred from Exhibit 1:

- The business seems to have significant economies of scale. This would explain the increase in market share in Europe, as well as the decrease in market share in Asia and Middle East.
- The drop in market share in Asia could possibly be because of the fact that Asia has several fast growing economies. The market is still evolving with a loss leadership strategy being played out by new entrants.

Key insight

- Fresh Basket is the market leader in Europe and has consolidated its market share further from 2014 to 2017. It is likely that competition would be less intense in this region as the competitive dynamics have already been established. Fresh Basket is likely to have a significant cost advantage over others due to economies of scale.
- The above information, if viewed with the lens of increasing profitability, would lead us to the conclusion that Fresh Basket could potentially become a price leader in Europe and would be able to influence the prices in the region.



Exhibit:1

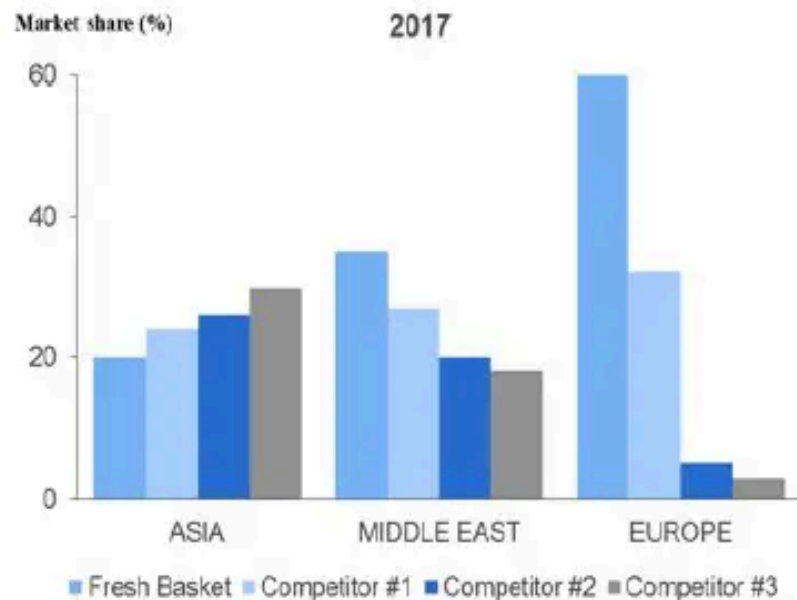
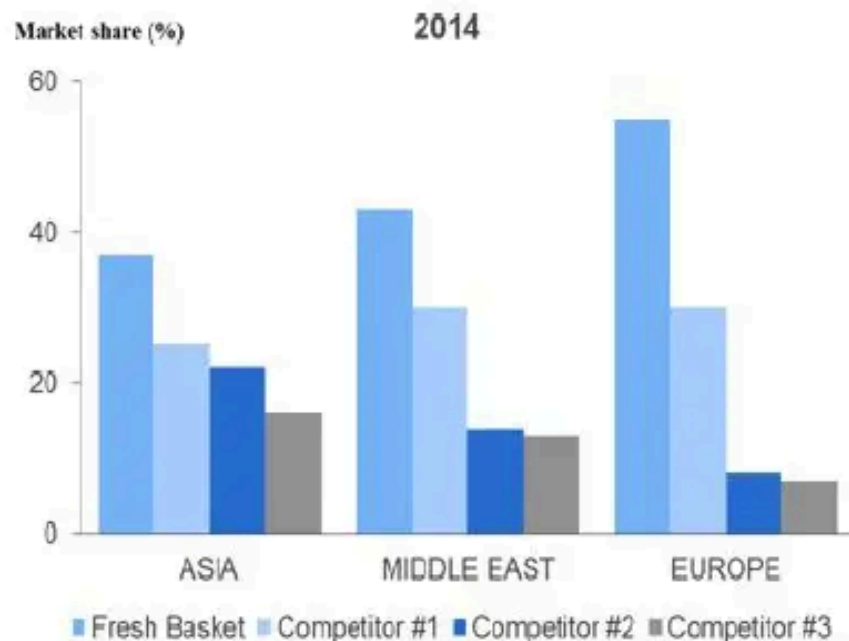


Diagram 1 – Market share of Fresh Basket vs. its competitors in 2014 and 2017





Analysis

Share **Exhibit 2**

Question 1: "What insights can be inferred from this chart?"

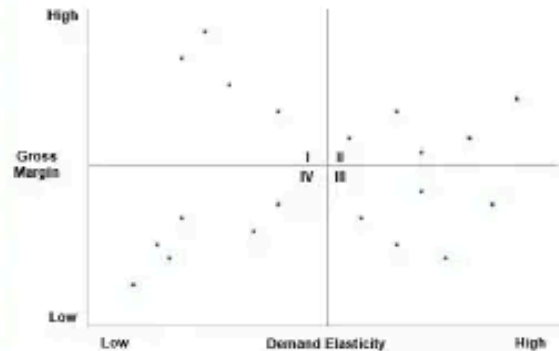


Diagram 3 – Gross Margin vs. Demand Elasticity for Fresh Basket's product lines

The following information can be inferred from Exhibit 2:

- The gross-margin vs demand elasticity relationship for Fresh Basket's product lines does not follow the negative linear curve.
- Quadrant I: The pricing strategy for the products in Quadrant I seems intuitive. Those products have low demand elasticity, therefore it makes sense that the gross margins for those products are high.
- Quadrant II: Although the demand elasticity is high, the margins have still been kept high. If the company were to reduce prices, there would be a significant increase in sales and the total profits would increase.
- Quadrant III: Similarly, the pricing strategy for the products in Quadrant III also seems intuitive. Those products have a very high demand elasticity, it seems prudent to keep the gross margins low and to maximize sales.
- Quadrant IV: For the products in Quadrant IV, the margins have been kept low, even though the demand elasticity is low. If the company were to increase margins and increase prices, it is unlikely to change sales and the total profits would increase.



Exhibit: 2

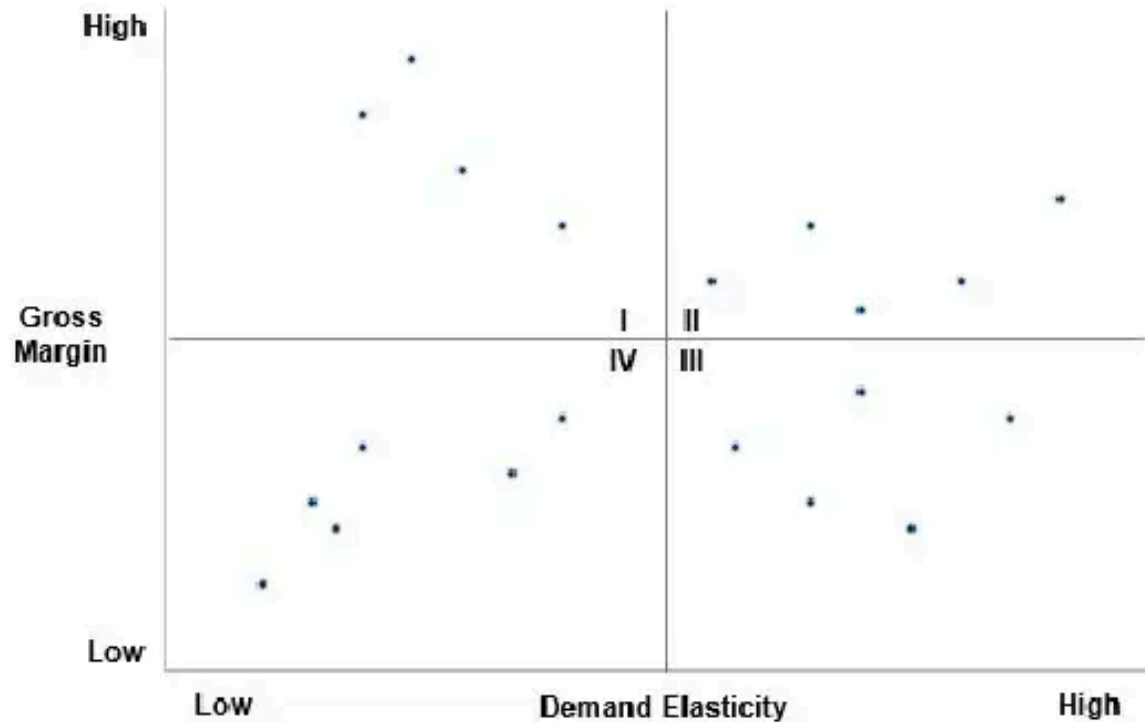


Diagram 3 – Gross Margin vs. Demand Elasticity for Fresh Basket's product lines



Conclusion

Recommendations:

- The candidate must cover the following key points in the conclusion:
 - The pricing strategy would be different for different regions keeping in mind the competitive dynamics. In Europe, for example, the company could act as the price leader as it has significant market share.
 - The pricing strategy for the products in Quadrant I and Quadrant III should be continued.
 - The prices for the products in Quadrant II should be reduced in order to increase sales.
 - The prices for the products in Quadrant IV should be increased in order to increase profit margins.

Risks:

- New market entrants
- Changing consumer preferences and elasticities

Next Steps:

- No right or wrong answers here



Behavioral

Give me an example of a time you influenced or persuaded a group

Prompt

Our client is a Korean conglomerate named Faval that has acquired a small San Diego based biotechnology firm. The biotech firm has developed a chemical that helps control the ripening of produce. After testing, this chemical appears to work especially well with apples: it allows apple orchards to harvest earlier in the season, and it improves the quality of the harvest in some specific ways. Faval would like to know if they should commercialize this chemical.

DESCRIPTION & Interviewer Notes

This is an interviewer led case that asks the candidate to size the market, then assess the profitability of the chemical.

Candidates should keep math organized and tidy.

ADDITIONAL INFORMATION (IF ASKED)

Client Characteristics

- Only concerned about a test-market in the state of California

Competitive Dynamics

- No other competitive products on the market currently

Local Industry Characteristics / Economics

- Growing at the rate of GDP

Product Benefits

- Reduced costs through earlier harvests
- Improved crop yields of “whole apples” sold in grocery stores
- Improves juiciness of “juicing apples” sold to juice manufacturers



Analysis

INTERVIEWER NOTE: This is an interviewer led case. Each question requires data that the candidate doesn't have yet (or wouldn't necessarily know to ask), so steer them towards asking for the right details if they are taking too long to think of it on their own. Q1 is about market sizing, Q2 is about costs. Q3 is about potential revenue increases, and Q4A & 4B are about profitability. The correct answers to the questions are on the following page.

Question 1: "How big (in \$) is the apple market in San Diego, and does this seem large enough to continue investigating this product?"
(information to provide when asked)

- San Diego has 200 orchards
- Average annual orchard revenue is \$30K / acre
- Average orchard has 100 acres of land
- Only 1 apple harvest per year

Question 2: "What are the cost savings per acre from using the chemical?"

(Information to provide when asked)

- The chemical allows the farmer to harvest 10 days sooner than usual
- It costs \$1.5K/night to maintain crops for 100 acre orchard

Question 3: "How much additional revenue per acre will the farmers be able to generate by using the chemical?"

(Information to provide when asked)

- Orchards use two types of trees: "whole apple" trees and "juicing apple" trees. 25% of orchard revenue comes from whole apple sales, and 75% from juice sales.
- The chemical improves "whole apple" orchard yields by 10%
- The chemical improves the juiciness of the "juicing apples": the amount of juice yield improves by 5%

Question 4a: "If the chemical production costs are \$100K per 200 acre farm, what price range (per acre), would be reasonable for the client to charge farmers for their chemical?"

Question 4b: "What should our client sell the product for?"

- If the candidate's suggested price is unreasonable, push back on them.



Calculations

Answers

Q1: Market Sizing

• $\$30\text{K per acre revenue} \times 200 \text{ orchards} \times 100 \text{ acres per orchard} = \$600\text{M (annually)}$. This is a significant market and warrants further investigation.

Q2: Cost Savings

• $\$1.5\text{K per day} \times 10 \text{ days} / 100 \text{ acres} = \text{savings of } \$150 \text{ per acre per year}$

Q3: Revenue Increase

- Improved yield: $25\% \times 10\% \times \$30\text{K per acre} = \$750 \text{ per acre per year}$
- Improved sweetness: $75\% \times 5\% \times \$30\text{K per acre} = \$1,125 \text{ per acre per year}$
- Total Revenue Increase: $\$750 + \$1,125 = \$1,875 \text{ per acre per year}$

Q4 a: Product Profitability

- Farmers' willingness to pay = $\$1,125 \text{ increased revenue} + \$150 \text{ costs savings} = \$2,025 \text{ per acre}$
- Chemical's production costs = $\$100\text{K} / 200 \text{ acres} = \$500 \text{ per acre}$
- Reasonable Price Range: Client won't sell chemical for less than $\$500 \text{ per acre}$, and farmers won't buy for more than $\$2025 \text{ per acre}$.

Q4 b: Suggested Price

- Make the candidate defend their suggested price point. The candidate should note that based on potential profit margins, there is a significant opportunity with this product. Their price should be high enough to create value for the client, but low enough to give farmers an incentive to buy the chemical.



Conclusion

Recommendations:

- Overall, our client should commercialize this chemical and price it at approximately \$1,000 per acre to make a 50% margin.
- Strong candidates need to address value-based pricing: the need to quantify added profits that our client's product will make for its clients and how much of that money our client can capture.

Risks:

- Differentiation: What the client's positioning?
- Environmental issues: Is there a risk of backlash and/or boycott from the general public? Could the U.S. government attempt to regulate our product?
- Operational reality check: Does the company have the resources to do this?
- Representativeness of test market: Does it cost less to cover apples in other states?

Next Steps:

- Patenting: Is the product already patented? If yes, then when does it expire? If no, then is it possible to patent? If not, then can we patent the manufacturing process?
- Strategic fit: Is this opportunity too small relative to the size of the client?

Winter Olympics



Behavioral

Tell me about a time you learned something you were curious about. (in STAR format)

Prompt

It is year 2024 and our client is a major US television network that is trying to figure out how much to bid for the 2030 Winter Olympics and has brought you into to help us figure out the right bid. The Winter Olympics are important to the network's prestige and will require a significant amount of capital to secure the rights. Before the network bids on the Winter Olympics, we want to make sure that we've considered all the right things.

DESCRIPTION & Interviewer Notes

This case asks the candidate to think about the many factors that contribute to the bidding process.

It focuses on finance components but leaves room for creativity in the conclusion of the case.

ADDITIONAL INFORMATION (IF ASKED)

Winter Olympics schedule is 16 days total

- Day 1 Friday is opening ceremony w/ 3 hours of programming from 8-11pm
- Day 2-15: Games –10 hours / day
 - Weekday (9-12, 2-5, 7-11)
 - Weekend (11am –9pm)
- Day 16: Closing ceremony w/ 3 hours of programming

Revenues

- No subscription revenue, but the network can keep 100% of advertising revenue
- Ad rates are \$400K / 30 second ad for primetime (M-F 7-11pm, all weekend) and \$200K / ad for non-primetime
- 10 minutes of ads per hour of Olympics coverage

Costs

- \$428M of total costs
- Opportunity costs for ads: \$1M / hour
- Time value of money: Discount rate (aka the cost of capital) is 12%
- 6 year lag for receipt of revenue. The current year is 2024 and the Olympics is 6 years away.



Calculations

INTERVIEWER GUIDANCE: This case is intended to be a stress test. Allow the candidate to do calculations from beginning to end but math MUST be understandable. If the math is messy, even if the final value is correct ask the candidate to explain the process from beginning to end before moving forward. If there are any calculation errors, allow them to struggle before just giving them the final number and moving on.

Calculate the revenue from broadcasting the Winter Olympics

- Primetime:
 - Weekdays (M-F): $10 \text{ weekdays} * 4 \text{ hrs/day} * 10 \text{ min/hr of ads} * 2 \text{ slots/min} * \$400\text{K/ad} = \$320\text{M}$
 - Weekends (S-Su): $4 \text{ weekends} * 10 \text{ hrs/day} * 10 \text{ min/hr of ads} * 2 \text{ slots/min} * \$400\text{K/ad} = \$320\text{M}$
- Non-Primetime:
 - Weekdays (M-F): $10 \text{ weekdays} * 6 \text{ hrs/day} * 10 \text{ min/hr of ads} * 2 \text{ slots/min} * \$200\text{K/ad} = \$240\text{M}$
- Opening & Closing Ceremonies:
 - $2 \text{ days} * 3 \text{ hrs/day} * 10 \text{ min/hr} * 2 \text{ slots/min} * \$400\text{K/ad} = \$48\text{M}$
- Total Ad revenue = $\$320\text{M} + \$320\text{M} + \$240\text{M} + \$48\text{M} = \$928$

Calculate the costs

- \$428M of total costs
- Opportunity costs = $[(2 \text{ days} * 3 \text{ hrs}) + (14 \text{ days} * 10 \text{ hrs})] * \$1\text{M/hr} = \$146\text{M}$
- $\$428\text{M} + \$146\text{M} = \$574\text{M}$

Calculate the NPV using the "Rule of 72"

- We know that the number 72 divided by the discount rate gives us the number of years to double our money
- Discount Rate = 12%, therefore the number $72 / 12 = 6$. 6 years until money is doubled
- $\$928\text{M revenue} - \$574\text{M costs} = \$346\text{M}$ in year 2030's gross profits. $\$346\text{M} / 2 = \$177\text{M NPV}$



Conclusion

Recommendation:

- While the NPV of the project is \$177M, the fact that there are other intangibles (new viewers, plugging our programs, and prestige) a reasonable bid could be over \$177M.

