



DARDEN SCHOOL OF BUSINESS



# Darden Consulting Club Case Book

2014-2015 Edition

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# The Consulting Case Interview

# Structure of the Case Interview

The case interview typically lasts between 20-40 minutes and consists of:

- Case overview/ prompt
- Clarifying questions
- Structure/ framework building & explanation
- Problem solving & analysis
- Recommendation

More information on each of these sections follows.

In general, the bulk of your time should be spent on problem solving & analysis, with 2-3 minutes to build your framework and a <2 minute recommendation at the end.

The interview should be highly conversational and interactive. Depending on the firm, round, and seniority of your interviewer, some interviews will be more structured than others. Please see the subsequent section for more firm-specific information.

# Structure of the Case Interview

## Case Overview/ Prompt

- The case interview will start with the interviewer providing the overview of the client and the problem. Take diligent notes, as the overview contains crucial information you will need later in the case.
- Following the prompt, you should give the interviewer your initial synthesis of the case. Confirm the objective and the key facts. Don't simply repeat back word-for-word what the interviewer said – this is the first chance to prove that you can synthesize information quickly
- Occasionally, the interviewer will not frame a specific question – one way to handle this is to test the client's goals with clarifying questions and propose an approach before structuring the problem

## Clarifying Questions

- After the initial synthesis, you have the opportunity to ask some clarifying questions. This can be used to clarify a specific term used in the case prompt, to identify a concrete benchmark or goal for the problem(e.g. in a profitability case, can ask whether there are targets or time frames that the client has in mind) or to understand more about the client, their customer base, their competition, and their industry generally. Do not ask specific questions about the client at this stage, and do not ask more than 3-5 clarifying questions.

# Structure of the Case Interview

## Structure/ Framework Building & Explanation

- Following the prompt and clarifying questions, you should ask for some time to sketch out your framework
- Generally it is a good idea to write the objective at the top of your framework, and then structure it like an issue “tree”, with 2-4 buckets and a few supporting points underneath each
- Do not take more than 2 minutes to draw out your framework; then present to your interviewer
- It can be useful to read books like *Case in Point* that provide a bank of suggested frameworks, but **it is not recommended to try to memorize frameworks** as you run the risk of overlooking what is unique about each case situation and appearing robotic and overprepared

## Problem Solving & Analysis

- After talking through the framework with your interviewer, propose the area of analysis that you'd like to start with. Do not wait for the interviewer to prompt you with “Where would you like to start?”.
- At this point your interviewer may suggest a different path or present you more information, especially data. If the interviewer does neither of those things, you should continue down the path you proposed and start identifying potential issues and areas of analysis, and then ask if the interviewer has any related data
- In general, the analysis will start off with some calculations or chart-reading, and then will move into a more qualitative/strategic direction where you're asked to come up with some ideas. Keep in mind that this whole interview should be conversational in nature and listen carefully for hints.

# Structure of the Case Interview

## Recommendation

- Once you have worked through analysis and uncovered the main issues of the case, your interviewer will ask for a recommendation.
- You can ask for a minute to gather your thoughts, but some interviewers will say no. It is a good idea to make a habit of noting risks and next steps as you work through the case so that this step is quicker
- Your answer should:
  - Clearly state the recommendation
  - Support with a few key pieces of evidence (don't rehash analysis – get to the answer)
  - Identify risks
  - Suggest next steps
- Presentation of this should be no longer than 1 min (and sometimes the interviewer will ask for a shorter answer)
- If your interviewer gives you a minute to prepare, you can write out a recommendation slide and present it, similar to the framework at the beginning of the case. This is not necessary or possible in many case situations

# Frameworks

## Structure/ Framework Building & Explanation

- The most important thing to remember about frameworks is that there is no one-size-fits-all framework.
- That being said, the profit framework applies to a large number of cases; a framework for evaluating an investment decision is also useful.
- For a good overview of how various parts of a framework fits together in one monster diagram, refer to *How To Get Into the Top Consulting Firms* by Tim Darling book. There are good overviews of the most common frameworks in *Case In Point* and in the shared Consulting Club folder, but **do not memorize them**. Instead, you should be able to use your intuitive business judgment to determine the most relevant issues to examine.
- When constructing your framework, **remember to be MECE**, a McKinsey-coined term that stands for Mutually Exclusive and Collectively Exhaustive – meaning that your framework should cover all the key issues, without repeating issues across buckets.

