



# **Case Interview Prep Workshop for Beginners**

BUSPH Career and Practicum Office

# Agenda

- Behavioral Interview vs Case Interview
- Typical Case Interview Structure: 4 Step Process
- Facts & Frameworks to Use
- Examples and Exercises
- General Do's and Don'ts

# Behavioral vs Case Interview

## **Behavioral Interview Question Example:**

Tell me about a time when you worked with a difficult team member. What was the situation and how did you handle it?

**\*Your answer is about telling a story and giving an example.**

## **Case Interview Question Example:**

How many taxis are there in NYC?

**\*Your “answer” is about solving problems and most often recommending solutions.**

# Who uses case interviews?

- Becoming more common for MPH candidates, however, they are MOST common at consulting firms.
- Other settings that may use case interviews:
  - Hospitals, especially for fellowship interviews
  - Insurance companies/payers
  - Private sector companies
  - Government agencies

Cases you are given can vary. Some consulting firms don't include healthcare cases. Following are some examples...

# Declining Revenues (or Sales) Case

Our client is a very popular family restaurant chain with 25 restaurants across New England. There is a decline in revenues in one of their restaurants.

How would you advise the client to restore revenues?

# Improving Efficiencies/Operations Case

Our client is a local hospital dealing with long call center wait times. They have hired you to improve their customer service phone response time.

How you would address the problem in order to reduce wait times? What information would you want?

# Pricing Case

Our client is about to launch an over the counter (OTC) addiction cessation aid that has shown excellent results in helping patients addicted to marijuana. It's similar to "the patch" and is sold in boxes containing a 2 week supply.

The client is unsure of how to ***price the product***. What price would you recommend to the client?

# Brain teaser Case

How many new golf balls could be used in the U.S.  
in a given year?

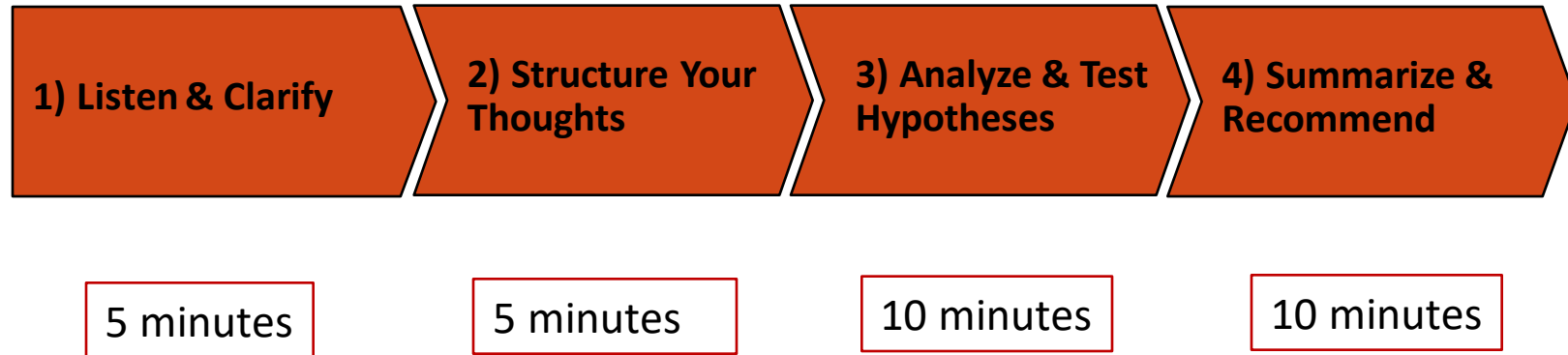
# What are interviewers looking for?

1. **Problem Solving, Analytical Thinking and Quantitative Skills** – methodical, good with math
2. **Intellectually Curious** – picks up on concepts, enjoys learning, asks good questions
3. **General Business Sense** – understand common frameworks and vocabulary
4. **Communications** – structure your thoughts, communicate well
5. **Creativity** – “appropriately” creative in exploring issues and options
6. **Presence/Good People Skills** – confident, collaborative, friendly and enthusiastic

*It is the path you take to get to the solution that is of interest.*

# Case Interview Types\*

## Type 1: Candidate-Led



**Candidate-Led Case interviews are typically about 30 minutes.**



Source: <https://www.myconsultingcoach.com/case-interview-candidate-led-vs-interviewer-led>

# Step 1: Listen and Clarify

## 1) Listen & Clarify



1. You and interviewer have some small talk, and then the interviewer begins reading the case.
2. You write down facts of the case, and the problem or question.
  - Paper is in “landscape” position. **Write legibly and use a pencil.**
  - Use 2 pieces of paper: one to write out information/details/math, and the other to show to interviewer.
  - Note: Sometimes cases involve math. You can not use a calculator.
3. Clarify you have facts right and understand problem. If simple, don't ask. **Ask if this is client's only objective.**
  - Example: Checkers wants to increase lunch time revenues.
  - Ask: What is current revenue? How much do they want to increase it by? Are there any other objectives?
4. Ask for a moment to collect your thoughts – usually 1 minute depending on complexity. **Silence is expected!**