Good Conclusions

- While there is no one correct answer, most answers should be in the range of \$200M. If there is significant fluctuation from \$200M, the candidate will have to provide in-depth justifications and make a compelling argument.

Excellent Conclusions

- This case tests the candidate's comfort with numbers and understanding of how intangible factors may influence financial value. The bid process requires another level of understanding around game theory and what dynamics will ultimately determine the value of the bid beyond NPV.
- Ultimately, the best candidates will make a very strong argument using the facts provided and support their bid and explain why they moved their bid from the NPV figure.
- There is also a lot of room for creativity for the candidate to discuss other factors, including supplemental streams of revenue, intangible factors, and things to consider during the bid process.

Risks:

- Significant uncertainties
- High potential for added costs

Next Steps:

- Secure the capital needed for the bid amount



Behavioral

Tell me about something that is not on your resume

Prompt

Your client is HealthCo, a software company that has developed an innovative software solution for hospitals. The software is used for tracking patient outcomes and utilizes an extensive database and proprietary analytics to recommend treatments based on patient comorbidities (“comorbidities” is the technical term for when having one condition makes it more likely to have another condition. Example: diabetes and hypertension). HealthCo is preparing to go to market with their software and is seeking our advice on how to maximize revenue.

DESCRIPTION & Interviewer Notes

This case reflects the use of improved technology to increase revenue.

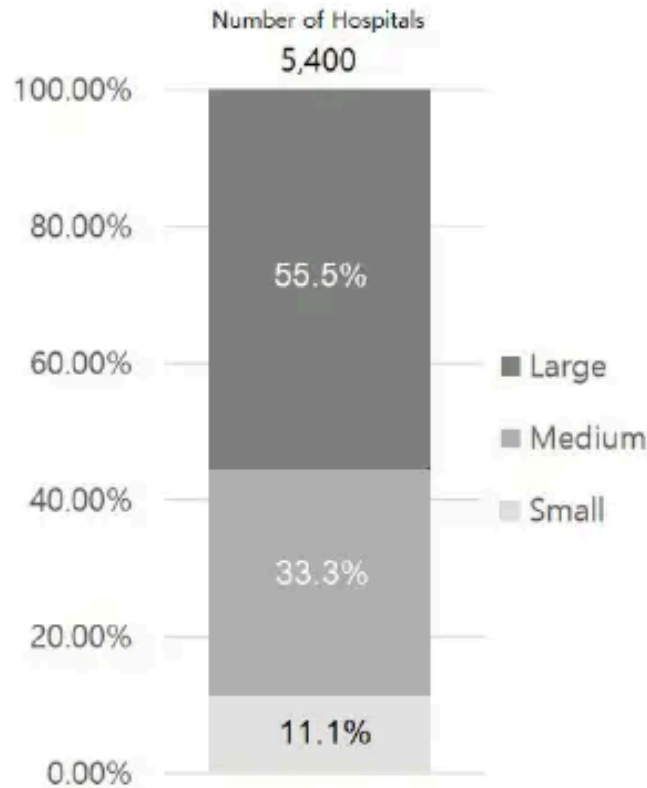
The candidate will explore the attractiveness of the software (based on price point) for different sized hospitals.

ADDITIONAL INFORMATION (IF ASKED)

- Software is provided to hospitals for a fixed annual fee, independent of the # of patients served or doctors using it. All clients pay the same fixed rate (no negotiations).
- Client is considering 3 different price points: \$150k, \$250k, and \$300k per year. They want to pick one price for their software and charge all hospitals the same price.
- Client is focused on maximizing revenue
- Software is patented and there are currently no competitors in the market
- Share **Exhibit 1** once they ask for specific details



Exhibit:1



Software is provided to hospitals at a fixed annual fee, independent of the number of patients served or doctors using it.

- Annual patients served per hospital type:
 - Small: 5,000 patients
 - Medium: 10,000 patients
 - Large: 15,000 patients
- Annual value of software to hospital per patient
 - Small: \$50/patient
 - Medium: \$30/patient
 - Large: \$10/patient
- Costs are based on a per-hospital basis



Analysis

Candidate should recognize that this is a Market Entry/Pricing case prompt. They should identify that pricing should be based on the value the software brings to the hospital.

A strong candidate will recognize that the value provided to the hospital will depend on the hospital size. In this case, the software provides less value to large hospitals because they see more patients and can use that sample size to recommend treatments without relying the client's software.

Calculation notes are on the next slide. The candidate should calculate the revenue generated at each of the three price points (\$150k, \$250k, \$300k).

- 150k: Small, Medium, & Large hospitals all purchase : $150k * 5400 = \$810M$
- 250k: Small and Medium hospitals purchase: $250k * (3000 + 1800) = \$1.2B$
- 300k: Only Medium hospitals purchase: $300k * 1800 = \$540M$



Calculations

Willingness to pay by hospital size	Small	Medium	Large
Patients per hospital	5k	10k	15k
Value per patient	\$50	\$30	\$10
Max willingness to pay	$5k * \$50 = \$250k$	$10k * \$30 = \$300k$	$15k * \$10 = \$150k$

	Small	Medium	Large	Total Revenue
Number of hospitals (5,400 total)	$55.5\% * 5400 = 3,000$	$33.3\% * 5400 = 1,800$	$11.1\% * 5400 = 600$	\$810M
Priced at \$150k	$3000 * \$150k = \$450k$	$1,800 * \$150k = \$270k$	$600 * \$150k = \$90k$	$450 + 270 + 90 = \$810M$
Priced at \$250k	$3000 * \$250k = \$750k$	$1,800 * \$250k = \$450k$	Unwilling to purchase	$750 + 450 = \$1200M$
Priced at \$300k	Unwilling to purchase	$1,800 * \$300k = \$540k$	Unwilling to purchase	$= \$540$



Conclusion

Recommendations:

- Price software at \$250k per hospital to achieve maximum revenue of \$1.2B
- An excellent candidate will note that the client's software value is significantly based on total number of users (multiple hospitals), and there are significant benefits of a network effect provided by a larger data set.
- There may be a possibility for a pricing increase after a large customer base is established.

Risks:

- Insufficient adoption –based on maximum willingness to pay
- Hospitals unable to achieve maximum value due to user error or overestimation of cost savings
- Software piracy

Next Steps:

- Hire and train a sales team
- Develop marketing pitch to demonstrate value for hospitals
- Develop software for other patient service institutions such as physical therapy, primary physicians, etc.



Behavioral	Tell me a joke. Any joke. (This is an actual question that comes up in interviews sometimes)	
Prompt	Your client is the CFO of Marshall Tech, a leading US telecom company. Marshall Tech has a reputation for innovative and high quality hardware products. The company is under investor pressure given underwhelming revenue forecasts, with analysts expecting significant changes announced in the next quarter. The CFO has identified multiple capital-intensive projects, but the company lacks cash to invest in any of these - what should she do?	
DESCRIPTION & Interviewer Notes	ADDITIONAL INFORMATION (IF ASKED)	
Finance and math are required. Candidate should be organized and clear in their objectives for the client.	Raising Funds: • Prompt the candidate to brainstorm ideas on raising capital to invest in the projects the CFO identified. This can include: • Raising debt • Issuing equity • Selling assets Lead the candidate towards suggesting divestment of a business unit, and then provide Exhibit 1 .	



Analysis

Question 1: "What are your thoughts based on Exhibit 1?"

- Video conferencing software has low growth, low revenue, is outside Marshall's specialization in hardware, and can be subject to high competition relative to the low specialization.

Question 2: "Marshall Tech retains a prominent investment bank that values the various business units. Any sale will fetch a 3.5x enterprise value to sales multiple. How much cash can the business raise?"

Answer: If asked about taxes, inform the candidate that the investment bank has structured this as a tax-free divestment. The candidate should be able to combine their findings from Exhibit 1 (divest Video Conferencing Software) with the above information provided to perform the following calculation: $\$5M \times 3.5 = \$17.5M$. The interviewer should identify that the \$17.5M can be used to fund projects the CFO has in mind.

Present **Exhibit 2**.

The interviewer should walk through the exhibit and identify how the \$17.5M can be spent . If asked, clarify that the NPV includes the capital investment.

Calculations to find best ROIs

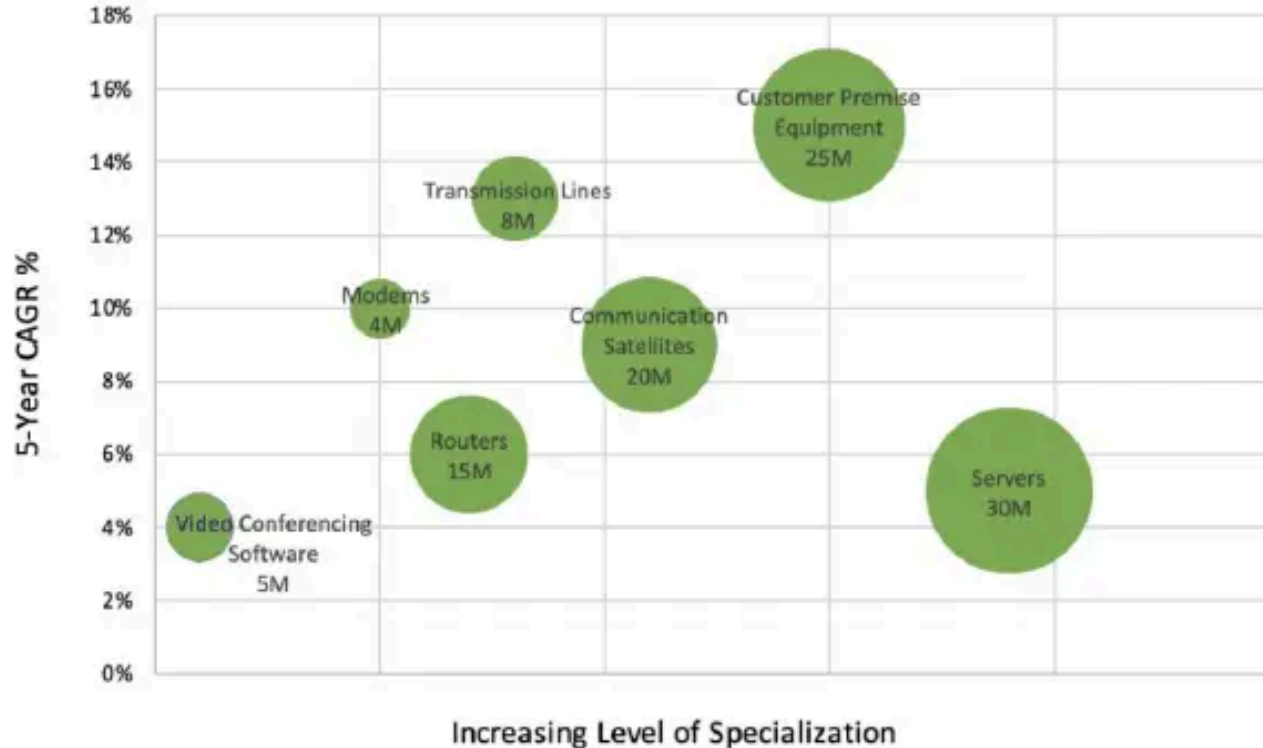
1. $\$15M / \$13M = 1.15$
2. $\$12M / \$8M = \mathbf{1.50}$
3. $\$9M / \$7M = 1.29$
4. $\$7M / \$4M = \mathbf{1.75}$
5. $\$4M / \$4M = 1.00$
6. $\$4M / \$3M = \mathbf{1.33}$

- Adding up projects 2, 4, and 6 gives us the highest NPV (\$23M) given our capital constraint of \$17.5M.
- A strong candidate will also have a recommendation for the remaining \$2.5M, i.e. share buy back, dividend payment, etc.



Exhibit:1

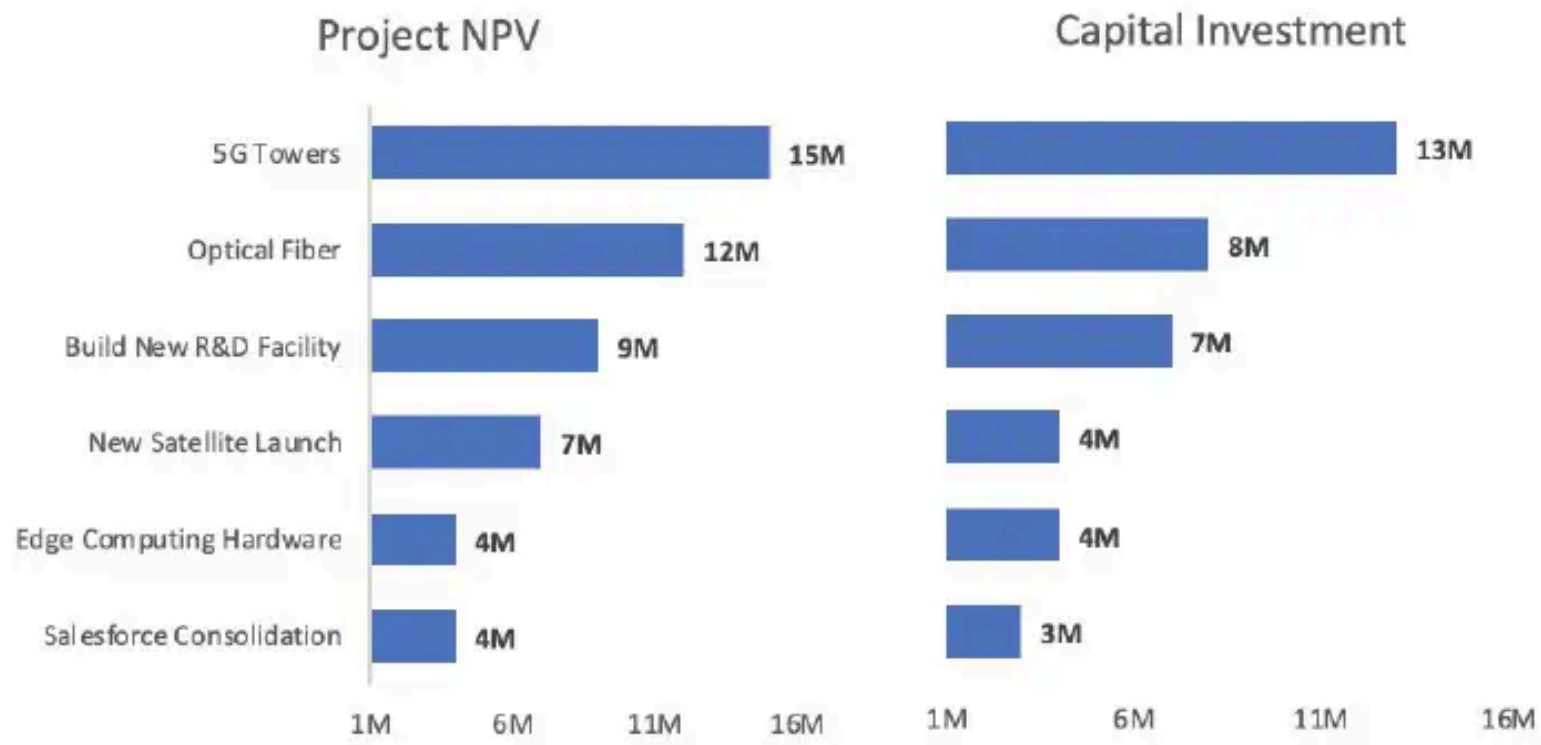
Marshall Tech Business Units



*numbers provided by business unit are annual sales.