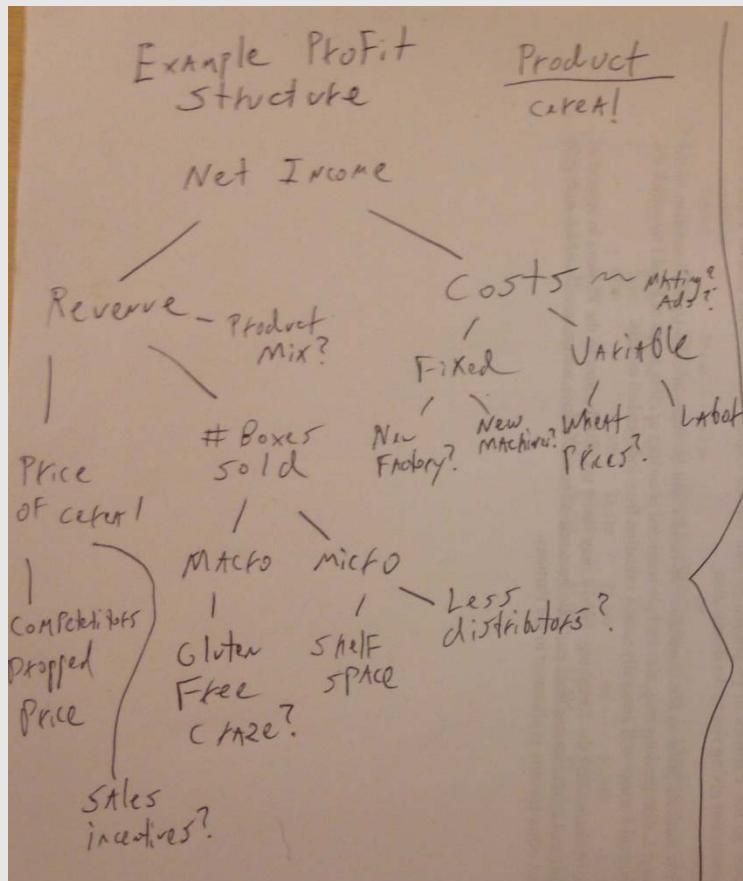
# Frameworks

## Additional advice

- Rehashing a generic framework like the BCG growth matrix or Porter's Five Forces in a consulting interview basically means interview suicide. Come up with your own framework (may be informed by Five Forces, etc) and make sure to customize the terms for the case: e.g. for a cable company, price is "subscription fee"; for a non-profit, price is "average donation amount".
- Practice structuring the problem by doing "practice starts", where you read the client problem and sketch out a framework. The advantage to this is that you can do it without a case partner.
- **Talking through your framework**
  - Once you have structured your framework, you will need to walk your interviewer through your thinking. The verbal communication of your framework is just as important as the structure.
  - Make sure you go through in a systematic, logical way, while being concise. Inserting a hypothesis when explaining your framework (eg. "It is my hunch that the profit decline is a result of a potential decline in the demand for razor blades due to a new trend of consumer dislike for shaving") will get you an extra gold star.
  - It is best to explain the framework at a high level by briefly introducing each bucket before drilling down into the issues listed within each bucket.

# Frameworks

## Example



## Things to Note

- The framework is customized for the product/market. This is an opportunity to show that you were listening and differentiate yourself from interviewees who will simply write generic trees ("revenue is composed of price, volume, and product mix" with little attention paid to the company and products given to them by the interviewer)
- Get creative. Note the use of known issues outside the case "Gluten Craze" combined with the details of the case.
- Dig past the 2<sup>nd</sup> and 3<sup>rd</sup> levels whenever possible
- There isn't a "correct" answer, just be creative, structured (MECE), and insightful

# Math

## The Math!

- For some people, doing calculations is the easiest part of the case. For others, it is the most miserable. The key is to be comfortable doing math on pen and paper with someone else watching you, which doesn't always come naturally. That's why it's critical to practice your "public math" through practicing cases with others.
- But keep in mind that 99% of the time, the math will be simple arithmetic, and keeping a cool head will prevent you from making mistakes. Additionally, your interviewer will frequently allow you to round to make the math easier (e.g. 50 week instead of 52)

## Sanity checking

- Once you come up with a number, "sanity-check" your answer – that is, make sure it makes sense in the context of the case. If you've sized the US cell phone market to be 10x the US population, you should verbalize to your interviewer that that doesn't seem to make sense and then work back through your calculation.