# Step 2: Structure Your Thoughts and Create Issue Tree

1) Listen & Clarify

2) Structure  
Your Thoughts

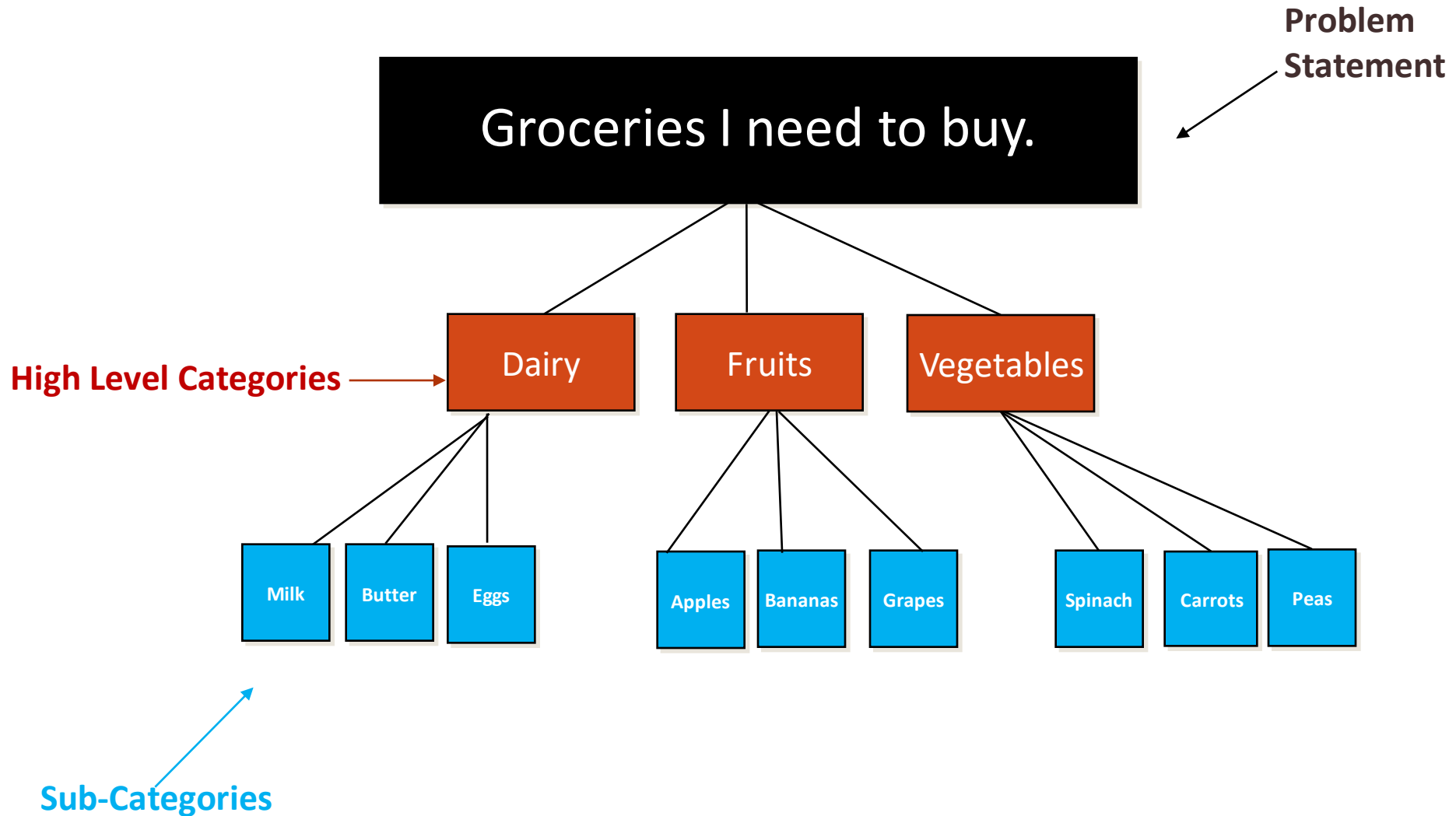
1. Silently take 1 minute to think about what the problem could be.
  - Example: Over the past year, lunch-time sales have gone down at Checkers.
  - What are possible reasons why?
  - List all of these on paper.
2. Create an Issue Tree.
  - Frameworks can be helpful here!
  - Avoid overlaps in potential root causes. Use MECE (*mutually exclusive, collectively exhaustive*)
3. Issue Tree should have:
  - Problem Statement at Top (i.e. *Restore lunch-time sales at Checkers.*)
  - 2 or 3 “high-level” categories with 2 or 3 questions to probe under each.