Exhibit:2





Conclusion

Recommendations:

- Divest Video Conferencing Software division
- Invest in optical fiber, new satellite launch, salesforce consolidation
- Think of something productive to do with the remaining budget

Risks:

- Unexpected costs associated with divestiture
- Uncertainty of sale price prediction
- Uncertainty of NPVs for investments, potential for cost overruns

Next Steps:

- Prepare for divestiture
- Conduct additional research on new projects

Lighter Than Air



Behavioral

Tell me about a time your productivity was affected because of someone's mood. (STAR format)

Prompt

Your client Aerospace Co. (think of it as Lockheed Martin) is an American global aerospace, defense, security and advanced technologies company with worldwide interests. Aerospace Co.'s profits have declined in recent years. Headquartered in Bethesda, Maryland, in the Washington, DC, area, the company is one of the world's largest defense contractors based on revenues. As a clear market leader operating in the Aerospace & Defense industry, it has many patented high-tech products. The CTO of Aerospace Co. is evaluating an investment in a new technology: lighter-than-air (LTA) vehicles. Will an investment in LTA vehicles restore the client's profitability to previous levels?

DESCRIPTION & Interviewer Notes

This is a difficult case that is heavy on exhibits.

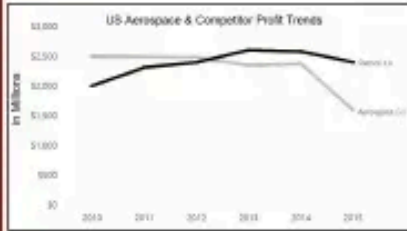
An excellent caser will be able to articulate what the next exhibit they want is, and why they want it.

ADDITIONAL INFORMATION (IF ASKED)

- A lighter-than-air (LTA) vehicle is an aircraft (the average density of the craft is lower than the density of atmospheric air) that gains its lift through the use of a buoyant gas. LTA vehicles include unpowered balloons and powered airships. LTA vehicles are mainly used in intelligence, surveillance and reconnaissance (ISR) or lift missions.
- The client is considering two different vehicle types. The vehicle types are called "Lift" and "ISR", and there are cost advantages to pursuing both programs. The client may choose to proceed with one, the other, both, or neither of the vehicle types.



Interviewer Guidance



New Technology Introductions	2012	2013	2014	2015
Aerospace Co.	3	4	4	5
Patriot Co.	2	2	1	0

Costs	ISR Vehicles	Lift Vehicles
R&D	\$100,000,000	\$80,000,000
Manufacturing (first 10 units produced)	\$80,000,000	\$60,000,000
Cost per vehicle (first 10 units produced)	\$8,000,000	\$6,000,000
Cost per vehicle (second 10 units produced)	\$7,000,000	\$5,500,000
Cost per vehicle (at additional units produced)	\$6,500,000	\$5,000,000
*If both vehicle programs are pursued, tech synergies will result in R&D savings of \$25m.		
Revenue	ISR Vehicles	Lift Vehicles
Expected Selling Price	\$10.2M per unit	\$24.1M per unit

1. Make them go quickly. They should note that Aerospace profits dropped in 2015.
2. Make them go quickly. They should observe the relationship between new tech and profitability.
3. They should note that Aerospace's costs are reasonable and that operational improvements are unlikely to produce the desired 750m in profits.
4. This is the largest part of the case. Steer the interviewer to consider breakeven points. The R&D synergies are irrelevant at this point, so don't let them waste time there.
5. Make them go quickly. 160 ISRs and 36 Lifts.

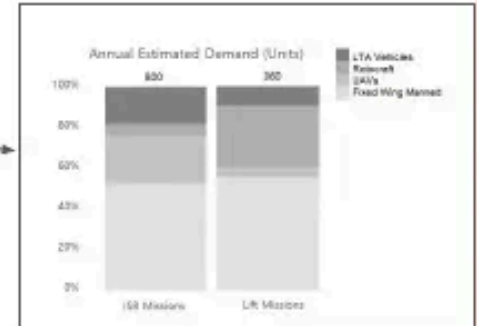
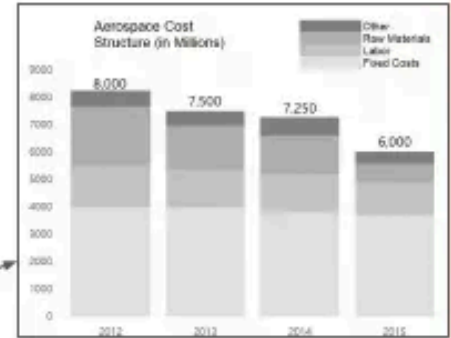




Exhibit:1

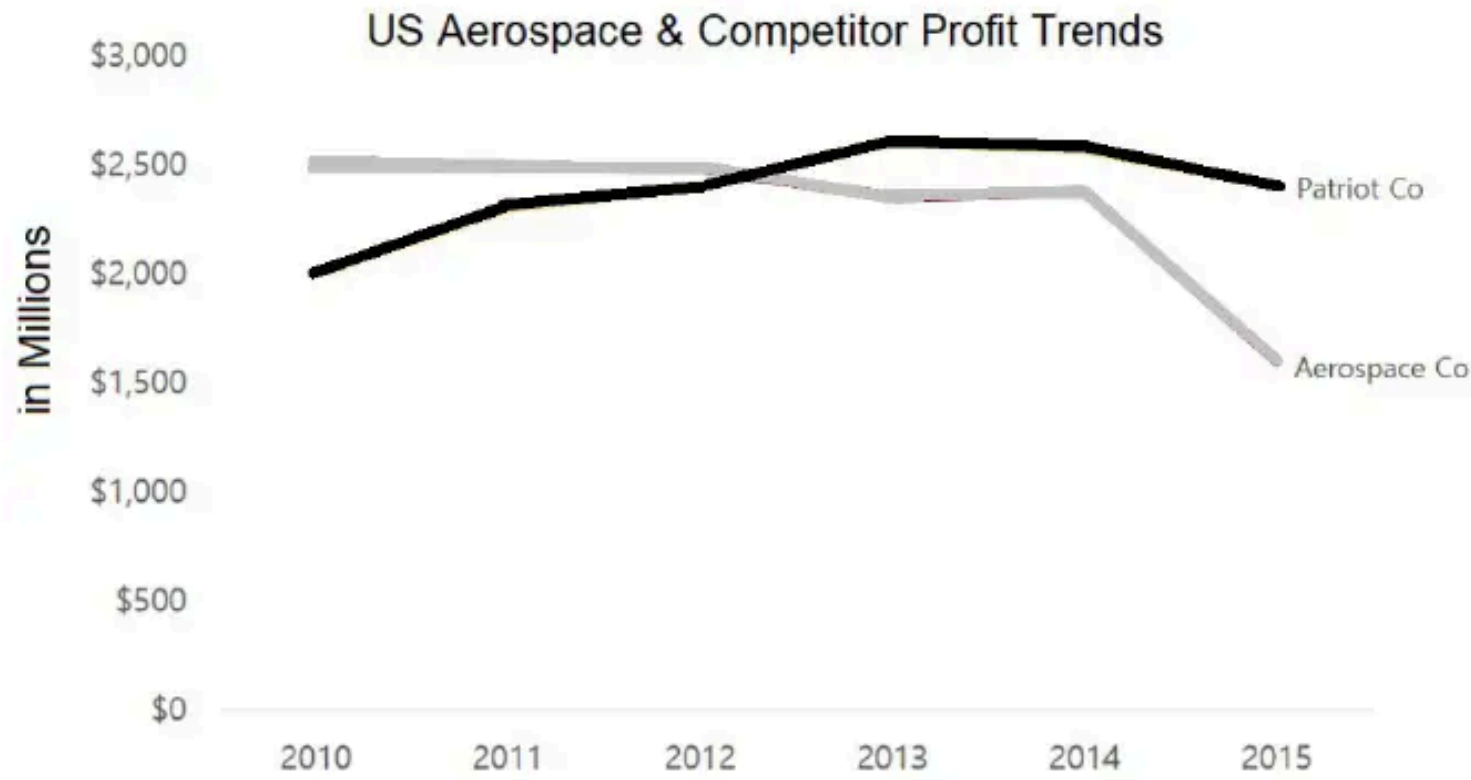




Exhibit: 2

New Technology Introductions	2012	2013	2014	2015
Aerospace Co.	3	4	4	5
Patriot Co.	2	2	1	0



Exhibit:3

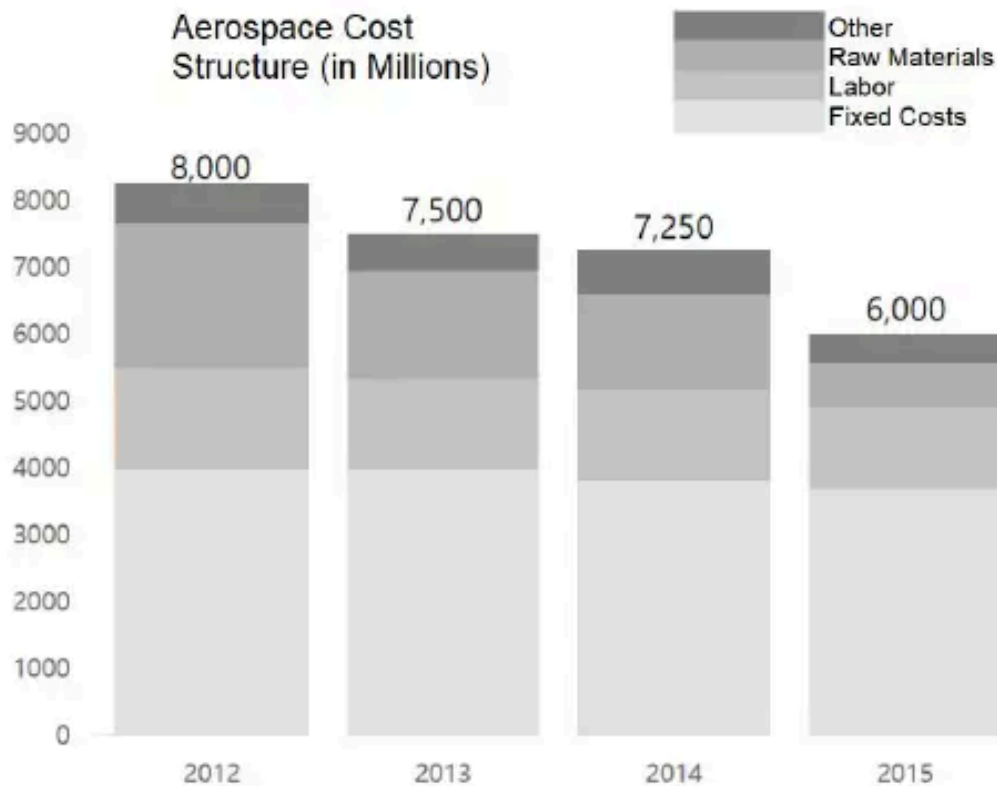




Exhibit: 4

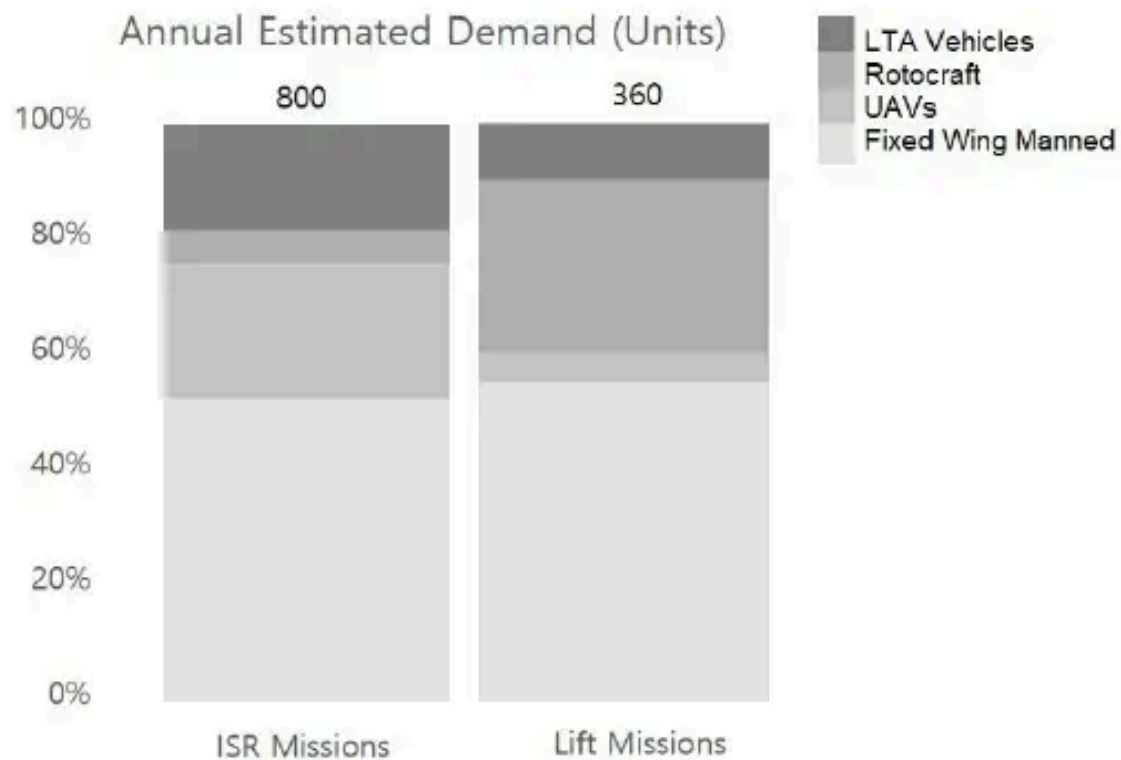
Costs	ISR Vehicles	Lift Vehicles
R&D	\$245,250,000	\$50,000,000
New facility investments	\$50,750,000	\$55,000,000
Cost per vehicle (first 10 units produced)	\$9,000,000	\$25,000,000
Cost per vehicle (second 10 units produced)	\$7,000,000	\$23,000,000
Cost per vehicle (All additional units produced)	\$6,500,000	\$21,000,000

*If both vehicle programs are pursued, tech synergies will result in R&D savings of \$25m.

Revenue	ISR Vehicles	Lift Vehicles
Expected Selling Price	\$10.2M per unit	\$24.1M per unit



Exhibit:5





Calculations

Analysis:

BREAK-EVEN POINT

ISR Vehicles

- Let the breakeven production volume be X
- Fixed costs = $\$245.25\text{M} + \$50.75\text{M} = \$296\text{M}$
- Variable costs = $(\$9.0\text{M} * 10) + (\$7.0\text{M} * 10) + (\$6.5\text{M} * (X-20)) = (\$6.5X + \$30)\text{M}$
- Total costs = $(\$6.5X + \$30)\text{M} + \$296\text{M} = (\$6.5X + \$326)\text{M}$
- Expected Revenues = $\$10.2\text{M} * X$
- Set up the breakeven equation: $6.5X + 326 = 10.2X$
- Solving for X, we get $X = 88.1 \approx 89$

Analysis:

BREAK-EVEN POINT

Lift Vehicles

- Let the breakeven production volume be Y
- Product costs = $(\$25.0\text{M} * 10) + (\$23.0\text{M} * 10) + (\$21.0\text{M} * (Y-20)) = (\$21Y + 60)\text{M}$
- R&D and facility costs = $\$50\text{M} + \$55\text{M} = \$105\text{M}$
- Total costs = $(\$21Y + 60)\text{M} + \$105\text{M} = (\$21Y + 165)\text{M}$
- Expected Revenues = $\$25.1\text{M} * Y$
- Set up the breakeven equation: $25.1Y = 21Y + 165$
- Solving for Y, we get $Y = 40.2 \approx 41$

Assuming full capture

ISR Vehicles

- Market Size: $20\% * 800 = 160$ units sold
- FC = $\$296\text{M}$
- VC = $\$9\text{M} * 10 \text{ units} + \$7\text{M} * 10 \text{ units} + \$6.5 * 100 = \$90\text{M} + \$70\text{M} + \$650\text{M} = \$810\text{M}$
- Total Costs = $\$296\text{M} + \$810\text{M} = \$1,106\text{M}$
- Revenue = $\$10.2 * 160 \text{ units} = \$1,632\text{M}$
- Profitability = $\$1,632\text{M} - \$1,106\text{M} = \$526\text{M}$

Assuming full capture

Lift Vehicles

- Market Size: $10\% * 360 = 36$ units sold
- FC = $\$165\text{M}$
- VC = $\$25\text{M} * 10 \text{ units} + \$23\text{M} * 10 \text{ units} + \$21 * 16 = \$250\text{M} + \$230\text{M} + \$336\text{M} = \$816\text{M}$
- Total Costs = $\$165\text{M} + \$816\text{M} = \$981\text{M}$
- Revenue = $\$25.1 * 36 \text{ units} = \$903.6\text{M}$
- Profitability = $\$903.6\text{M} - \$981\text{M} = -\$77.4\text{M}$



Conclusion

Recommendations:

- Invest in ISRs due to the ~\$500M increase in profitability.
- Do not invest in Lifts due to the ~\$75M decrease in profitability
- The potential R&D cost synergies of launching both vehicle types are not good enough
- A strong candidate will note that the client initially wants to obtain 750m in profit dollars and this is not feasible based on the information in the case. They can make a strong argument that ~500m from the ISRs is still worthwhile.