## Mistakes are OK

- You can recover from a math error – as long as you don't let it fluster you. Many of us made math errors in our final rounds of interviews and still received job offers.
- That said, it is best not to make the same mistake more than once, so if you're having trouble with the same issues (e.g. dropping zeros) in practice cases, focus on eliminating those errors.

# Math

## Talking through the process

- The toughest part about “public math” is learning not to fall completely silent while you’re doing multiplication. You can’t leave your interviewer hanging while you dive into calculations for several minutes, so it’s very important to come up for air and explain what you’re doing.

## Use shortcuts

- Remember to use shortcuts – round when you need to, or manage your zeros with scientific notation if that works for you.

## So what?

- The point of the case interview is not to showcase your mental acrobatics, but to actually do something with the numbers once you’ve calculated them. One of the most important qualities that interviewers look for is the ability to tie the number back to the point of the question (the answer isn’t “\$8B”, the answer is, “the potential market size is \$8B, which looks pretty attractive ...” and so on). It’s important to not only get the number but to understand how it fits into the overall problem and what it means you should do next.

## Practice!

- No one is a natural at all of these steps! It’s important to practice until you’re comfortable doing this in front of an interviewer.

# Math

## Example

How much money will we save?				
Current State	Material / Unit	# Labor / Unit	Volume	Total Cost
Product 1	15	10	1M	25M
Product 2	5	20	2M	50M
				75M

10% Labor Reduction on per unit basis				
FUTURE STATE	Material / Unit	# Labor / Unit	Volume	Total Cost
Product 1	15	9	1M	24M
Product 2	5	18	2M	46M
				70M

$$\text{Savings} = 5M$$
$$75M - 70M$$

## Things to Note

- The more you can structure information like an Excel spreadsheet, the better off you will be because:
  - You can better recover information
  - Your interviewer can follow what you are doing
  - It makes your look structured and organized
- Take the time to write prompts such as “How much money will be saved” and “10% labor reduction on per unit basis”
- Circle important numbers (\$5M in savings) that might be relevant to the recommendation or any additional prompt
- Go to the next level after the number is calculated → “I see the total savings is 5M, which represents about 6% of our total costs. This seems like a great reduction, but we would next want to know how this labor reduction is being generated and if there are any negative unanticipated consequences such as the threat of unionization, loss of great workers due to high stress, and/or high capital costs associated with getting to this higher level of labor efficiency

# Company Overviews and Interview Processes



## Firm Overview

“Whether it's business strategy, technology strategy or operations strategy, we shape value, new businesses and operating models for the future. That's high performance, delivered.”

### What they look for

- Accenture traditionally recruits on-grounds for its Strategy and Operations, Federal and IT Strategy practices.
- Accenture looks for well-rounded candidates who demonstrate a passion for creating client value through practical, implementable solutions.

### Career Hierarchy

Managing Director

Senior Manager

Manager

Consultant (post-MBA)

Analyst

# Accenture

>  
**accenture**  
*High performance. Delivered.*

## Interview process

- First and second rounds are both on-Grounds, with little time between each round (may be next day)
- Second round interviews are likely to be conducted by at least one Managing Director
- Accenture's interviews are less quantitative
- Interviews exhibit a “conversational style,” where the focus of the case interview is how the candidate communicates his approach and thinking.

# A.T. Kearney or ATK

\ Car-Knee\



## Firm Overview

"A.T. Kearney is a global team of innovative, insightful and collaborative experts who deliver creative, meaningful and, above all, sustainable results. Consultants that generates powerful strategic insights to address practical, real-world needs"

## What they look for

- ATK recruits on-grounds at Darden for its NA offices.
- Given ATK's national staffing model it makes little difference which office an applicant applies.
- ATK looks for candidates who are willing to work in its collaborative engagement model.
- ATK does not have a specific type of candidate that they look for and they actually take pride in the fact that their consultants are a diverse group with a wide range of personalities
- It is important to note that ATK does not recruit 2<sup>nd</sup> year MBA students and their entire class comes strictly out of the intern pool

<https://www.atkearney.com/careers>

Career Hierarchy
Director/ Partner
Principal
Manager
Associate (Post-MBA)
Analyst