# Example: Turning Your List into an Issue Tree

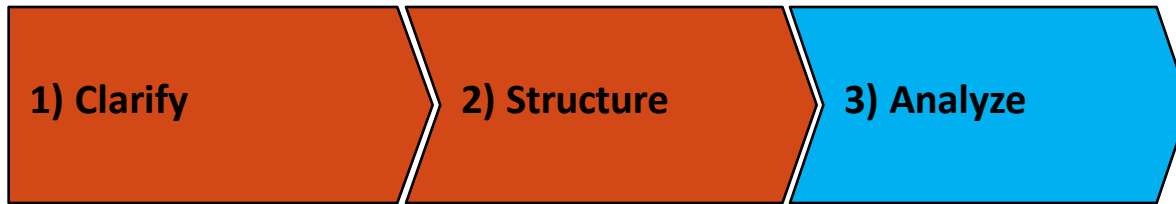
- Grocery list:

- Apples
- Milk
- Bananas
- Spinach
- Carrots
- Grapes
- Butter
- Peas
- Eggs

# Structure Your Grocery List into an “Issue Tree”

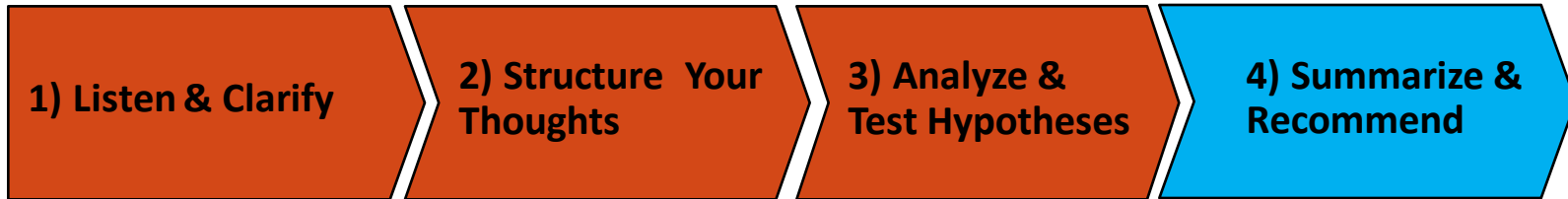


# Step 3: Analyze -- Request Info and Test Hypotheses



1. Tell interviewer you're ready. Turn your paper around so Interviewer can see your Issue Tree.
2. Share with the interviewer:
  - 2 or 3 areas you'd like to look into; list the names of your "buckets" and briefly explain each
  - Ask are you moving in right direction, "*Does this sound good? Have I missed anything?*" They may direct you.
3. Next, talk through your buckets and ask questions -- test out your assumptions and hypotheses.
  - Ask for more information under each bucket – you're trying to dig down to the potential cause of the problem.
  - The interviewer may or may not give you additional information such as a data set or facts. If they don't give you information, be comfortable making educated assumptions.
  - Start to narrow down what you think the problem may be so that you can give your best option for recommendations. "Trim the branches from your Issue Tree".
4. Ask for few minutes to finalize your thoughts and share your conclusion/recommendations.

# Step 4: Summarize and Make Recommendations



After taking 1-2 minutes, share that you are ready to conclude and make a recommendation:

1. Restate the problem statement and your approach (framework, thought process, etc)
2. Summarize your high-level takeaways from the analysis
3. Talk through your recommended solutions using a “Solution Tree” (similar to an issue tree)
4. Your Solution Tree should have 2 or 3 categories with a few details under each
5. Conclude with what you expect the outcomes will be based on these recommendations
  - Ex: If the client implements these changes, sales should be restored within 6 months.



Presentation skills are important here. When you practice case interviews, be sure to practice presenting at the beginning and the end.

# Case Interview Types\*

## Type 2: Interviewer-Led

Interviewer led cases are pre-structured cases. The sequence is usually as follows:

- **You will be presented with a problem** (data may or may not be provided) and after clarifying questions you will structure the problem by being as specific as possible. The initial part is essentially the same as in candidate-led cases.
- **The interviewer will ask you a set of pre-determined questions**, regardless of what your initial structure is. You will have to understand the problem, come up with a mini structure, ask for additional data (if necessary) and come to the conclusion that answers the question.
- **Essentially interviewer led cases are big cases with lots of mini-cases within them.** The method you have to follow is basically the same as in the candidate led cases, the main difference being that instead of solving one big case you are solving several mini cases.