Risks:

- Assumes that market share can be captured
- Competitive response –what if Patriot Co. creates LTAs?
- Cost overruns, incorrect market assumptions, etc.

Next Steps:

- Identify new areas of potential investment

To Panda or Not to Panda?



Behavioral

Give me an example of a serious communication problem you've experienced. What did you do about it?

Prompt

A national zoo hires you to decide whether they should buy a panda. Should they, or should they not?

DESCRIPTION & Interviewer Notes

This is a McKinsey-style case, which is traditionally interviewer led. In these types of cases, the interviewer asks questions, after which the candidate is responsible for providing answers in an intelligent and structured manner.

ADDITIONAL INFORMATION (IF ASKED)

- The zoo is located in South America

The candidate should clarify/inquire early as to where the zoo is located. If this is not asked for, do not provide this knowledge. Not asking for this is a big error, as many of following questions will depend largely on where the zoo is located.

The candidate should treat this as a profitability/cost benefit type case, in which they will be weighing the cost of the Panda versus the benefits of the Panda.

Interviewer and candidate should have a lot of back and forth dialogue in this case. It should feel like a big brainstorming session. Good candidates will find ways to add structure within this format.

This case is intentionally ambiguous and has little information. It is designed to be a "breadth test" and also tests the candidate's comfort with not getting information.



Analysis

Question 1: "Please provide me your approach"

1. Candidate should identify that this is a tradeoff of cost versus additional revenue.
2. Candidate should offer at least 3 costs and 3 additional revenue sources
3. Candidate can also identify other factors, such as:
 - a. The zoo itself – existing animals, revenue streams, floor space, donors, location
4. Candidate should have customers and their preferences in the framework
5. Candidate can have competitors listed in their framework (if competitors have a panda)

Question 2: "What are some of the additional revenue streams the zoo can realize?"

1. Increased foot traffic. (This is important, and if candidate mentions this, ask them how they would project the increased amount of foot traffic after they have finished providing their revenue streams- Question 4)
2. Advertising
3. Donors (both new and more \$\$ from existing. if this is mentioned, ask them how they could raise money)
4. Merchandising (If this is mentioned, ask how they could project the increased merchandising spend)

To Panda or Not to Panda?



Analysis

Question 3: “What are some of the differences between having two pandas at the zoo or just one?”

1. One panda
 - a. Pros – Less upkeep, less risk, less space required means more room for other animals
 - b. Cons – May not live as long of a life if loneliness is a factor (hopefully candidate will get creative and have more ideas)
2. Two pandas
 - a. Pros – Offspring, may live longer due to not being lonely, may have more interactions that will excite the crowd, customers may prefer seeing more than 1 lonely animal
 - b. Cons – more upkeep, higher risk

Question 4: “If you were conducting customer surveys to see what they wanted, how would you administer the survey and what questions would you ask?”

1. Delivery method:
 - b. Existing Customers – app login upon entering zoo, QR code on ticket, some sort of in zoo promotion
 - c. Nearby Customers – (identify that you would target families or a demographic that would be likely to go to the zoo but has not yet), online methods, promotional methods/ raffle
2. Questions on survey
 - b. Questions should be structured in some way that respondents will need to assess between tradeoffs
 - c. A good question will not be binary in nature (ie: “Would you like to see a panda?”. If Candidate proposes this, ask them, “What if the survey came back and it was unanimous that customers wanted to see a panda?”)

To Panda or Not to Panda?



Analysis

Question 5: “What if we were choosing between 3 animals: a panda, an exotic bird, or a ferocious predator? How would you pick which one to invest in?”

1. Candidate should mention a similar cost benefit analysis on the predator and exotic bird
2. Customers surveys (if this is brought up, ask them how they would structure the survey. One question that should be included involves asking customers to rank their preference of animals)
3. At this point, further brainstorming should also take into account where the zoo is located. (ie: if the candidate knows that the zoo is in South America, an exotic bird may not be that alluring)

Question 6: “What are some risks associated with acquiring a panda?”

1. Animal rights groups could be very vocal about holding an animal captive
2. Animal could die, leading to bad press and ROI
3. Animal could be negatively impacted by its new environment
4. Political relationship with China: The Chinese government owns virtually all pandas, and considers them national property.



Conclusion

This case has no right or wrong answers.

Depending on the remaining time, have the candidate provide a formal recommendation, or simply end the case interview whenever it's convenient.

Appliance Alliance



Behavioral

Talk about an experience where you helped empower others. (candidate should answer in STAR format)

Prompt

Appliance Alliance (AA) is the 2nd largest manufacturer of appliances in North America. On a recent analyst call, AA's new CEO faced some pointed questioning from an analyst who suggested AA has sub-optimal margins in their dishwasher segment. The CEO wants to determine if there's an opportunity hiding within the analyst's questions.

DESCRIPTION & Interviewer Notes

This is a profitability case that focuses on the client's performance as compared to competitors.

The exhibits are meant to be dense, but make it clear where the profitability issues lie.

Candidate should offer an approach where they start by examining profitability of AA. Profitability should be compared to that of competitors.

ADDITIONAL INFORMATION (IF ASKED)

- AA makes other products (but candidate should only focus on the dishwasher segment)
- AA has manufacturing facilities in various parts of North America
- AA sells dishwashers at \$250 each, costs are \$222, and total volume is 7.2M dishwashers per year



Interviewer Guidance

When candidate mentions...

Benchmarking against competitors , hand them **exhibit 1**

- Takeaway: AA is indeed performing sub optimally when compared with competitors. This graph is confirmation of the analyst's assessment

Information regarding profitability , ask them what they want to explore first: revenues or costs. A strong candidate will mention exploring price first. (Ask them why - it is an easy metric to gather). Mention that there is no competitor pricing available, but then hand them **exhibit 2** (cost information)

- Takeaway: Candidate should immediately see that manufacturing costs are high

A further breakdown of manufacturing costs , hand them **exhibit 3**

- Takeaway: Plant overhead, raw materials, and labor are large components of manufacturing costs and further segmentation would normally be warranted
- Since there is no segmentation available, push the candidate to offer several hypotheses for why these costs may be high. Have them brainstorm until they consider that AA uses multiple production facilities.

Multiple manufacturing facilities , hand them **exhibit 4**

- Candidate should do math calculations to find the average costs per unit at each location.
- Math is as follows: $\text{annual plant cost} / \text{units produced} = \text{average cost per unit by plant}$
Cleveland: \$132/unit, Pittsburgh: \$177/unit, San Leandro: \$113/unit, Nashville: \$167/unit, Tallahassee: \$136/unit
Average unit cost for all five plants is \$147,