# A.T. Kearney or ATK

\ Car-Knee\

**ATKearney**

## Interview process

- First round is on-grounds with Principal or Manager
  - Has two interviews in 1<sup>st</sup> round – 1 behavioral and 1 case (30min each)
  - First round case tests quant skills and ability to structure (can have a lot of math or almost no math; usually have cases built around operations strategy or sourcing and are not similar to the familiar profitability, market sizing or M&A cases)
- Second/Final round is at ATK office (need not be the one you are recruiting for)
- Second round has three components
  1. Written case with presentation to panel of Managers and Principals
    - A slide deck of about 15 slides is handed over to the candidate, will have lots of qualitative and quantitative information
    - Candidate has about 30mins to go through the information, build a slide deck with insights and recommendations on a flip chart and present it to the panel when they walk in
    - The case by itself is not complicated; the catch is to understand the data, pick the relevant insights and build a simple, coherent story on it
    - You will not have a computer but might have to do some math (ex. NPV) using a calculator (your phone's calculator is allowed)
  2. 2 Behavioral fit interview with Partners, similar to 1<sup>st</sup> round

# Bain & Company



BAIN & COMPANY

## Firm Overview

“Bain & Company is the management consulting firm the world's business leaders come to when they want enduring results. Together, we find value across boundaries, develop insights to act on, and energize teams to sustain success. We're passionate about always doing the right thing for our clients, our people and our communities, even if it isn't easy..”

## What they look for

- Generalist practice – no specializations
- Strong emphasis on cultural fit due to local-staffing model
- Want to see a balance of quantitative ability and qualitative strengths
- “Answer first” structure to responses
- Focus on driving results for the client (originated “fees at risk” model)

Career Hierarchy
Partner
Principal
Manager
Consultant (Post-MBA) → Case Team Leader
Associate Consultant

# Bain & Company



## Interview process

- First round is at Darden (two cases, with behavioral questions at the start)
- Second round is in the office you are interviewing for; either:
  - 1 typical case, 1 written case, 1 behavioral interview
  - 2 typical cases, 1 written case

# The Boston Consulting Group



## Firm Overview

“Our customized approach combines deep insight into the dynamics of companies and markets with close collaboration at all levels of the client organization. This ensures that our clients achieve sustainable competitive advantage, build more capable organizations, and secure lasting results.”

## What they look for

- BCG looks for intellectually curious candidates that are looking to grow with the firm and are open to new challenges.
- Fit with the firm's culture is important, so it is good to start developing relationships with BCGers early on in the process. There is no set professional background or profile that BCG is looking for in prospective Consultants.
- BCG wants to know why you are passionate about a certain location. Be prepared to network with BCGers at your office preference and explain why you want to work there

[http://careers.bcg.com/path/who\\_we\\_seek.aspx](http://careers.bcg.com/path/who_we_seek.aspx)

Career Hierarchy
Partner
Principal
Project Leader
Consultant (Post-MBA)
Associate

# The Boston Consulting Group



## Interview process

- Round 1: On Grounds
  - Two consecutive interviews will both contain a behavioral part and a case with roughly equal weight
  - Cases typically start with an open ended “brainstorming” phase followed by a quantitative phase.
  - Expectation is that the interviewee will “drive” the case with input from interviewer
  - Story of “why consulting, why BCG” are important, as is nailing the quant section. Less importance on office-specifics
- Round 2: In office (note that some offices do not have the 3<sup>rd</sup> written interview)
  - Three one-hour interviews typically with partners, maybe principals
  - Lots of probing into “office-specific” questions. Why this office in particular?
  - All interviews will have a behavioral and case component
  - Two interviews will have same structure of first round (similar length quant case)
    - Typically will be more “conversational”, and less structured than first round
    - Some partners will use cases from their own experience
  - Third interview consists of a written case and Q&A/ fit questions at the end
    - ~30 minutes to read 15-20 page slide deck and prepare recommendation
    - Present your recommendation using 3-4 selected slides
    - Interviewer will challenge your recommendation and you will jointly analyze the case



## Firm Overview

“As the world’s largest management consulting firm, we help organizations build value by uncovering insights that create new futures and doing the hard work to improve performance.”

### What they look for

- Deloitte recruits on-grounds at Darden its Commercial Strategy & Operations practice, although Federal, Technology and Human Capital are also a part of the consulting division.
- They look for well-rounded candidates who understand their mantra of “executable strategy” –
- Deloitte prides itself on not only doing the strategy assessment, but staying on for the implementation and execution of the strategy as well.