Source: \*<https://www.myconsultingcoach.com/case-interview-candidate-led-vs-interviewer-led>

# Tips for Interviewer-Led Cases\*

An interviewer led case does not look like a massive challenge. However, despite the skills tested being very predictable, candidates tend to fall into 3 traps:

- **Being passive:** you should always be the leader of the conversation. Usually the best way is to keep the big picture in mind. It is very important to relate each question or “mini-case” to the big issue the case wants to solve. And the ability to look at the big picture is what makes CEOs different from analysts.
- **Forgetting about MECEness:** In the “what else?” type of question make sure to come up with a list of ideas that is at the same time exhaustive and without overlaps. In other words, when asked how to grow sales in a supermarket, you should not answer “by increasing customer retention and growing the total number of customers” because increasing retention leads to increasing the total number of customers (not MECE). A MECE answer would have been instead: “by increasing customer retention and growing the number of new customers”, since there are no overlaps between the two levers: through the former you act on existing customers, through the latter on new customers.
- **Getting cornered:** questions are sometimes used to assess your capability of handling pressure. The interviewer might play the bad cop, deliberately cutting your time or showing disappointment and lack of patience. Keep calm and carry on. Chances are that you are actually doing very well in the case.

Source: \*<https://www.myconsultingcoach.com/case-interview-candidate-led-vs-interviewer-led>

# HOSPITAL CASE EXAMPLE FROM ALUMNA

**The hospital has gone over its cafeteria budget by \$1 million. Talk me through why this might be happening and how you would fix it?**

**FIRST, candidate should run through why this could be happening. Here is an example:**

1. Probably due to a DOWNTIME waste (LEAN). List some possible examples of waste.
2. Would start by doing:
  - current state analysis → currently, how is the kitchen operating? Look at current budget
  - future state analysis → are we looking to just cut the \$1mil or cut further?
3. Form a coalition (Change Mgt) to produce more widely accepted changes within kitchen
4. Conduct key stakeholder interviews
5. Need to look at the major cost leading to this significant overspending.
  - Was the cafeteria over staffed?
  - What kind of food waste did we realize in the last budget period?
  - Were there any one time big expenditures (I.e. a new walk in fridge, ovens, etc.)?
  - Was our budget unrealistic (what % terms is this \$1M of the budget)?
  - Moving forward, it's imperative to limit all non-essential costs and adjust the budget, as necessary.

# HOSPITAL CASE EXAMPLE FROM ALUMNA (cont'd)

**The hospital has gone over its cafeteria budget by \$1 million. Talk me through why this might be happening and how you would fix it?**

**NEXT, candidate should run how you would improve processes in the hospital kitchen. Here is an example:**

1. First, look at the process from Start to Finish, where are there delays or defects, how can we be more efficient with time and product usage?
2. Second, look at projections:
  - Were we too optimistic?
  - Was there over-ordering causing waste?
  - Did the price of our inventory go up and we did not factor that into the new budget?
3. Run through the DOWNTIME to determine where the waste is coming from
4. Adopting a process of limiting food waste
5. Sticking to a succinct and profitable menu
6. Training an efficient staff can help avoid unnecessary expenditures

# HOSPITAL CASE EXAMPLE FROM ALUMNA (cont'd)

**The hospital has gone over its cafeteria budget by \$1 million. Talk me through why this might be happening and how you would fix it?**

**NEXT, candidate should find out why and offer solutions.**

1. This would be where you would ask the interviewer questions in relation to the above to then offer a solution based on what type of waste is occurring
  - EX: Defects: Recommend using production guides to ensure all employees are following a standard procedure to reduce errors in production
2. Was the cafeteria over budget due to a one time expenditure or irresponsible management/expectations?
  - If this was due to a one time expenditure, a long term plan to work in the black to recoup these losses is essential.
3. If this is was due to a poorly constructed budget, all elements must be reviewed (particularly all costs) and a new annual budget must stick to a realistic goal and lead to profitability.

**LASTLY, candidate thinks what should client be concerned about re: their recommendations?**

1. Client should be concerned about the coalition forming, this is really important for any change to take place because people are the core of ANY change.
2. \$1 million dollars (assuming the original budget is not significantly larger than that) is a large over expenditure. If the hospital wishes to properly meet spending guidelines, they must significantly change how they are currently operating.

# How do you tackle a case?

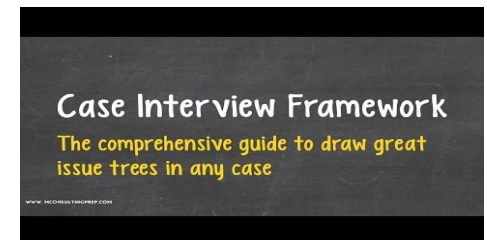
This is where facts and frameworks can help. Here are some examples.