Exhibit:1

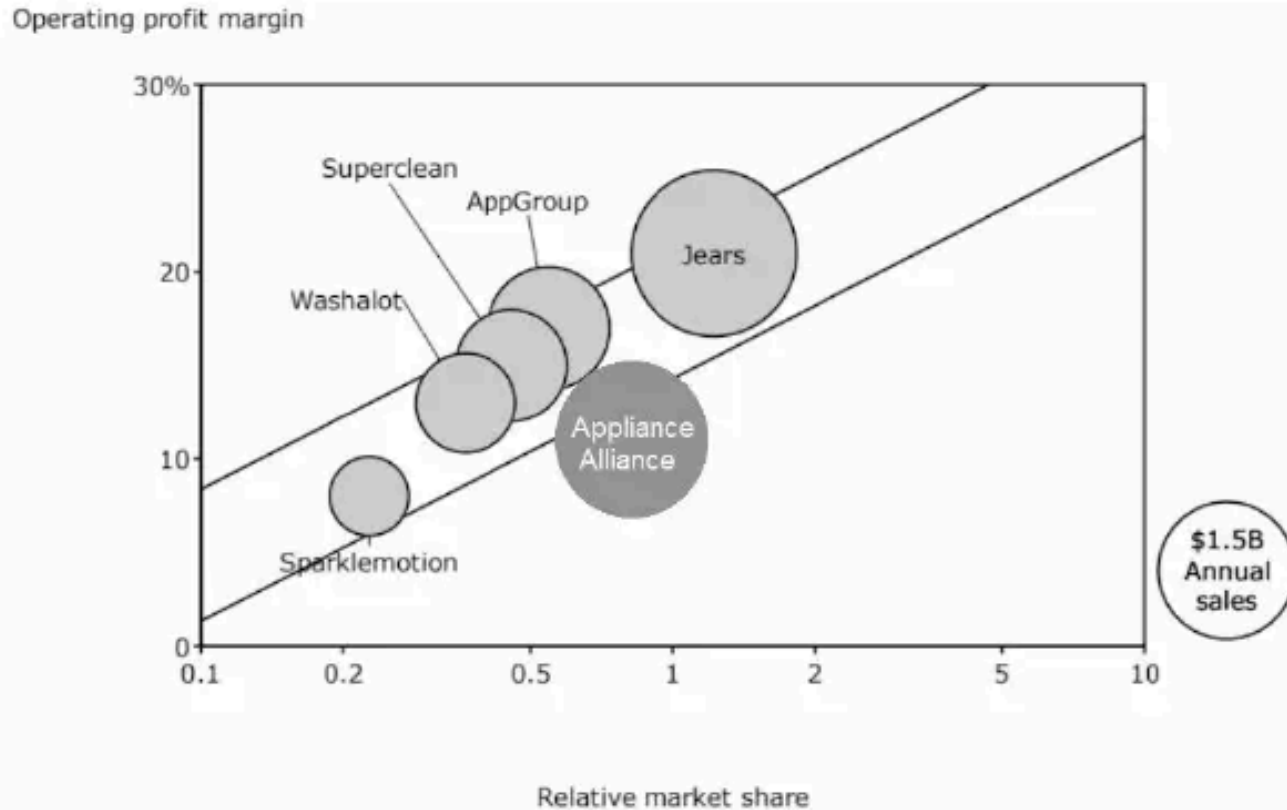




Exhibit: 2

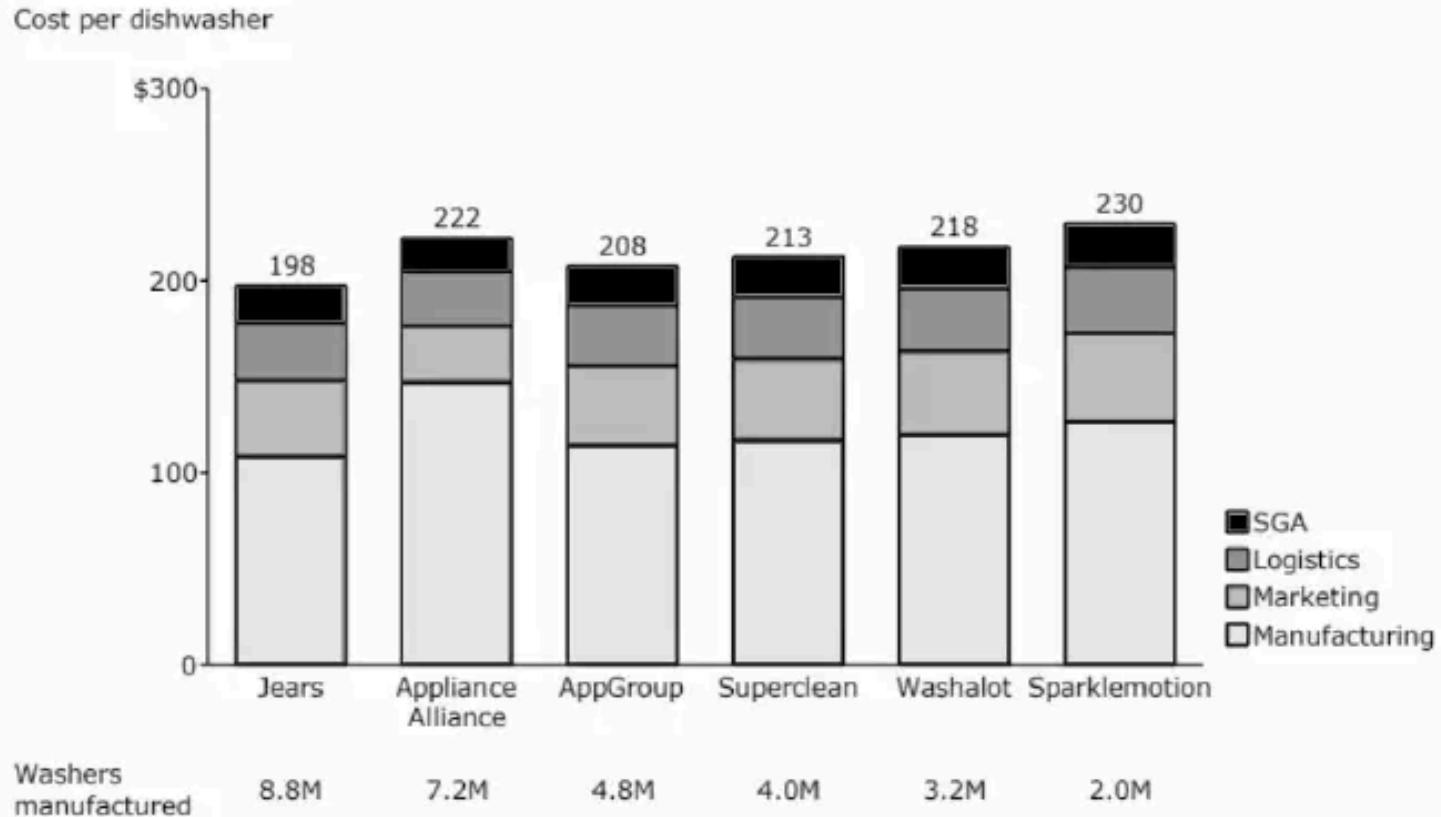




Exhibit:3

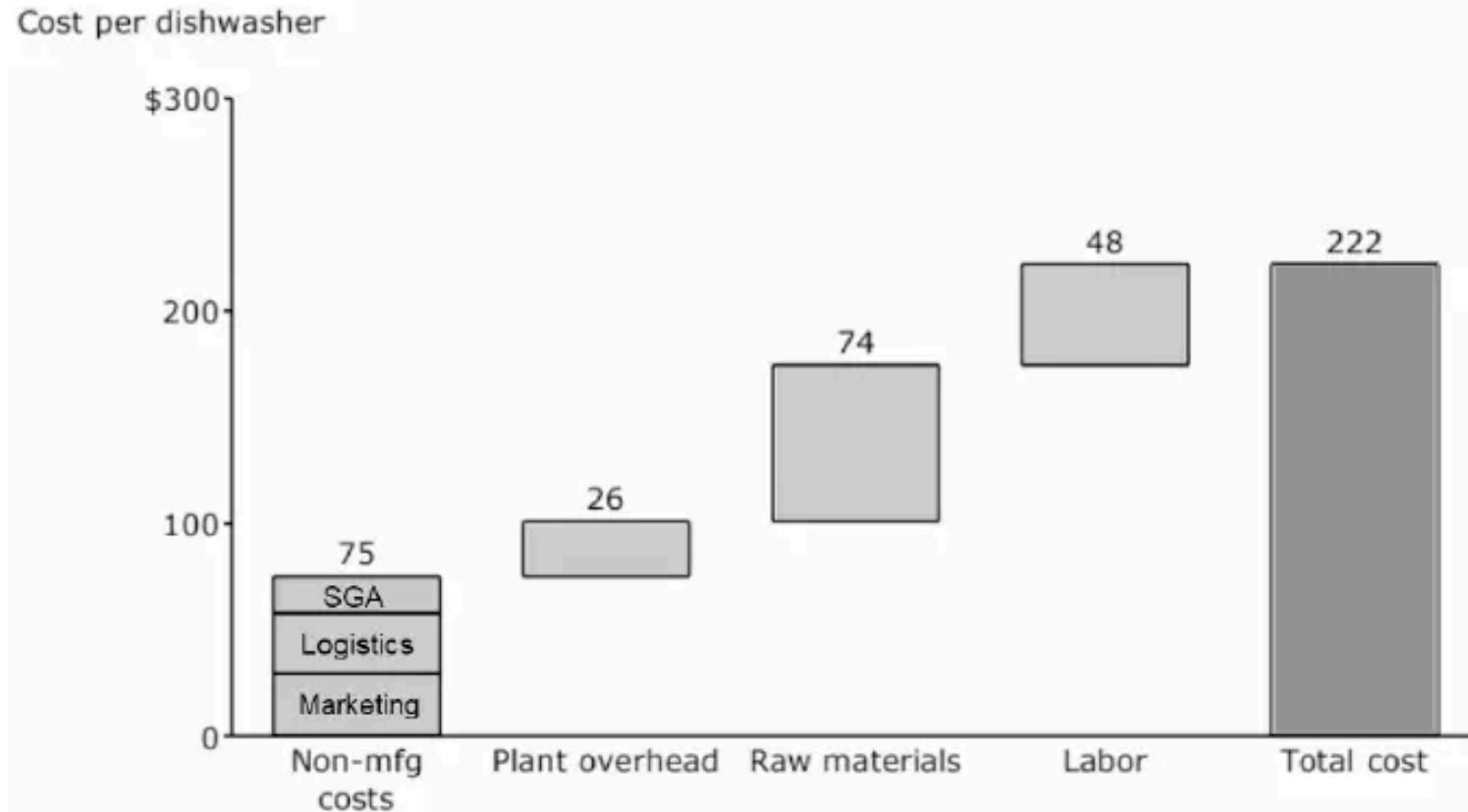
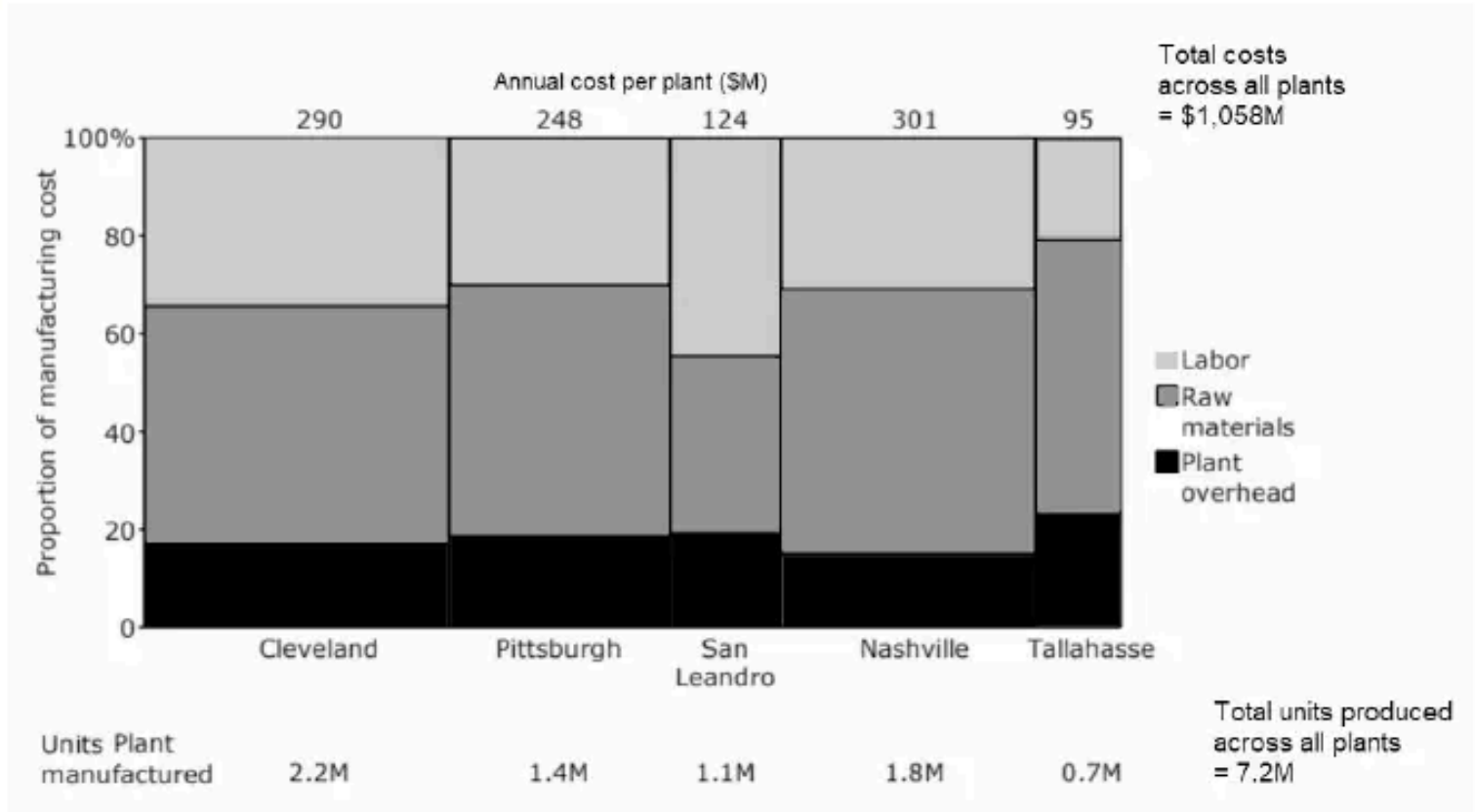




Exhibit:4





Conclusion

Recommendations

- The candidate should provide insight into each of the four exhibits as they are presented and follow up with a review at the end of the case.
- Focus on improving locations that have excessive costs despite high volumes. Look to achieve economies of scale.
- San Leandro is able to achieve lower costs despite less volume than other plants. Best practices at this facility could be explored and brought to other facilities to improve efficiency.

Risks

- Prices of raw materials may differ based on location, further complicating cost issues.
- Moving manufacturing from one plant to another may cause excess costs elsewhere in the supply chain.

Next Steps

- Assess viability of increased production at the San Leandro plant.
- Analyze the efficiency of the San Leandro plant and pinpoint successful processes.

Seven Banners



Behavioral

Talk about an experience where you observed strong leadership, and what you learned from it. (answer in STAR format)

Prompt

Our client is Seven Banners (SB), a company that owns and operates multiple roller coaster themed parks. One of their well-known rollercoaster parks is located in Slide City, which is a mature market. A rival is opening a comparable theme park in a nearby city, Libertyville, and our client is interested in knowing the impact that this new entrant may have on their revenues. Our client is also interested in knowing about any strategic options it may have. How would you advise the client?

DESCRIPTION & Interviewer Notes

There is a lot of math to complete, but is relatively simple.

This case asks the candidate to calculate how a new competitor might impact the client and what steps can be taken to reduce negative impact.

ADDITIONAL INFORMATION (IF ASKED)

See next page



Additional Information

Seven Banners

- Seven Banners has 2.5M customers per year
- Seven Banners's revenues are \$150M per year
- Revenue streams include tickets, restaurants/concessions, memorabilia, and pay-to-play games

Customers:

- 3 customer segments: Local Regulars, Vacationers, Experiencers
 - Local Regulars: 40% of total revenues - People who live in the surrounding area and visit often.
 - Vacationers: 50% of total revenues - Traveling to the theme park for vacation.
 - Experiencers: 10% of total revenues - Passing through the city.

Libertyville:

- 1 hr away from Slide City
- No theme parks currently in Libertyville or the surrounding cities
- Larger population base than that of Slide City

Overall revenue split from customers in each city

- Slide City – 10%
- Libertyville – 15%
- Garden City – 15%
- Motor City – 10%
- Other Cities - 50%

Other nearby cities (none have theme parks): show **exhibit 1**



Analysis

Present **Exhibit 1** if the candidate has not already asked about nearby cities or geography.

Question 1: Candidate should intuitively think to start these calculations, but if they are moving too slowly, prompt them with “Calculate the Slide City theme park revenue based on customer segment and city”

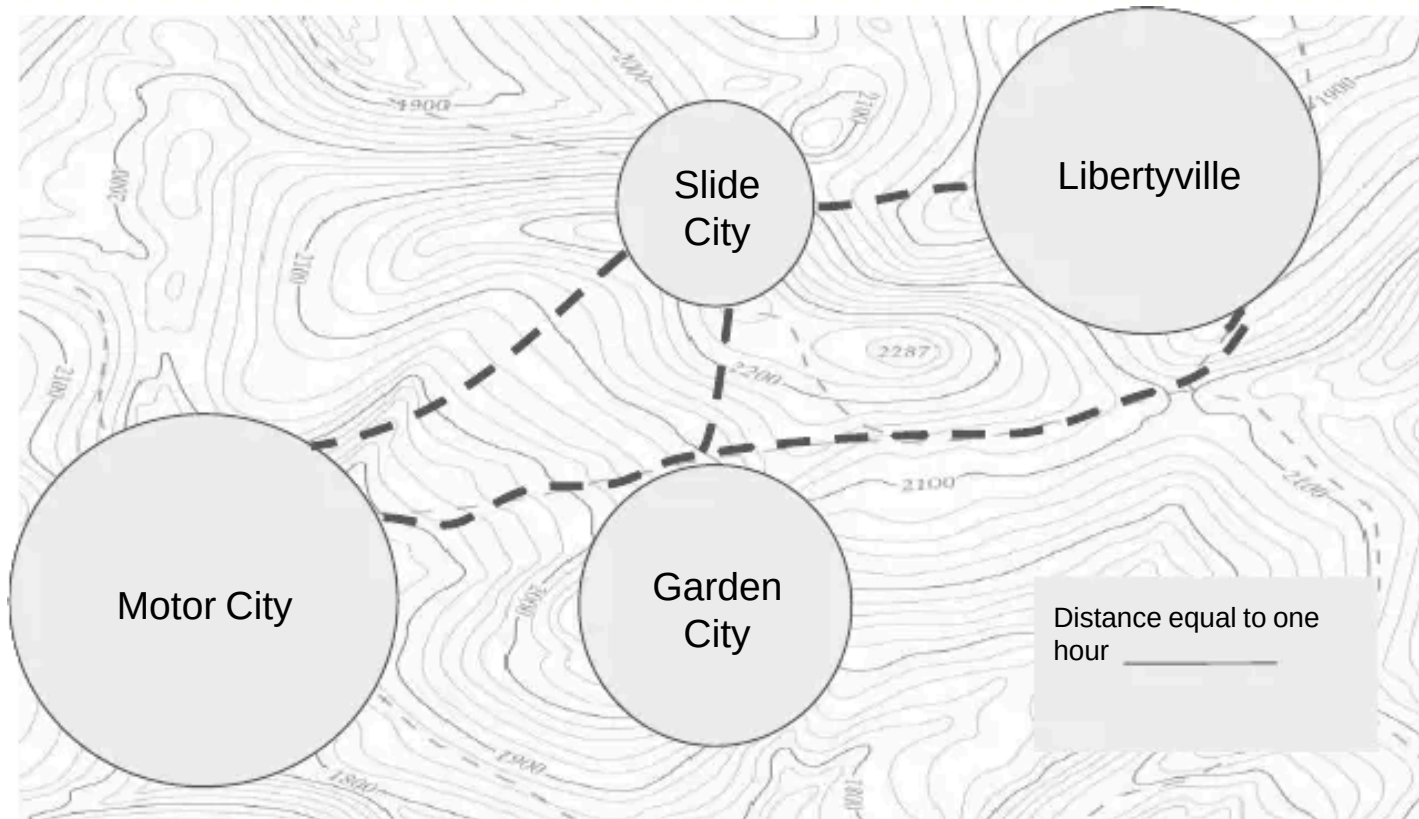
Interviewer Guidance:

Location	% of Revenue	Correct Answer
Slide City	10%	\$15,000,000
Libertyville	15%	\$22,500,000
Garden City	15%	\$22,500,000
Motor City	10%	\$15,000,000
Other Cities	50%	\$75,000,000

Segment	% of Revenue	Correct Answer
Regulars	40%	\$60,000,000
Vacationers	50%	\$75,000,000
Experiencers	10%	\$15,000,000



Exhibit:1





Analysis

Present **Exhibit 2**

Question 2: "Analyst reports predict the new Libertyville theme park will have the following impact on each customer segment in the first year of operation. Based on these reports, what will the overall financial impact be (dollar amount and percentage)?"

Interviewer Guidance: Candidate should recognize that Other Cities only make up 50% of total revenue, so each related percentage in Exhibit 2 must be multiplied by 50%.

Interviewer Guidance:

4 Local Cities	Change	Calculations	Answer
Slide City: All customer segments	-20%	$-0.2 \times \$15\text{M}$	-\$3,000,000
Libertyville: All customer segments	-30%	$-0.3 \times \$22.5\text{M}$	-\$6,750,000
Garden City: All customer segments	-30%	$-0.3 \times \$22.5\text{M}$	-\$6,750,000
Motor City: All customer segments	-20%	$-0.2 \times \$15\text{M}$	-\$3,000,000
Other Cities: Local Regulars	-30%	$-0.3 \times 0.4 \times \$75\text{M}$	-\$9,000,000
Other Cities: Vacationers	-40%	$-0.4 \times 0.5 \times \$75\text{M}$	-\$11,250,000
Other Cities: Experiencers	-15%	$-0.15 \times 0.1 \times \$75\text{M}$	-\$1,125,000
Total Financial Impact			-\$40,875,000
		$\$41\text{M} / \$150\text{M} =$	27%

< They can round to \$41M



Exhibit: 2

City / Segment	Predicted Change in customers
Slide City: All customer segments	-20%
Libertyville: All customer segments	-30%
Garden City: All customer segments	-30%
Motor City: All customer segments	-20%
Other Cities: Local Regulars	-30%
Other Cities: Vacationers	-40%
Other Cities: Experiencers	-15%



Analysis

Question 3: “What are potential responses?”

The following are examples, but the candidate can list a variety of ideas. Push the candidate for more until they have exhausted all ideas.

- Find Slide City business partners to do cross-promotions such as hotel discounts, bike rentals, local music festivals
- Create a rewards program that encompasses ticket, concession, and merchandise purchases.
- Increase marketing spend surrounding annual and rolling monthly passes that will lock in current customers before the opening of the Libertyville theme park.
- Improve the quality of rides and facilities to match the new theme park.
- Customer service improvements to improve customer loyalty.



Conclusion

Recommendations:

- The candidate should briefly walk the interviewer through the financial impact of the new theme park, then move into the top responses that they brainstormed. A 34% reduction in revenue may be catastrophic for their business.
- A strong candidate will tie quantitative figures to specific recommendations

Risks:

- Analyst's predicted impact is lower/higher than actual impact
- Investments into the client's response does not help them retain customers
- cost/timeline overruns of responses diminish their effectiveness

Next Steps:

- Based on the candidate's recommended responses, they should follow up with next steps that fit those recommendations.
- A strong candidate will outline short term and long term recommendations that can be rolled out simultaneously

Road Disruption



Behavioral

Tell me about your role in a team where you did something complex. (Candidate should answer in STAR format)

Prompt

Our client has recently invented a remarkable new chemical compound that is designed to make roads last three times as long. The chemical is blended with the formula used to pave roads, and when done so, roads only need to be repaved every 30 years instead of every 10. How much should our client charge for this chemical?

DESCRIPTION & Interviewer Notes

The candidate will need to lay out their framework and then offer three options to price the chemical based on: cost, value, and competition.

The most sensible way to price is based on value. If the candidate attempts to use other methods, question them on their reasoning until they give up and use value based pricing.

As the candidate makes calculations during this case, stay silent and do not help them.

ADDITIONAL INFORMATION (IF ASKED)

Client: has capabilities to manufacture the chemical, and massive production capacity

Customers: main customer is the US government

Market size: 3 million "mile lanes" (a mile lane is a single lane of road that goes on for a mile)

Cost of paving a road: \$45B spent on road repairs every year

Chemical:

- Costs \$7/Liter to produce
- 500 Liters to pave 1 mile lane
- Chemical does not have any negative effects on road
- No other competing chemicals currently available due to complexity of the chemical formula



Calculations

Encourage the candidate to consider cost based, value based (customer willingness to pay), and competition based pricing methods

Value calculation

- Roads are currently repaired every 10 years = \$450B spent every 10 years
- Every 30 years, \$1.35T spent on roads
- With new chemical, \$450B spent every 30 years means there are savings of \$900B every 30 years
- \$900B savings divided by 3M mile lanes = \$300K per mile lane

Pricing the chemical

- $(\$300k \text{ per mile lane}) / (500 \text{ Liters per mile lane}) = \$600 \text{ per Liter}$
- A strong candidate will think to check to see if this number makes sense since it seems irrationally high, but it is indeed the correct pricing based on value.