Career Hierarchy
Director/ Principal
Senior Manager
Manager
Senior Consultant (post-MBA)
Consultant
Business Analyst



## Interview process

- First and second round are back-to-back at Darden
- First Round
  - A behavioral interview
  - 30 minute case designed to heavily test quantitative ability
  - Deloitte interviews often feature a “data sheet” that presents all the information in advance, but it is still important to follow the standard case format
- Second Round
  - A behavioral interview
  - An individual case interview
  - A ~5 person group case in which you will play a specific functional role

# McKinsey & Company

McKinsey&Company

## Firm Overview

“McKinsey & Company is a global management consulting firm. We are the trusted advisor to the world's leading businesses, governments, and institutions.”

## What they look for

- McKinsey looks for five aspects in its candidates. All areas are tested in the interview process; the case interview will test problem solving and the other skills will be tested through the experience interview. They are **Personal Impact, Entrepreneurial Drive, Problem-Solving Skills, Achievement and Leadership Abilities**
- McKinsey recruits MBAs into 3 different practices: Strategy, Operations, and BTO (Business Technology Office)

Career Hierarchy
Partner
Associate Principal
Engagement Manager
Associate (Post-MBA)
Business Analyst

## Interview process

- First round (on-grounds)
  - 2 interviews, each with 1 case and 1 experience question
  - First rounds normally conducted by Ems
  - McKinsey's interviews are less driven by the interviewee and more driven by the interviewer than other companies. Be prepared to structure your thoughts during each new prompt/phase of the interview, but keep in mind that each prompt from the interviewer is still part of the larger issue/ client need which is usually presented up front
  - Recommendations need to take into account takeaways from each prompt/phase of the interview
- Second round (in-office)
  - Generally 3 interviews, each with 1 case and 1 experience question
  - Second rounds are normally conducted by APs/ Partners

# The Parthenon Group



## Firm Overview

- The Parthenon Group is a strategy consulting firm with expertise in private equity and education. Additional practices include healthcare, industrials, and consumer and retail. Parthenon operates a “two-case model” and typically emphasizes light-travel. Parthenon was acquired by EY in September of 2014, but is maintaining a separate brand and operations.

## What they look for

- Parthenon recruits at Darden for its Consultant and Summer Consultant roles.
- Parthenon describes its consultants with the phrase “Smart. Nice. Driven.”

Career Hierarchy
Managing Director
Vice President
Sr. Consultant
Consultant (Post-MBA)
Senior Associate
Associate

# The Parthenon Group



## Interview process

- Format is the same for summer and full-time roles
- First Round: 2 interviews
  - Each interview will begin with a behavioral question
  - The first case interview will be a typical case
  - The second case interview will be a market sizing exercise (ex: “How many doughnuts are sold in the US each year”)
- Second Round:
  - 15 minute chat with a Managing Director
  - 1 hour case (30 minutes solo preparation, 30 minutes talking through the case with a vice president or managing director)



## Firm Overview

"From expansion into emerging markets, to new technologies such as cloud computing, companies are trying to sort through how to exploit new opportunities for growth. We have deep industry experience and deliver customer solutions to help our clients address their most complex business issues. Our professionals bring a diverse background of skills and education allowing us to provide clients with a unique and holistic perspective on their issues."

## What they look for

- Fit, and the typical consulting analytical toolkit, as well as relevant background experience. PwC is functionally-based
- The major functions of PwC Advisory include: Strategy Consulting, Management Consulting, Risk Consulting, Consumer and Industrial Products (CIPS), Financial Services, Technology, Information, Communications and Entertainment (TICE) and Technology Consulting within Health Industries.
- PwC Advisory has offices in most of the major cities in the US. The firm is quite flexible in location. Relocation among offices within the US is common.

Career Hierarchy
Partner
Director
Manager
Senior Associate (post-MBA)
Experienced Associate
Associate



## Interview process

- Round 1 (on-Grounds): 2 behavioral interviews, 30 min. of each, focusing on fit and relevant background experience
  - The interviewers are not necessarily from the office the candidates applied for
  - But candidates are interviewed by the function applied to
- Round 2 (in-office): 2 behavioral interviews + 1 written case interviews, all are around 30 min.
  - PwC Advisory usually organized the interviews in the offices in some hub cities instead of sending candidates to the offices they applied for
  - An associate level employee of PwC Advisory will be assigned to each candidate as the host for interview, and be accompany with the candidate during the breaks of the interviews
  - The written case background will be distributed 48 hrs in advance of review; the questions will be given out 30 min. before the interview



## Firm Overview

- A mid-sized management consulting firm focused on sales and marketing, primarily in healthcare
- The firm has growth initiatives in place for “PI” aka priority industries (Financial services, travel and transportation, energy, media, industrials)
- ZS is unique in their academic, non-hierarchical environment, casual, office-based culture, and the level of responsibility given to MBA hires. As a consultant at ZS, you are often given the responsibility of managing the project team and the project’s day-to-day operations.