# Facts You Should Know

- 320 Million in U.S. population
- 7 Billion in world population
- 100 Million households
- Average life span: 80
- 4 million people for every age group (from 1 year olds, to 70 year olds)
- 50/50 female and male split

# Frameworks Are Helpful Too...

- Good way to think through a problem and structure your thoughts.
- Easy example we use all the time when making a decision: **PROS and CONS**
- **Sample Frameworks and Formulas:**
  - ✓ 3 C's: Company-Customer-Competition (often good for why revenues are down)
  - ✓  $\text{Profit} = \text{Revenue} (\text{Unit} \times \text{Price}) - \text{Costs} (\text{Fixed and Variable})$
  - ✓  $\text{Revenue for Goods} = \text{Number of Units Sold} \times \text{Average Price}$
  - ✓  $\text{Revenue for Services} = \text{Number of Customers} \times \text{Average Price of Services}$
  - ✓  $\text{Market Sizing} = \text{Number of Potential Customers} \times \text{Average Annual Revenue}$
- Note: Try to adapt frameworks where possible



# Framework: The 3 C's

## Company

- Pros and cons of the product or service
- Regulatory & External Changes
- Management team
- Value Chain
  - Technology & Innovation
  - Marketing & Sales
  - Operations, Capacity, Infrastructure
  - Human Resources

## Customer

- Demographics (age, etc)
- Key values they possess
- Wants and needs
- Size and growth of customer segment
- Key drivers in decisions:
  - Price, Brand, Product characteristics

## Competition

- Product or Service value proposition vs company
- Financial (deep pockets?)
- Market share (% of total sales volume in a market captured by competitor)
- Value Chain\* (internal):
  - Technology & Innovation
  - Marketing & Sales
  - Operations & Capacity
  - Human Resources

*Tip: To increase revenues, profits, applications, customers (etc), ask the client for their numeric goal.*

# Common Case: Declining Applications (or sales, etc)

MBA applications have decreased over the past 2 years at London School of Management (SOM) by 20%. London SOM is a top 20 business school with a strong reputation for entrepreneurship. The Dean has hired you to figure out why this may be happening, and to help bring applications back up to the MBA program. What should your client do to bring MBA applications back up?

What opportunities exist for London SOM to increase MBA applications by 20% by Fall 2021?  
With a partner, take 5 minutes to fill in possible issues for each of the 3 C's.

London SOM  
(company)

Prospective Students  
(customer)

Institutions, educators  
(competitors)

# Possible Issue Tree

## London SOM (company)



- Has anything changed?
  - Tuition
  - Faculty
  - Programs
  - Other
- How do they communicate with prospects?

## Prospective Students (customer)



- What is profile of prospective students? Changes?
- What are their needs and desires?
- How do they choose an MBA program for Entrepreneurship?

## Institutions, educators (competitors)



- Competitors? Any data on their #'s?
- What are they offering?
- Strengths?
  - Faculty
  - Programs
  - Funding
  - Other

# Possible “Solution Tree”

During the *Analysis* phase of the case interview, you learned there are 3 more highly respected London schools now offering MBA’s in Entrepreneurship. Also, prospective students want more exposure to industry.

**Increase MBA applications by 20% in 2020.**

**Problem Statement**

**High Level Categories**

Market “Intrapreneurship”,  
leveraging existing expertise

Develop Ties  
with Industry to  
Meet Student Needs

**Sub-Categories**

Target 200 London  
companies to send their  
employees; goal for  
50% to send  
1-2 people (100+)

Tie-up with large  
professional orgs;  
goal to attract  
100+ members to  
enroll in program