Profit calculation (Candidate can do this for extra points)

- $(\$7 \text{ per Liter}) * (500 \text{ Liters per mile lane}) = \$3.5k \text{ in chemical costs for 1 mile lane}$
- Company profits \$296,500 per mile lane assuming they could charge the full \$600 per liter.

Market Valuation

- With 3M miles lanes in the market size, the market is potentially worth $\$300k * 3M = \$900B$



Analysis

Question 1: "Given the enormous potential for profit, what threats should the client be concerned with?"

Potential answers:

- Theft
- Competitor imitation via espionage
- Political risks / legislation

Question 2: "If the client is able to reap the benefits of this product's sale to the US gov, what measures can they take to protect their business?"

Potential answers:

- Lobbying
- Legal protections for their formulas
- Additional security measures to maintain product secrecy
- Buy out competitors as they emerge
- Intentionally reduce prices in order to discourage new entrants

Question 3: "What methods could be used to better assess the long term profitability of this product?"

Potential answers:

- Negotiate long term gov contracts
- Estimate time frame before competition has a viable product
- Estimate time frame before price reductions become politically unavoidable



Conclusion

Recommendations:

- Choosing a price that allows the client to capture the majority of the value may be justified: lots of R&D costs, possible development of many failed chemicals in the past with only this one succeeding (relate this to pharmaceutical industry)
- More value is realized because traffic does not need to be constrained as often due to less paving of road

Risks:

- Massive incentive for competition to enter the market with a reverse-engineered product
- Client may have a limited timeframe to use their first-mover advantage

Next Steps:

- Find additional markets for product in other countries
- Find additional markets for product in similar industries that could benefit from increased durability

Wilderness Tour Guides



Behavioral

Tell me about how you learned to use a technology that you were unfamiliar with, and how you navigated that process (candidate should answer in STAR format)

Prompt

A company that offers wilderness adventures to tourists seeks your help. The company specializes in outdoor experiences and backcountry sports all across North America, and they want to offer customers an opportunity to try many types of vacations. Their field leaders are experts in their individual areas of geography or activity expertise, but the customer experience is highly varied, and the client seeks to be more standardized without sacrificing on quality. They want a new Chief Customer Experience Officer to help them re-organize to meet these goals and wants to know what are some things they should be considering to achieve this goal.

DESCRIPTION & Interviewer Notes

Interviewer led, organization structure case. No math, and all brainstorming. Interviewer should ask probing questions when possible.

Allow the candidate to create and share their framework before moving on to the questions.

Interviewer should allow 5-10 minutes per prompt.

ADDITIONAL INFORMATION (IF ASKED)

Product: A group of 8-10 adult customers and 2-3 professional wilderness guides engaging in a specific outdoor adventure for approximately 1 week. Guides are responsible for outdoor activities, safety, cooking, and general entertainment of the guests.

Geographies: Colorado mountains, California deserts, Montana glaciers, Alaskan forests, Appalachian hills, Utah badlands, and many others

Adventures: Backpacking, white water rafting, skiing/snowboarding, mountain climbing, canoeing, dog sledding, and many others

Primary client segments: Adventurous americans, high net worth international travellers, athletic retirees, travel influencers.

Employees: Highly trained and experienced outdoors professionals, who are specialized in their areas of expertise/geography. A whitewater rafting guide from Oregon wouldn't lead a rock climbing trip in Wyoming. Staff from different areas of operation have zero contact.



Analysis

Freeform discussion questions. Interviewer should keep track of time and move the candidate through the questions to keep the case from being too short/long.

Question 1: “An increased number of customers seek to chain multiple adventures together into a seamless vacation, but the client’s staff in various locations don’t coordinate with one another. What are opportunities for improvement?”

Possible answers:

- Cross training of outdoors staff
- Centralized planning dept that helps arrange logistics for clients between adventures
- Centralized, standardized training for new staff regardless of wilderness expertise

Question 2: “A customer who enjoys a specific adventure is more likely to book another trip with the client, so it is critical to have continuity between regions/activities. Given that outdoors staff are frequently away from computers/technology, what organizational methods are available to increase cooperation in planning, and creating a more standardized customer experience?”

Possible answers:

- Centralized planning dept that helps answer questions for staff and customers
- Centralized marketing efforts
- Use of satellite phones and other devices that can operate in extreme conditions
- Staff can use log books to track individual customer experiences and sentiments



Analysis

Freeform discussion questions. Interviewer should keep track of time and move the candidate through the questions to keep the case from being too short/long.

Question 3: “The client needs help selecting a new Chief Customer Experience Officer for the standardization of customer experiences. Would you recommend promoting an internal candidate, or hiring someone from outside of the organization?”

Possible answers:

- Internal - someone who understands the current culture and where improvements need to be made

- External - someone who can look at the organization from a more objective perspective

Question 4: “What culture changes can be initiated across this dispersed organization, and what KPIs can be used to track progress towards the client’s goals?”

Possible answers:

- Increased communication between employees in different areas

- Improved employee and customer survey responses

- Improved employee and customer retention rates

- Customer’s total spend during a specific time period



Conclusion

Recommendations:

- Opportunities for...
 - centralized training of staff members
 - Staff to go on other region's trips to learn best practices
 - Admin staff to handle intra-trip planning
 - Change reporting structures so multiple regions can benefit from client feedback
- Hiring a leader internally or externally both have advantages. Make candidate justify their choice and ask probing questions if needed.

Risks:

- Lack of specialism may alienate some staff and hurt morale
- Culture changes always impact employee turnover
- Leader may not be effective right away, and lasting change may take months/years.

Next Steps:

- No right or wrong answers, but candidate should address timeframes, and lay out a chronological change plan to achieve the client goals



Behavioral

What was a success you achieved with your team?

Prompt

Your client is a furniture brand that prides itself in having a supply chain that is 100% within the United States. Everything from the raw timber to the cloth upholstery uses American-sourced materials and labor. The company has seen a small decrease in profits in recent quarters and they seek your advice on how to keep the decreases from growing over time. The company is concerned that rising labor costs will make them less profitable over the next five years, and they want to investigate cost savings methods that will allow them to maintain fair wages. They are optimistic that operational improvements can help them avoid headcount reductions, and they refuse to outsource any aspect of their supply chain.

DESCRIPTION & Interviewer Notes

This case is an opportunity to brainstorm issues in each segment of the supply chain SCOR* model.

This case blends math with common business sense.

Allow the candidate to create and share their framework before moving on to the questions.

ADDITIONAL INFORMATION (IF ASKED)

- The company makes chairs, tables, sofas, desks, and other large items.
- Customers are in America
- Established in mid 1900s, known for reliable quality and value
- Pricing: Premium pricing model, freight included in purchase price, free returns within 30 days,



Analysis

Question 1: “Using the SCOR model, where might there be opportunities for improvements? Please consider each of the following phases of the supply chain model: Plan, Source, Make, Deliver, Return.”

Potential Answers: When candidate lists possible problems in...

Plan- Is inaccurate demand planning causing excess inventory or rushed production?

Source- Are material suppliers reliable? Are materials of sufficient quality?

Make- Is manufacturing capacity used appropriately? Are there excessive slowdowns due to Quality Control issues?

Deliver- Are freight costs reasonable? Are deliveries on time, and undamaged?

Return- Does the brand have a method of dealing with returns? Are return rates excessive compared to competitors?

Question 2: “Further research has identified possible issues with Returns. Which three items would you like the client to consider for further review? (provide **Exhibit 1**)

Answer: See slide for exhibit guidance. Without doing lengthy math, candidate should identify that the two chairs and the couch are the primary issues.



Exhibit:1

Product	Annual Sales Volume	Weight (lbs)	% Return Rate
Chair HRT6	~6,000	40	11%
Chair FGT1	~8,000	50	6%
Table FIR4	~1,500	130	7%
Table OAK2	~2,000	150	4%
Couch SLP9	~2,500	150	15%
Desk COM8	~3,500	100	3%
Desk GAN5	~2,000	95	5%

*Return freight costs the client \$1.00 per lb shipped



Calculations

Candidate should be able to identify the most problematic three items without doing any heavy math.

Once they have recognized the two chairs and the couch as being the most problematic, have them calculate the weight of the returns for these three products and let them skip the other four product lines.

If candidate is unable to identify the three most significant products, have them do the math for all 7 products but let them round their numbers.

Product	Annual Sales Volume	Return Rate	Weight (lbs)	How many lbs must be shipped during an order return Answer: (sales * return rate * weight)
Chair HRT6	~6,000	11%	40	$6000 * .11 * 40 = 26,400$
Chair FGT1	~8,000	6%	50	$8000 * .06 * 50 = 24,000$
Table FIR4	~1,500	7%	130	13,650
Table OAK2	~2,000	4%	150	12,000
Couch SLP9	~2,500	15%	150	$2500 * .15 * 150 = 56,250$
Desk COM8	~3,500	3%	100	10,500
Desk GAN5	~2,000	5%	95	9,500



Analysis

Question 3: “What characteristics or factors could affect the return rates for each of these three products?”
(brainstorm for ~3-5 minutes. Make candidate list several possible reasons and push them for more and more ideas)

Sample answers could include:

Depending on the quality of the product, materials could be damaged upon arrival

Inaccurate sizing or color information on website

Disappointing level of quality or comfort

Difficult assembly, etc

Question 4: “There are two proposals for changing the way the business approaches Couch SLP9, and the client would like you to evaluate the options. Option A is to invest an additional \$15k per year in SLP9 production quality, with the intention of reducing the return rate to just 10%. Option B is to reduce the shipping weight of the SLP9 to 130 lbs, knowing that having lower quality means another 1% of customers will make returns. What do you advise?”

Answer Calculations: \$56,250 is the amount currently spent on return freight, so any improvement to this is a benefit to the client.

Option A: $(2500 \text{ units} * 10\% \text{ return rate} * 150 \text{ lbs}) + \$15,000 \text{ investment} = \$52,500 \text{ in expense.}$

Option B: $2500 \text{ units} * 16\% \text{ return rate} * 130 \text{ lbs} = \$52,000 \text{ in expense}$



Conclusion

Recommendations:

- The two chair types and the couch are problematic. The cost of return freight for these three items is impacting profits.
- Either proposal A or B will have a positive impact on costs
- A strong candidate will recommend option A over option B despite the minor cost savings of option B. Option B likely has other negative impacts on the business that could outweigh the freight savings.
- Achieving roughly \$4k per year in cost savings is underwhelming. There may be other similar opportunities to reduce returns costs for other products.

Risks:

- Making supply chain changes can have unintended consequences on other business activities. Do lots of research to ensure that product changes are wise.

Next Steps:

- Make necessary investments, changes, etc.
- Negotiate better freight costs
- Find more cost-saving opportunities to improve performance in other product lines besides Couch SLP9.

Turn Back Time



Behavioral

What are your top three weakness? What are you doing about them?

Prompt

The year is 2021 and you have been hired by Turner Brothers, a Hollywood film studio. Turner has a long-time collaboration with one of Hollywood's most powerful directors, the moody and irascible Nolan Christopher. A common theme of Christopher's movies is the use of time as a plot device, and he is planning his most ambitious film yet called "Turn Back Time" about a time machine. Christopher wants the hero of the film to fight the main villain inside a time portal, and he wants a special effect that will make time – not objects, but time itself – to move both forwards and backwards on screen at the same time. No one has done an effect like this and Turner's visual effects department says it will take five years to develop this technique. Christopher will not consider rewriting the ending and because he is so in-demand he would easily find another studio to meet his needs. Should Turner Bros make Nolan Christopher's movie?

DESCRIPTION & Interviewer Notes

Candidate should start thinking about revenues and NPV, across a 5 year timeline.

Allow the candidate to use rounding when appropriate, but warn them that rounding can lead to inaccuracies.

ADDITIONAL INFORMATION (IF ASKED)

- If Turner Bros don't make the movie, Christopher may leave the studio and never come back
- Costs to make the film are expected to be \$250 million (including the time machine), which must be paid up front. There will also be \$100 million in marketing costs five years from now.
- The studio's criteria to evaluate the film project is box office returns only. The future of streaming and TV rights is uncertain, so we won't analyze them
- The studio thinks if the film breaks even at the box office, the project is worth pursuing because those future tv/streaming revenues will guarantee financial success
- Metric should be an NPV, using 10% discount rate
- Box office ticket sales revenues are shared 50/50 between the studio and the theaters



Calculations

Question 1: "Let's move forward through this scenario's timeline. Tell me what you make of the revenue needs, based on the project's budget"

Answer:

- Find the future value of the \$250M production budget with the 10% discount rate over 5 years. $\$250\text{M} \text{ production} \times 1.1^5 = \$403\text{M}$
- Next, add the \$100M marketing budget to find the break even revenue the studio needs. $\$403\text{M} + \$100\text{M} = \$503\text{M}$
- The client only gets 50% of the box office revenue, so ticket sales must be double the break even amount. $\$503\text{M} / 50\% = \$1,006\text{M}$

Provide **Exhibit 1**

Question 2: "Let's move backwards through this scenario's timeline. Tell me what you make of the production and marketing budget needs, based on similar project's box office ticket sales from the last 10 years" (you can remind them that the current year is 2021 if they are struggling)

Answer:

- We only care about the last decade, so any films before 2011 can be ignored. Candidate should note that 1 out of those 5 films flopped.
 - Mean ticket revenues for all 5 films = $(\$1160\text{M} + \$958\text{M} + \$169\text{M} + \$882\text{M} + \$1253\text{M}) / 5 \text{ films} = \$884\text{M}$
 - If the outlier is removed, mean ticket revenues for all 4 films = $(\$1160\text{M} + \$958\text{M} + \$882\text{M} + \$1253\text{M}) / 4 \text{ films} = \$1063\text{M}$

Year	Title	US (\$M)	Global (\$M)	Combined (\$M)
2011	The Watchmaker	355	805	1160
2013	The Clocktower	321	637	958
2015	5:13	93	76	169
2017	Minutes to Midnight	343	539	882
2019	dnE ot gninnigeB	455	798	1253

- If we discount all five films to find the maximum budget = $(\$884\text{M} / 1.1^5) \times 50\% \text{ revenue split} = \$274\text{M}$
- If we discount only the successful films to find the maximum budget = $(\$1,063\text{M} / 1.1^5) \times 50\% \text{ revenue split} = \$330\text{M}$
- This implies the movie will be financially successful as long as it doesn't flop. Nolan's films appear to have a 1/5 chance of flopping.



Exhibit: 1

Year Released	Title	Production Budget + Marketing (\$M)	US Box Office (\$M)	Global (non-US) Box Office (\$M)
2003	The Hourglass	40	45	63
2005	Tomorrow	55	183	103
2007	Time's Up	110	120	135
2009	Last Second	150	238	377
2011	The Watchmaker	240	355	805
2013	The Clocktower	250	321	637
2015	5:13	310	93	76
2017	Minutes to Midnight	270	343	539
2019	dnE ot gninnigeB	300	455	798
2026	Turn Back Time	312*	?	?

* The NPV of \$250M production and \$100M marketing budgets



Conclusion

Recommendation:

- No right or wrong answer. The risk of flop should be the deciding factor

Risks:

- The biggest risk of making the movie is the risk of it being a box office failure. If the candidate crunches the numbers, they will find 5:13 (a huge flop) lost the studio \$195M. \$350M is a lot to spend to make a movie, and if Turn Back Time flops, the losses could be huge.
- The biggest risk of not moving forward is losing Nolan Christopher to another studio. Directors are free agents and can go where they want. If Turner Bros says no, he will find someone who says yes.

Next Steps:

- One mitigation against the risk the movie flops is the ongoing nature of the relationship. Turner can lose money on some of these movies because, on average, Christopher's movies are wildly successful. The relationship itself is a mitigation against having one movie flop.
- Technology developments from this project may be helpful for similar productions. This tech can be used to reduce future costs, or licensed to other studios for extra revenue.



Behavioral

What is your greatest strength and how will it help you become a good consultant?

Prompt

Your client is a company called Quantum, a multinational oil firm based in Dallas, Texas. They have drilling operations in 32 countries on 4 continents, a market cap of \$73 billion, and employ 38,000 people. Although they are a giant of the industry, times are tough for Quantum. Quantum's CEO, Dominic Greene, is increasingly frustrated that environmentalists keep convincing people to use less of his product, and he is worried that the trend away from gas guzzling cars towards hybrids and electrics doesn't seem to be slowing down. In response to this, his team has developed a series of speculative ventures that could diversify the business away from oil and gas. The venture Greene is most excited about is in Bolivia. Bolivia is looking to privatize its water supply in the hopes that higher prices for water will encourage conservation and private investment will build up the country's rudimentary infrastructure and will be taking bids for a company to provide 10% of the country's water needs. Luckily for Quantum, extracting groundwater involves a similar set of skills and equipment as extracting oil. In fact, Quantum already has drilling and extraction equipment in the region, although none of it is Bolivia. The CEO wants you to evaluate whether this is a profitable business venture.