## What they look for

- ZS recruits at Darden for its Consultant position.
- The firm values candidates with strong quantitative abilities and sales and marketing knowledge.
- A thorough understanding of the pharmaceutical and medical devices industries is valued, but not required. This is especially the case if recruiting for the PI or Tech practices.
- The firm looks for candidates who are team players, and have demonstrated the ability to work well in / manage teams.

Career Hierarchy
Principal
Associate Principal
Manager
Consultant (post-MBA)
Associate Consultant
Analyst

## Interview process

- First round interview held on-grounds at Darden
- These interviews are mostly behavioral, with one case
- Second round will probably be held on-grounds
- Second round will include back to back interviews, including a presentation to principals
- Quantitative skills (theoretical and actual), ability to synthesize large amounts of information, and presentation skills are rigorously tested

# Practice Cases

# Case Index

Case Name	Firm	Round	Difficulty*	Page Number
Diesel in “The Last Frontier”	Bain	1	2	35
Blue Ivy Airlines	Accenture	1	1	44
Plastic Pellet Problems	AT Kearney	1	2	51
Ski Resort	Deloitte	1	3	59
Regional Bank Expansion	Accenture (IT)	1	1	66
Jewelers-R-Us	Bain	1	2	74
SuperTech Electronics	Deloitte	1	2	83
Kyle’s Brick Factory	McKinsey (Ops)	2	3	92
Car Radios	BCG	2	2	103
Big Bob’s RV Generators	McKinsey	2	1	112
Magazine Pricing Power	BCG	2	3	119
Movie Theaters Today	Accenture	2	2	126
Wing Spoilers	McKinsey	2	2	135
Frozen Slushy	Bain	2	2	148

\*Difficulty scale is 1-3 with 1 being the easiest and 3 being the hardest

# CASE #: 1

## Diesel in “The Last Frontier”



Firm Style	Interview Round
Bain	1

### Case Question

Our client is the Alaskan business unit of a large multi-national oil & gas company that is drilling on the north shore of Alaska. Due to its isolated location the company has to provide all necessities for its employee including food, housing, utilities, transport, etc. Recently the company has been facing higher diesel fuel costs. How can we help?

### Clarifying information (*provide only if corresponding questions are asked*)

Q: What is diesel used for at the facility?

A: There is no other source of fuel. The machinery, utilities, transportation, and housing all use diesel.

Q: Is this company making diesel or is this a cost?

A: The company is drilling crude oil but does not currently refine the oil into diesel.

Q: Is there a reason why costs have increased?

A: The EPA has recently required cleaner fuel which requires increased refining resulting in higher diesel prices

Q: How are we currently sourcing our diesel?

A: We are currently buying our fuel in Anchorage and paying to ship it 500 miles to the North Shore facility

# Diesel in “The Last Frontier”

## Framework / Structure

This interviewer is looking for (i) identification of whether this is a company-specific or industry-wide problem and (ii) breadth and creativity of thinking in identifying the company's primary uses of oil and potential opportunities for savings, which can be accomplished by reducing the volume of usage or the price of purchase. Below is an example of a strong MECE framework.

### Internal:

- *Reduce fuel usage*
  - Transportation costs (employees, machinery, diesel fuel)
    - Reduce frequency / increase utilization of shipments (employees and equipment)
    - Change method of transportation (land vs air vs sea; most fuel efficient option)
  - Operations
    - Improve fuel efficiency of drilling machinery
    - Reduce operating expense (utilities / electricity consumption onsite)
- *Reduce purchase price*
  - Vertical integration / reduce third party dependencies and expenses
  - Oil futures
  - Find a closer fuel source
  - Lobbying / subsidies

### External:

- *Competitors' costs*
- *Long term diesel trends*
- *Macro market trends*

# Diesel in “The Last Frontier”

## Interviewer Tips

- Amongst several other issues / opportunities, the candidate should mention the cost of procuring / transporting diesel from the nearest refinery to the North Shore site.
- Once prompted, mention that there is a significant third-party cost associated with the transportation of the fuel.
  - If not presented during clarifying questions, present the case fact that the North Shore oil field is 500 miles from the nearest refinery facility when possible.
- After some discussion, mention that the client is considering building their own refinery facility at the North Shore in order to eliminate this cost (essentially, they would create their own diesel on-site).
- The rest of the case should focus on a breakeven analysis surrounding the construction of the new refinery.