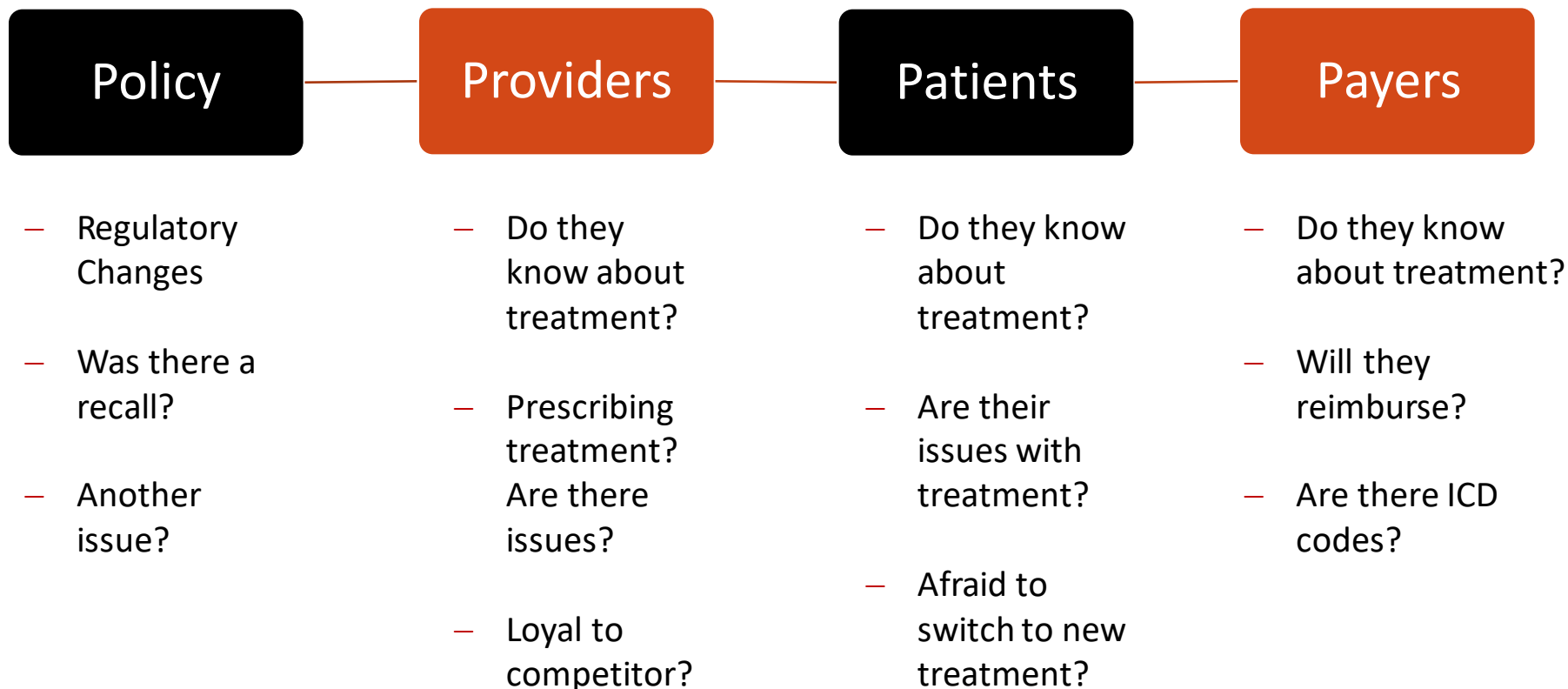
Create bootcamp with  
top Venture Capital  
firms; attract  
12 (1/100 students)

Secure 100 alumni  
mentors to help  
with business plans  
(1/12 students)

# 3 C's Continued: Adapting for Drug/Medical Device Case\*

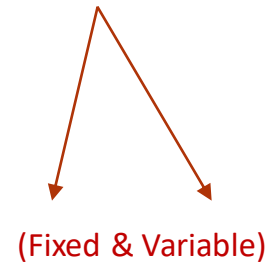
*Company, Customer, Competition*

\*Sub-categories could include these stakeholders:



# Framework #2 - Profitability

$$\text{PROFIT} = \text{Revenue} - \text{Cost}$$

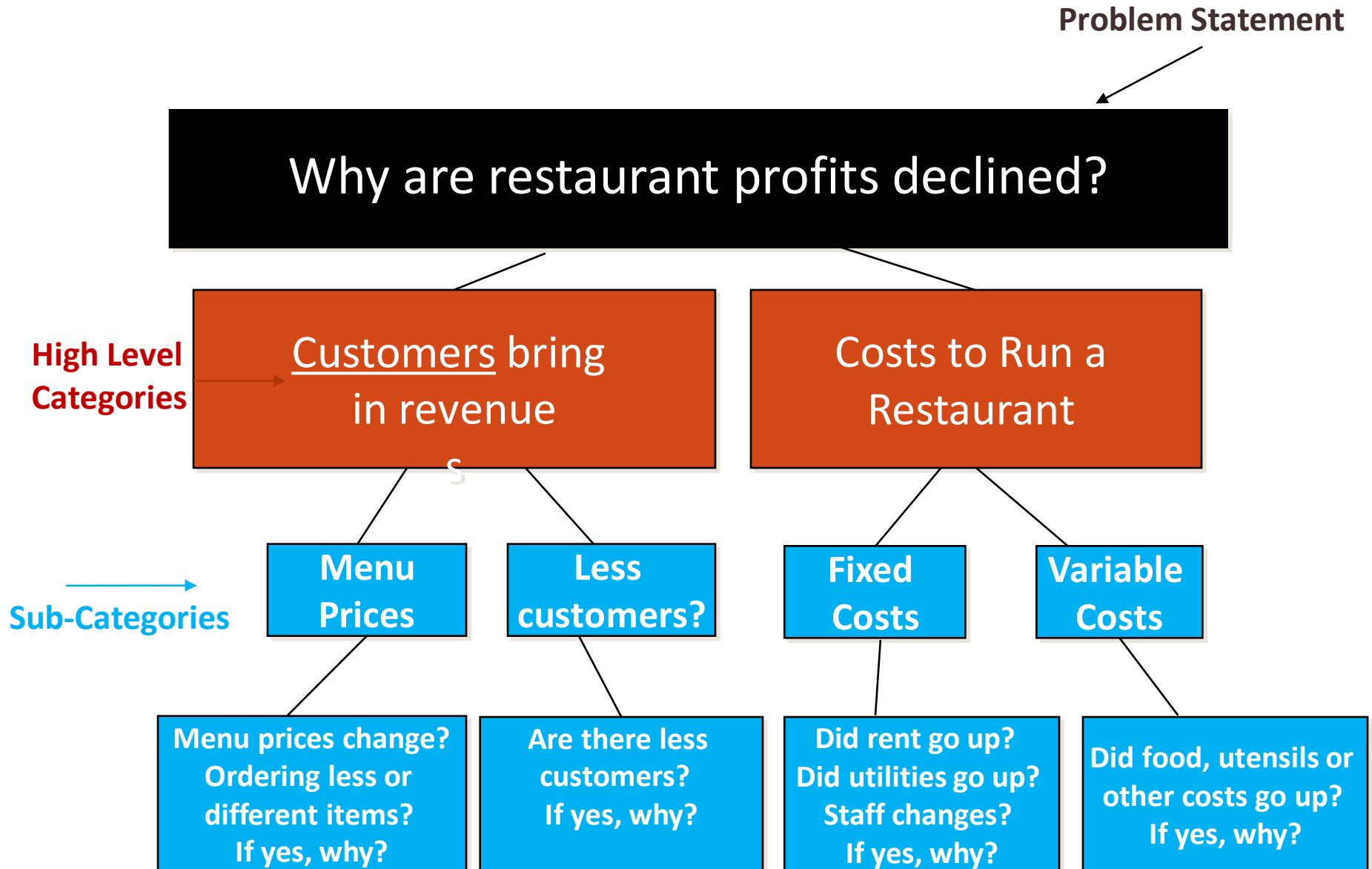


<https://youtu.be/cdK31eg79xY>




\*Source: [Case Interview Frameworks for drawing great Issue Trees](#)


# Structuring an “Issue Tree” for Declining Profits




# Common Case: Brainteaser Example


How many new golf balls would be used in the US in a given year?

- Number of golfers in the US
  - 320 million people in the US
  - 20% of population plays golf  
(64M, round to 60M)

~ 60 million people play golf in the US
- Number of balls they use per round
  - 2 to 3 balls per round

~ 2 to 3 balls per round
- Number of rounds they play per year
  - Average of 10 rounds per year

~ 10 rounds per year

 ~ 1.8 billion golf balls used  
(60,000,000 x 3 = 180,000,000 x 10 = 1.8B)

Tip: Start with size of U.S. population: 320M

# Common Case: Market Sizing

Your client developed novel eye drops that correct nearsightedness in 60% of the cases when taking one drop/day. An annual supply of drops is priced at \$200. The client has received FDA approval and is going to market. This product will be available through stores like CVS and Walgreens. The client needs to “size the market”.

## How to figure out market size:

1. Count up all the potential customers that would be a good fit for your business.
2. Multiply that number by the average annual revenue of these types of customers in your market.

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How to think about and estimate this... NOTE: When making assumptions, be able to back up your reasoning!	Possible answer....	Math
1. Start with U.S. population (round off)	300 M	= 300 M
2. How many wear (corrective) eyeglasses?	20% of 300	= 60 M
3. Of these, how many are nearsighted?	70% of 60	= 42 M
4. How many will be helped (60%) with the drops?	60% of 42	= 25.2 M
5. How many will likely adopt this new product?	50% of 25.2	=12.6 M (PEOPLE)
<b>MARKET SIZE = # of People x Annual Revenue</b>	<b>12.6M X \$200</b>	<b>= \$2.5B</b>

# Market Sizing Exercise

Our client has designed a new electric shovel that is easy to handle and designed to break through the heaviest snow. Because it is lightweight, they believe it will be very attractive to customers. They have priced it at \$149. **The client wants an estimate of the market size for this shovel in the United States.**

## Exercise:

1. Count up all the potential customers that would be a good fit for your business.
2. Multiply that number by the average annual revenue of these types of customers in your market.