DESCRIPTION & Interviewer Notes

This case is math-heavy, involves inconvenient equations and unit conversions, and requires efficient use of rounding.

Too little rounding and the math is challenging. Too much rounding and the answers are inaccurate.

ADDITIONAL INFORMATION (IF ASKED)

- Sole objective is profit
- Timeline for project is five years
- Minimum 5-year ROI is 10%
- If asked about revenues, provide **exhibit 1**
- If asked about costs, provide **exhibit 2**



Exhibit: 1

Daily personal use



Population of Bolivia: 12 million people

Percentage of population with access to water grid: 91.66%

Water consumption per person: 30 gallons per day

Annual usage by sector



Agriculture: 2B cubic meters



Commercial: 150M cubic meters



Industrial: 450M cubic meters

* Rough approximation: 250 gallons per CM³

* Price per gallon – \$0.008

* Assume 0 population growth and 0 change in usage over time



Exhibit: 2

Price to purchase concession (1 time) -
\$1.2B(estimated cost, of winning bid)

Cost to move equipment (1 time) - \$35M

Cost to set up extraction operation (1 time) -
\$180M

Cost to operate extraction = \$170M per year

Cost to build pipelines (1 time) – \$85M

Cost to operate pipeline = \$10M per year

Cost to maintain operations, make political
contributions, and security overhead = \$76M
per year

*You do not need to maintain distribution
beyond the pipeline, that is handled by
municipal water agencies





Calculations

Daily Personal Use

- Population of 12M * 91.66% = 11M customers
- 30 gallons * 360 days per year = 10,800 gallons per person per year
- 10,800 gallons * 11M people = 118.8B gallons total
- It is acceptable to round 118.8B to 120B for personal use

Annual Use by Sector

- 2B for agricultural + 150M for commercial + 450M for industrial = 2.6B cm³
- 2.6B cm³ * 250 gallons per CM³ = 650B gallons

Revenue

- \$ per gallon = \$0.008
- 770B gallons used in a year across all Bolivia * \$0.008 = \$6.16B market size by dollar
- 10% market share * \$6.16B = annual revenue of \$616M
- \$616M * 5 years = \$3.08B

Costs

- Total 1 time costs = \$1.2B + \$35M + \$180M + \$85M = \$1.5B
- Total annual costs = \$170M + \$10M + \$76M = \$256M
- \$256M * 5 years = \$1.28B
- \$1.28B * \$1.5B one time costs = \$2.78B

ROI

- \$3.08B / \$2.78B = 10.8% return on investment over 5 year horizon



Conclusions

Recommendation:

- Yes
- $\$3,080,000,000 / \$2,780,000,000 = 10.7\%$ return on investment over 5 year horizon

Risks:

- An oil company controlling a foreign country's water carries risk of political backlash
- Risk that our equipment might not be as well suited to new country as we think
- Risk of not having the concession extended, or being charged higher fees to extend it
- Risk that \$1.2B is not enough to purchase the rights, and we are outbid

Mitigations:

- Do proper evaluation of political situation in Bolivia
- If bidding gets out of control, don't bid more than would allow us to earn 10% ROI, unless there are opportunities for significant cost-cutting in other areas

Next steps:

- Place a bid for the concession
- Make plans for moving equipment away from current sites
- Make plans for hiring a local workforce



Behavioral

Tell me about a time when workplace culture had a negative impact on your performance, and what you did to improve the situation.

Prompt

Our client is a global private equity firm that has just purchased Voltburg, a battery manufacturer based in Germany that makes high capacity batteries for home usage in conjunction with solar panels (think Tesla's Powerwall, but larger). Currently they supply house batteries to European markets but have no presence in the US. They are looking to expand the business into the US but are unsure of how to do this. They are considering two models: one is selling through existing solar panel installers and dealerships in the US, the other is building a flagship dealership and selling that way. Our client wants to consider a few issues. First, is this expansion a good idea? Second, which model would be the best to pursue?

DESCRIPTION & Interviewer Notes

Classic M&A case, inspired by the Bain casing style.

Interviewer should keep asking the candidate to summarize their thoughts and justify their assumptions.

ADDITIONAL INFORMATION (IF ASKED)

- The PE company intends to flip the battery company at some point
- The company does not sell solar panels or other accessories. Only the battery packs.
- The company feels that American tech enthusiasts have a limited awareness of their brand, but construction companies and contractors are aware.
- The company has sufficient manufacturing capacity to serve the US market without making any significant investments



Analysis

Question 1: “As a starting point, tell me a little about the high level pros and cons of building a flagship dealership versus selling through existing channels”

Potential Answers:

- There is no right or wrong answer. Candidate should articulate the advantages and disadvantages for each. A good candidate will be structured in their approach rather than ramble off a series of random pros and cons for both ideas.
- Flagship: better margins, better marketing control, more training for sales teams, high fixed costs, lack of brand recognition, no obvious location for flagship.
- Dealer network: fast startup period, low setup costs, easy to enter the US market in phases, less control over sales process, lower margins,

If the candidate hasn't asked about price or cost figures yet, push them to consider these and provide **exhibit 1**

Question 2: “What’s the breakeven number of units in each scenario?”

Answers:

- Breakeven for flagship store is 300 batteries: $\$3\text{M investment} / (\$20\text{K}-10\text{K})$
- Breakeven for dealer network is 83 batteries:
 - 33% of the \$20K MSRP = \$6.6K that goes to the dealer.
 - 2.5% allowance of the \$20K = \$500
 - Voltburg's revenue is \$12.9K (feel free to tell the candidate to round up to \$13K)
 - For every battery \$13K revenue - \$10K costs = \$3K profit.
 - $\$250\text{K} / \$3\text{K}$ is approximately 83 batteries.

Question 3: “What do these breakevens tell you?”

Potential Answers:

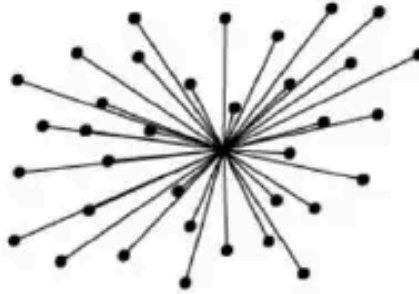
- There is no right or wrong answer. Candidate should articulate the advantages and disadvantages for each.
- Flagship model has a higher breakeven point, but much better long term profitability



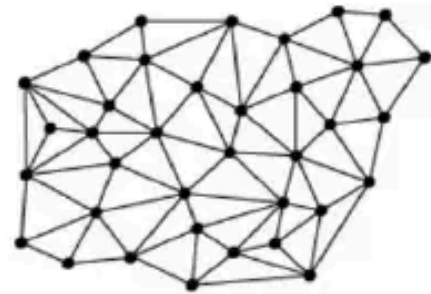
Exhibit:1



MSRP: \$20K
Cost per unit: \$10K



Flagship Model:
Setup Cost: \$3M



Existing Channels:
Setup Cost: \$250K

*Distributors in existing channels
require 33% gross margin

** There is a 2.5% allowance of the
sales price that will be reserved to
cover the costs of returns,
warranties, etc.



Analysis

Question 4: “How realistic are these breakeven points when you consider them as annual sales targets?”

Potential answer:

- It's impossible to say for sure without demand stats. Do we know how many homeowners are interested in these types of investments?

Once the candidate has shared their initial thoughts, push them to ask about demand characteristics, then present **Exhibit 2**.

Question 5: “Based on this info, what do you think about the breakevens now?”

Answer:

- Of the 100K units sold, 30% are \$20k or more, 10% are high capacity, and 15% are European. $100K \text{ batteries} * 30\% = 30K$. $30K \text{ batteries} * 10\% = 3K$. $3K \text{ batteries} * 15\% = 450$ Expensive, High Cap, European batteries sold.
- At this point, the candidate should realize that selling 300 batteries in the first year would be challenging based on competition.

Question 6: “How much do you think customers will care about the EU origin? Is this factor even relevant?”

Potential answer:

- There is no right or wrong answer. Make the candidate take a stand and defend it. Push them to justify their position, but don't let the candidate spend too much time on this.

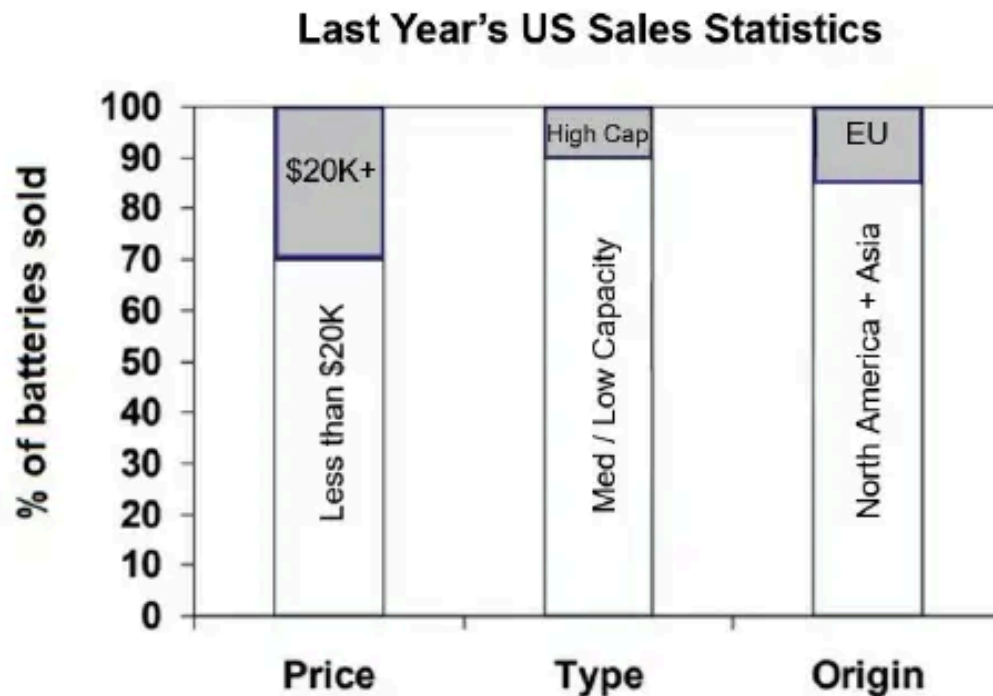
Question 7: “There's no right or wrong answer, but let's assume that origin doesn't matter and the market is much bigger than what you calculated. Does that change your perspective? Keep in mind that Voltburg is owned by a PE firm now”

Potential answer:

- Start with dealer networks to keep costs low and build brand awareness, then transition to a flagship model when Voltburg is reasonably confident that the demand is sufficient to justify the setup costs.
- PE firms want to flip companies and avoid risky investments



Exhibit: 2



*Total units sold in the US: 100,000 annually



Conclusion

Recommendations:

- No right or wrong answers. Dealer network is the safer choice, but has less upside potential for the PE firm.

Risks:

- Uncertain demand
- Lack of brand awareness in the USA
- External factors that affect battery purchasing habits: solar panel cost increases would decrease demand for batteries
- Geographic/climate factors may affect sales in different regions.

Next Steps:

- Devise a timeline to enter the US market
- Create marketing plans to increase consumer awareness

Aggressive Cost Melting



Behavioral

Tell me about a time when you led an unpopular initiative.

Prompt

Our client is a \$500M machine manufacturing company with 5 business units in the U.S. They have hired us to work with the Metallurgical* Machines division, which has a revenue of \$25M and an EBITA of 5%. The CEO has promised investors that they will grow the division to a \$100M business with an EBITA of 20% in 4-5 years. These machines are made in the USA and are used to inspect and manipulate metal alloys. The client wants to know whether this growth goal is feasible, and what they should do with this business unit. How would you approach this question and what would you recommend?

- Metallurgy is the art and science of extracting metals from their ores and modifying them for practical uses

DESCRIPTION & Interviewer Notes

The math in this case is extensive. Candidate must be organized and move quickly to finish in a reasonable amount of time.

The candidate should :

- Understand the problem and what 5% EBITA means
- Explore the industry (introduction of new technology), competitors (2 big players), and sales channel (distribution)

This is a longer case that requires the candidate to move at a quick speed to complete it.

ADDITIONAL INFORMATION (IF ASKED)

The Industry:

- The metallurgical machines industry is approximately \$1B, and stable (not growing, not shrinking)
- Our client is the #3 out of 10 players. The top two competitors have 40-42% market share each.
- All companies offer products with similar quality, service, warranty, etc. (there's no point of differentiation).
- The machines are exclusively sold through distributors (regional, local, etc.). Sales of the machines represent only 5% of the distributor's revenues. Distributors typically make money by selling consumables.
- Distributors only carry one or two brands each: they won't carry more because they need to keep inventories of spare parts, etc.

The Products:

- There are 2 types of machines: old technology (on the market for 30+ years) and new technology
- 90% of the market is old technology. Despite the benefits of the new technology, customers are not willing to pay the price
- Prices: old technology sold at \$1,800 and new technology sold at \$2,800

The Company:

- Entered the market 10 years ago by inventing the new technology. 60% of their revenue comes from the new technology machines sales.
- Production is entirely in the USA
- Other business units in the company are more profitable



Analysis

Question 1: “Quickly calculate the overall market sizes for the new and old tech, as well as the client's revenues from these product types

Answers:

Types of Machines	Market (\$1B)	Client (\$25M)
Old Tech	90% (\$900M)	40% (\$10M)
New Tech	10% (\$100M)	60% (\$15M)

Question 2: “What could the client do to transform a \$25M business to a \$100M one?”

Make them move quickly on this. A good candidate does not need to rework a new framework for this but should stay structured and organized in their response.

Potential Answers:

- In order to increase its revenues, the client needs to convince distributors to carry its products.
- It needs to disrupt the market and create demand of the new technology machines. It could lower the price to make it more attractive to customers and distributors (how much it could lower the price and maintain/increase profitability?).
- The company must sell through distributors, and does not have power to negotiate with distributors. The top 2 competitors have most of the old technology market.

Question 3: “If the company decides to sell the new tech at the same price as the old tech, what are their options?”

Answer: The candidate should ask about current costs as well potential cost savings. Don't let them spend much time on this. Present **Exhibit 1** and ask them for their perspective.

Aggressive Cost Melting



Exhibit: 1

Facts and Figures for New Technology Price and Cost Structure

Domestic Production Costs	
Materials:	60% of COGS
Labor:	15% of COGS
Overhead:	25% of COGS
Marketing Costs	15% of Sales Price

Transport	Cost per Unit
China	\$50 per unit sold
Mexico	\$20 per unit sold
Vietnam	\$50 per unit sold

*Marketing costs unchanged by outsourcing (stays at 15% of sales price)

Materials	Cost savings
China	50%
Mexico	50%
Vietnam	70%

Labor	Prevailing Hourly Wages
China	\$2
Mexico	\$4
Vietnam	\$2
US	\$15

Overhead	Cost savings
China	60%
Mexico	50%
Vietnam	30%

Aggressive Cost Melting



Calculations

Question 4: “Based on this information, please calculate the labor hours required to make one unit of the new tech”

Answer: Price \$2,800 * (1 - (5% EBITA + 15% marketing)) = \$2,240 COGS. \$2,240 COGS * 15% Labor Cost = \$336 Labor dollars. \$336 / \$15 labor cost rate = 22.4 hours (tell the candidate it's ok to round to 22.5 hours)

Question 5: “Please calculate the current and proposed cost structure and EBITDA based on the information in Exhibit 1. Please give a breakdown of the current dollar costs for cost type, as well as what the cost targets for each category must be to meet the CEO’s goal.”

Answer:

		Current Structure		Proposal
Price		\$2,800		\$1,800
EBITDA	5%	\$140	20%	\$360
Marketing Costs	15%	\$420		\$270
Total COGS		\$2,240		\$1,170
Materials	60%	\$1,344		n/a
Labor	15%	\$336		n/a
Overhead	25%	\$560		n/a

Aggressive Cost Melting



Calculations

Question 6: "What country would should they use for production, based on the data in Exhibit 1?"