# Diesel in “The Last Frontier”

## Optional Question

If candidate asks about competitor's margins or diesel spending consider pushing the candidate by asking a second level insights question: How could we figure out our client's competitors cost?

### Direct

- Use financial reports to look at cost structure
- Call your competitor and ask how much they're paying for their diesel

### Indirect

- Call sourcing companies to ask them for data
- Back into prices by considering their location/cost structure
- Purchasing benchmarking data from 3rd party

Continue asking the candidate “what else” until they've exhausted their list to pressure test candidate.

# Diesel in “The Last Frontier”

## Question 2:

- Evaluate whether or not company should build their own refinery?
  - Candidate should perform a break-even or NPV analysis as a response. There is not WACC, so breakeven is best.
  - The company has a 5-year breakeven requirement
- Facility capital expenditure
  - The refinery would cost \$150,000,000 to build
- Candidate should drive the conversation to understand the current and post-refinery per gallon fuel costs to find the incremental cost savings associated with building a refinery
  - Current price: \$4.00/gal
  - Transportation costs \$.50/gal
  - Storage costs: \$.75/gal
  - Cost to drill and refine ourselves: \$3.40
- Candidate must remember that storage costs occur both before and after refinery project during incremental cost savings calculations
  - The facility is currently using 26,000,000 gallons of diesel annually

# Diesel in “The Last Frontier”

## Calculations

- Costs before: \$4/gal + \$.50/gal + \$.75/gal = \$5.25/gal
- Costs after: \$3.40/gal + \$.75/gal = \$4.15/gal
- Incremental: = \$5.25/gal - \$4.15/gal = \$1.10/gal
- Annual Savings:
- \$1.10/gal x 26M gal = \$28.6M annually
- 5 year payback = \$26.8M x 5 years = \$143 M

## Candidate should immediately drive to insights

- \$143M is less than the \$150M capital expenditure, but it's close. Candidate should consider the assumptions used to make these calculations.

# Diesel in “The Last Frontier”

## Insights

Candidate should naturally question the implications of his/her calculations – interviewer may need to prompt the candidate to consider pros and cons of refinery

### Pros

- Diesel prices may increase in the future thus increasing savings
- Refinery may provide more than 5-years of useful life increasing the ROI in the long-term
- Company may consider sell diesel to other projects or companies drilling in the region and therefore increase annual contribution

### Cons

- The price of diesel may drop causing our investment to contribution to fall further.
- The refinery may cause facility diesel consumption to increase which would deteriorate our cost savings.
- There is potential to decrease consumption to create even more saving than the refinery can provide.
- Company may not have the competency or capability to run refinery

# Diesel in “The Last Frontier”

## Recommendation

There is no “correct” recommendation in this case. The candidate’s recommendation should include a discussion of: (i) a clear “go” or “no go” recommendation regarding the new refinery, (ii) the project’s breakeven analysis and the client’s criteria, (iii) risks around building (or not building) the new facility, and (iv) a return to the original framework and the identification that there are other cost-reduction strategies that could be pursued.

### “Go Recommendation”

- *Weak:*
  - The client should consider moving forward with the new refinery. Although it doesn’t meet the company’s breakeven threshold, gas prices are likely to go up in the near future and the company will continue to save on costs moving forward.
- *Strong:*
  - The client should begin construction on the new refinery. The project only falls 5% short of the 5-year breakeven threshold, and there will likely be substantial additional cost savings if diesel prices continue to rise. However, the breakeven analysis is very sensitive to the budgeted construction costs, and the company should perform additional analysis to make sure this is the right estimate. There are also some risks associated with the operation of an oil refinery, but assuming the client has the competency to run a successful refining operation, I believe the benefits from the long-term savings outweigh the near-term costs.