# Things *TO DO*: The Case Interview Commandments\*

1. Listen to the Question – understand the client problem, pay close attention
2. Take Notes – allows you to check back on the facts
3. Summarize the Question – shows you listened, allows you to hear information again
4. Verify the Objectives – “*One objective is to increase sales. Are there other objectives?*”
5. Ask Clarifying Questions – helps identify and label question, shows you can probe, builds rapport
6. Organize Your Answer – identify and label your case, lay out your structure
7. Hold That Thought – think before you speak (can you hold your own with a client?)
8. Manage Your Time – don’t get bogged down in the details
9. Work the Numbers – demonstrate quantitative ability, explain calculations
10. Be Coachable – listen to feedback
11. Be Creative and Brainstorm – think outside the box, “*Brainstorm Without Commitment*”
12. Exude Enthusiasm and Positive Attitude – be excited about problem solving
13. Bring Closure and Summarize – review findings, restate suggestions, make recommendations

\*Source: *Case In Point: Complete Case Interview Preparation*

# Things *Not* To Do In A Case Interview

- Panic or become emotional
- Guess
- Say “I have no idea”
- Change the subject or lose focus
- Make the problem more complicated, use buzz words you don’t understand
- Jump to conclusions



# Common Case: Value-Based Pricing

**Value-based pricing\*** is when a company calculates and tries to earn the differentiated worth when compared to its competitor. Example:

- Brand A is about to launch a new LED television. It needs a price for its new 65-inch LED TV, the biggest screen size in the marketplace at the time.
- Brand B, the closest competitor, recently introduced a 60-inch TV for \$799. Both TVs have similar features -- built-in WiFi, same level of definition, same number of HDMI inputs, etc.

Factors to consider when coming up with VBP:

1. **Focus on a single segment.** Only focus on big-screen TV buyers, not all TV buyers.
2. **Compare with next best alternative.** What would customer buy if product wasn't available? This is the essential point of comparison for calculating the value-based price.
3. **Understand differentiated worth.** What features are unique? The only differentiated feature of Brand A is larger screen size.
4. **Place a dollar amount on the differentiation.** How much will big-screen TV shoppers pay for extra 5 inches of screen size? Add amount (say \$150) to \$799, Brand B's price. The value-based price of Brand A's TV is \$949.

# Tips for Value-Based Pricing (treatment or drug)

## How would you do “Value-Based Pricing” for a treatment or drug?

- Determine “value” of client’s new drug vs. what is the current treatment.
  - Will there be better health outcomes?
  - Less side effects?
  - Easier to take? Better adherence?
  - What is cost of current treatment? Will this be more “cost-effective” in comparison?
  - Will this save payers (insurers) money both short-term and long-term?
- Factor all of these in, then come up with a higher price point that reflects the “value” over the current treatment.
- From there, remember do a “gut check”. Will there be “sticker shock”? If yes, adjust.

# Business Concepts

Consulting firms will expect candidates to have a foundational knowledge of business concepts and vernacular. These include:

## Product or Service Introduction\*

- Is there a potential market for the product? Do consumers, patients, providers, payers want it?
- Will it be profitable? What will it cost to introduce? What are expected revenues?
- What about the competition? Are there already competing products or services? Can they easily copy it?
- Does the new product or service align with the organization? Does it fit with current product or service line? Does it make sense for the organization to introduce it?

# Business Concepts (Cont'd)

## Marketing (the 4 P's)\*

- Product: Good or service for sale to a target market. When developing a product, the design, quality, packaging, features, after-sales service, and customer service should be considered.
- Pricing: Amount of money that customers have to pay to purchase products or services. Several factors to consider include discounting, price setting, credit collection, and cash and credit purchases.
- Placement: With regard to location, this is the distribution and ways of delivering the product to the customer. This may include business, distributors, shop front, online, and logistics.
- Promotion: Act of communicating the values and benefits of your products to your customers. It involves the use of different methods, such as direct marketing, sales promotion, advertising, and personal selling to persuade customers to purchase your product or service.

\*Source: <http://marketingmix.co.uk/4ps-marketing/>

# Business Concepts (Cont'd)

## Mergers and Acquisitions (M&A)\*

Like making a purchase at a grocery store, M&A can be viewed as a "buying decision". In general, the consumer first determines the "need" to buy a product followed by analyzing whether he or she can afford the product. After analyzing the first 2 critical factors, the consumer might look at long/short term benefits of the product. Apply similar logic in M&A cases:

- **Analyze the client's company.** Why does the client want to acquire or merge with a company? In which industry does the client operate? Which other businesses does the client possess (look for synergies)? What are the client's key customer segments?
- **Analyze the industry.** How big is the market, and is it growing? Who are the key competitors, and how profitable are they? Are there barriers to entry? Threats this industry?
- **Analyze the target company (to acquire or merge with).** What are their strengths and weaknesses? Their market share? Their profitability compared to competitors? What their growth figures? What parts of the company are synergistic?
- **Analyze the feasibility (to acquire or merge with the target company).** Is the target company open to being acquired or merged with? Does the client have enough funds? Has the target company gone through an M&A before, and have they successfully integrated? Or, have there been management and cultural problems? Are there other risks?