Answer:

	USA	China	Mexico	Vietnam
Price	\$2,800	\$1,800	\$1,800	\$1,800
Material Savings %	0%	50%	50%	70%
Material Cost	\$1,344	\$672	\$672	\$403
Hourly Labor	\$15	\$2	\$4	\$2
Labor Cost	\$336	\$45	\$90	\$45
Overhead Savings %	0%	60%	50%	30%
Overhead Cost	\$560	\$225	\$280	\$392
Transport	\$0	\$50	\$20	\$50
Marketing Costs	\$420	\$270	\$270	\$270
TOTAL COST	\$2,660	\$1,263	\$1,336	\$1,162
Target %		20%	20%	20%
EBITDA \$s	\$140	\$537	\$464	\$638



Conclusions

Recommendations:

- Move the production of the new technology from USA to Vietnam to reduce costs and achieve EBITA target of 20%.
- Negotiate with distributors, offer regional exclusivities.
- Once the operation is stable (quality, distribution, etc), the company can decrease the price (or run promotions) to drive demand from the old technology to the new technology in the US, as the current obstacle on replacing old technology is primarily due to pricing.

Risks:

- Lowering pricing helps grow market share, but will hurt revenues in the short term
- All of the typical risks associated with outsourcing
- Competitors can lower price as well
- Possible cannibalization of their old tech sales

Next Steps:

- At the new price, they could sell the new machines in Asia, under a different brand, and generate extra revenues.



Behavioral

Tell me about the skills you learned from your very first professional job, and how you still use them today.

Prompt

Your client is a global private equity firm deciding whether or not to invest in a tulip farm in the Netherlands. The farm only produces flowers. The client doesn't have any investments in the floral industry or in farming more broadly, but does have unrelated holdings in Belgium and France. Should they purchase this tulip farm?

DESCRIPTION & Interviewer Notes

This case is straightforward. Strategy and math are required.

Candidate should be organized and clear in their objectives for the client.

ADDITIONAL INFORMATION (IF ASKED)

If they ask for details about costs and revenues, provide **exhibit 1**

- Tulip farming is a localized market (geographically limited)
- The acquisition target is in the same vicinity as other tulip farms
- Not all plantations have the same output per acre of land

Competitive dynamics:

- Target has 10,000 acres of land
- Competitor A has 7,500 acres of land
- Competitor B has 2,500 acres of land

Production Volume

- Target produces 100 cartons of flowers per acre of land
- Competitor A produces 80 cartons of flowers per acre of land
- Competitor B produces 50 cartons of flowers per acre of land



Analysis

Question 1: "What are your estimations of market share based on the available information?"

Candidate should be able to format the available data like the table below. Target has 60% of the land in the local market and 60% of the flower output

	# of acres of land	Annual output per acre of land	Total annual cartons of flowers	Approx market share
Target	10k	100	1M	> 50%
Comp A	7.5k	80	600k	Roughly 33%
Comp B	2.5k	50	125k	< 10%

Provide **Exhibit 1** if you haven't done so already. Guide the candidate towards conducting a profitability analysis.

Profit Dollars: $(1\text{M cartons} * \$16) - (1\text{M cartons} * \$10 \text{ variable cost}) - (\$4\text{M fixed costs}) = \$2\text{M profits}$

Profit Margin: $\$2\text{M} / \$16\text{M} = 12.5\% \text{ profit margin.}$

Question 2: "How would you go about evaluating if this was a good profit margin or not?"

Possible Answers:

- Look at industry benchmarks from research reports
- Look at local competitors
- Evaluate the breakeven point on the client's investment, and compare it to other companies in the client's portfolio



Exhibit: 1

Channels

All tulip farms in this area are contractually obligated to sell their flowers to a distributor

Buyers

The distributor is legally obligated to purchase all flowers grown in the area

Revenue

Price is set at \$16 per carton of flowers, and this price cannot be renegotiated for 2 years.

Variable Costs

Variable costs (water and nutrient solution) cost \$10 per carton of flowers.

Fixed Costs

Fixed costs (labor, equipment, etc.) cost \$400 per acre of land



Calculations

Question 3: “Assuming fixed costs are proportional to the land being used, how does the target's profit margin compare to others in the local market?”

Answer:

	# of acres of land	Total annual cartons of flowers	Total Revenue	Fixed Costs	Variable Costs	Gross Profit	Profit Margin
Target	10k	1M	\$16M	\$4M	\$10M	\$2M	12.5%
Comp A	7.5k	600k	\$9.6M	\$3M	\$6M	\$.6M	6.25%
Comp B	2.5k	125k	\$2M	\$1M	\$1.25M	(\$-.25M)	(12.5%)

Key insight: Larger farms have advantages in costs and outputs.

Question 4: “What are some risks associated with acquiring this business?”

Possible Answers:

- Acquisition price - other bidders may drive up the price to acquire
- PE firm has no experience in agribusiness
- Reliance on a distributor is fundamentally risky. The negotiated deals could fall through, and the target firm has no buyers in the immediate area, driving up freight costs
- Overall shifts in market demand
- Adverse weather conditions, floral diseases, etc.



Analysis

Question 5: “Leaked documents from the agribusiness company MonPlanto indicate that a new nutrient formula for tulips will be hitting the market in one year. It is estimated that this chemical will allow each acre of land to produce an additional 20 cartons of tulips, and MonPlanto is expected to use a Willingness-To-Pay pricing model for this ingredient. How might this affect the distributor’s motives when the purchase price for flowers is renegotiated?”

Possible Answers:

- Distributor will place a cap on the total flowers that it purchases
- Distributor will set a lower price per carton of flowers
- Distributor may vertically integrate into tulip production, increasing local competition

Key insight: The size advantage of larger farms will decrease and smaller farms can be more competitive in the short run.



Conclusion

Recommendations:

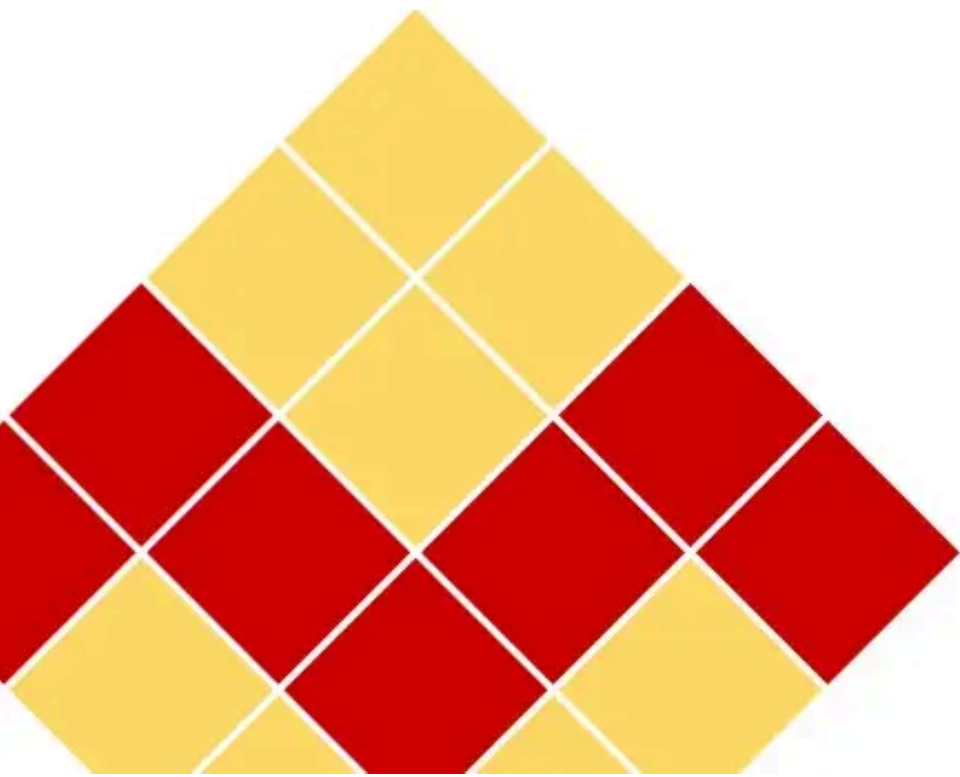
- No right or wrong answer. The target is profitable, but we don't know if the PE company's investment would pay off faster in another line of business.

Risks

- Market changes to flower demand
- Increased competition from smaller farms when the new nutrient comes available
- Relationship with the distributor is essential to the success/failure of this venture

Next Steps

- Due diligence for acquisition
- Investigate industry standards for fixed/variable costs



Corporate Strategy Bonus Materials

Interview Preparation

Interview Structure

Practice Scenarios

Shoes Co.

Keeping the Lights On

Waymo

Verizon



Interview Preparation

Company Research

- Alumni, FactSet, Capital IQ, 10Q/K
- Revenue drivers, trends, key metrics
- Products, recent launches etc.
- Competitors
- Recent strategic moves (new investment, divestment, M&A, corporate decisions).
[Example](#): shows how GM is thinking about their business.
- What are some potential choices the company will need to make?

Industry Research

- Alumni, Statista, Forrester
- Who are the major players
- Industry trajectory, opportunities, challenges
- What are some of the decisions companies will need to make in the short term?
- Competitive dynamics: how do companies compete?

Interview Structure

Behavioral

- Walk me through your resume (this should not be a memorization of your resume, more like an concise/interesting story)
- Why this company?
Why this industry?
 - Focus on fit, culture, and passion for the industry. **ie. no generic answers**
- How does your prior experience translate to the industry / company / corporate strategy

Casing

- Company dependant: do your research
- May range from no case, mini case, to a full case
- Common styles are hypotheticals, market sizing, and market entry
- Industry and company specific knowledge
- Follow consulting structure (refer to the MCSC Training Book)

candidate Questions

- Ask 2 - 3 meaningful questions as needed
- Your questions should not be easily answerable from the company website
- When possible, address current industry topics that prove you are aware of ongoing developments
- If you are able to research your interviewer ahead of time, prepare questions relevant to their role

Corporate Strategy Scenario: Shoes Co.



Prompt

You're the CMO of a small shoe company that is advertising online. What data would you need to inform your recommendations and strategy to grow the business?

Interviewer Guidance

This is a 'Google' style hypothetical strategy question. candidate needs a formal framework and analysis. No additional data is provided, but knowledge of the online advertising industry is needed.



Analysis

- Data needed:
 - Ad Platform: which platforms are we spending money on? Are these aligned with our high level target market?
 - Google, Facebook, etc.
 - Publisher level: which third-party websites are we displaying our ads on?
 - Targeting & Messaging: who are we targeting in our advertising? What is our advertising message?
- Metrics:
 - Spend (how much are we spending on online ads)
 - Click Thru Rate (CTR)
 - Conversion Rate (how many people complete the purchasing process)
 - Price Per Click (PPC)
 - Reach / Impressions

Recommendations

- To grow the business:
 - Analyze platforms and publishers to identify where conversion is high and/or Price per Click (PPC) is low
 - Optimize spend on these platforms
 - Conduct an analysis of the target market → does this align with the targeting on online advertising?
 - Conduct surveys on messaging: are our ads meeting the needs of potential consumers? candidate should identify questions that can be asked here.

Corporate Strategy Scenario: Keep the Lights On



Prompt

You are the CEO of a lighting company with physical stores and distributors. How do you evaluate the threat Amazon poses to your company?

Interviewer Guidance

This is a 'Google' style hypothetical strategy question. The interviewer may need to push to get deeper on some issues and should lead the candidate beyond pricing forces.



Analysis

- How does Amazon threaten the company?
 - Common mistake: Pricing can be an important factor. Competition from Amazon's lower prices can hurt the CEO's company who would have to react through discounts or price cuts. To only focus on this one item would be a mistake and the candidate should realize there are other factors to consider.
 - Customers are highly likely to want to take a look in person at the lighting they purchase to match this with the rest of their house and get a sense of size, style, and fit. This is something Amazon cannot offer and as such they are at a disadvantage.
 - Lighting fixtures can be small - bulbs and simple lights, but can also be large and complex - chandeliers. Amazon is likely going to have a hard time shipping most larger products. As such the CEO's company has an advantage here.
 - Most lighting will also require installation. Though Amazon offers this, it is a less known service they provide. More importantly, at home services require trust, and trust over Amazon's online platform is difficult to build. The CEO's company can build customer trust by selling and offering their installation services.
 - How can the company partner with Amazon: in-store demonstration coupled with online sales on Amazon → Revenue sharing potential?

Corporate Strategy Scenario: Waymo



Prompt 1

A leading software company has been at the forefront of developing autonomous driving technology. The company has experimented with creating their own vehicle, but lately have also partnered with existing vehicle manufacturers to augment their autonomous driving technology (sensors, cameras, etc.) on these vehicles. The company is facing a choice: should they manufacture and sell their own autonomous vehicles or continue partnering with vehicle manufactures and start a ride sharing service? What are some considerations the company should take into account?

Interviewer Guidance

This is a brainstorming session for the interviewer. Push them for pros and cons of both scenarios. Make sure they are structured in their approach and not listing out ideas at random. They should be able to select one scenario they prefer. Potential ideas are, but not limited to:

Manufacture Vehicle

Advantages

- First to market advantage
- End to end control of vehicle including quality, features, etc
- Possibility of seamless integration with autonomous technology
- Capture the total value from the sale of the vehicle, no revenue sharing

Disadvantages

- Lack of manufacturing expertise as a technology company
- Hard to establish a new brand name in the automotive industry
- Moving away from the company's core competency in software and technology

Partnership and Ride Share

- Partnering with an expert in manufacturing provides scale
- Current ride sharing competitors rely on human drivers - cost advantage with autonomous technology
- Maximize their core competency in software
- Significant reliance on a third-party who will manufacture the vehicle and capture a large share of the value
- Continuous integration required to combine autonomous technology with the vehicle

Corporate Strategy Scenario: Waymo



Prompt 2

The COO of the company decides on partnering with a vehicle manufacturer and wants to start the ride sharing business in New York City. She wants to know what the potential number of rides the company could serve every week in NYC.

Interviewer Guidance

If the candidate asks, you may provide the population of NYC: 8M People

Interviewer may follow a tops down or bottoms up approach here. No correct answer required, but they must follow a logical approach. For example:

0-20:	2M	x	5% use ride sharing	=	0.1M	x	2 rides/week	=	0.2M rides
21-40:	2M	x	60% use ride sharing	=	1.2M	x	4 rides/week	=	4.8M rides
41-60:	2M	x	50% use ride sharing	=	1.0M	x	3 rides/week	=	3.0M rides
61-80:	2M	x	25% use ride sharing	=	0.5M	x	2 rides/week	=	1.0M rides
NYC Pop: 8M					2.7M				10M rides



Prompt 3

The market opportunity in NYC is appealing for the COO and she has now asked for a pricing strategy to enter the market. How should Autonomous Auto approach price setting for ride sharing in NYC?

Interviewer Guidance

No quantitative price required but the candidate should be able to talk through the major considerations. They can take multiple paths for this including:

- **Cost Plus Pricing:** identify major fixed and variable costs of running an autonomous ride sharing business. These may include but are not limited to:
 - Fixed: vehicle cost, installation of autonomous driving technology, R&D
 - Variable: gas, maintenance

The candidate must identify that the pricing should be the cost + an appropriate margin. An excellent candidate may suggest that pricing can be structured as base price + per/mile price. Base price would cover fixed costs per trip while the per/mile charge should cover variable costs.

- **Competitive Pricing:** identify that the major difference between Autonomous Auto's cost structure compared to their competitor is the absence of a driver. Pricing could be determined by backing out driver costs.

Corporate Strategy Scenario: Verizon



Prompt

5G is here, what is one space Verizon can enter with this new technology and why?

Interviewer Guidance

This case requires an understanding of the telecom and technology industry as well as Verizon product range and ambitions in 5G. Recommendations can vary but need to be well supported and explained.



Analysis

Question to ask the candidate as they explain their answer: “Why this space? Why is it important to Verizon?”

- Suggested areas can include but are not limited to autonomous driving, immersive media and entertainment, manufacturing, advanced communications, and smart cities.
- Smart Cities
 - 5G service to power IoT devices including traffic management, parking, lighting etc.
 - Why?
 - Growing market demand for smarter cities with increasing urbanization, overpopulation and scarce resources such as land
 - Smart Cities are an emerging market, giving VZ an early mover advantage
 - Smart cities align with VZ's mission to transform how people connect
 - They can translate their core competencies in partnerships (they partner with Apple, Samsung, etc. for their telecom services) by partnering with cities
 - Smart cities will be increasingly important in emerging regions - path for VZ to grow internationally
 - This space will be important for VZ as consumer spend on telecommunications is likely to be saturated. 5G brings transformational change for businesses over consumers.

Additional questions can be: how would you validate this market? What will it cost?

Consulting & Strategy Club

2021-2022 Casing

This casebook was created and revised by a dedicated group of club members who volunteered their time for the betterment of MCSC's case preparation.

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The ongoing support of these training materials enable the continued success of our organization. If you would like to revise, add, or enhance any training materials or cases for future usage, please reach out to your MCSC President.