# Diesel in “The Last Frontier”

## Recommendation (continued)

### “No-Go Recommendation”

- *Weak:*
  - The client should not build the refinery. They have a 5 year breakeven criteria, and this project does not meet that criteria.
- *Strong:*
  - The client should not begin construction on the new refinery. The project falls short of the 5 year breakeven threshold by 5% based on the construction estimates provided, and these initial budgets are typically underestimated, pushing the project further away from the breakeven. There are also significant risks associated with the operation of an oil refinery, which is outside of the client’s core competency. Though the company may be exposed to rising diesel prices if they don’t build the refinery, there are additional cost reduction strategies as mentioned in the initial framework that pose significantly less risk to our client.

# CASE #: 2

## Blue Ivy Airlines



Firm Style	Interview Round
Accenture	1
Case Question	
Blue Ivy Airlines is considering charging for bags. Is this a good idea?	

### Clarifying information (provide only if corresponding questions are asked)

- This case is purposely ambiguous to challenge the candidates ability to create a framework without a great deal of additional information
- The customer is a low cost, national airline with an emphasis on customer service
- All of Blue Ivy Airlines competitors charge for bag fee
- Blu Ivy's primary goal is to increase revenue. Their costs are largely fixed making revenue a reasonable proxy for profitability. Their secondary goal is preserving market share on a customers/year basis
- Why is Blu Ivy considering this? Blu Ivy has experienced decreasing market share since competitors adopted this strategy?

# Blue Ivy Airlines

- Frameworks should include:
  - Revenue
    - Increased revenue from bag fees
      - Cost/bag\*Checked bags
    - Decreased revenue from losing customers
      - Average Ticket Price\*Lost Customers
  - Customer
    - Willingness to pay?
      - Will customers avoid bringing bags that need to be checked.
        - Leading to delayed flight takeoff time?
        - Leading to increased costs associated with gate agents and flight attendants?
        - Leading to decreased customer satisfaction due to inefficient loading?
      - Decreased customer satisfaction
      - Decline in Brand Equity
    - Competition
      - Will competitors take our place and allow bags to “fly free”?
      - Will consumer choose competition without additional cost savings?
      - Have competitors who adopted had their revenue grow or shrink since adoption?

# Blue Ivy Airlines

- At this point, the interviewee should have identified the tradeoff between the two revenue streams and ask to do a breakeven analysis
- Information should only be provided if asked
- Bag Revenue per Day = Bag Fee \* % Checking \* Avg Flight Capacity \* # Flights per Aircraft per Day \* Fleet Size
- Revenue lost per day = average ticket price \* customers per day \* %lost
- The difference in annual revenue is roughly 33M
- Encourage interviewees to round for an annualized number

Increased Revenue	
Bag Fee	\$25
% of customers checking	40%
Average Flight Capacity	150
# of flights per aircraft per day	4
Fleet Size	150
Total Customers Checking	36,000
Bag Revenue per day	900,000

Decreased Revenue	
Avg Ticket Price	\$100
Customers Per Day Before	90,000
% Customers Lost	11%
Customers Lost	9,900
Revenue Lost per day	\$990,000

# Blue Ivy Airlines

## Insights

- The lost revenue associated with lost ticket sales exceeds the gained revenue associated with charging for bags
- There are intangible elements to consider, most importantly:
  - Damage to brand and reputation beyond lost customers
  - Additional delays to flights due to increased plane boarding time
  - Cost of switching marketing campaign
- Competitors are gaining market share with their charge for bag strategy. Why?
  - Adopting this strategy opens up a niche in the marketplace for additional competitors to takeover
  - Competitors may be sacrificing revenue for market share
    - Can we segment customers by those who are likely to carry on regardless of fees (families) vs. those who are more flexible (business travelers)?

# Blue Ivy Airlines

## Recommendation:

Interviewee may choose to recommend or discourage charging for bags. The data in this case favors not launching, but each answer can be acceptable if it addresses the following (i) that initial analysis indicates that charging for bags will not increase revenue in the short term (ii) launching this initiative is likely to damage the reputation of Blue Ivy (iii) that this move may potentially destroy the economic moat that currently exists as the last carrier in the space who does not charge for bags

### **"Yes, we should charge for bags"**

- *Weak*
  - The client should launch the bag charging initiative because all of the competitors are doing it and we don't want to be left behind
- *Strong*
  - Despite the initial loss in revenue our client should launch the bag charging initiative for three reasons. First, the loss in revenue is potentially a temporary reaction to our new initiative and will likely be reversed. Second, we are losing market share and will continue to lose both market share and revenue if we fail to follow the industry norms of a la carte pricing. Finally, there may be the opportunity to combine our launch of bag fees with lower ticket prices to further serve our customer base. The risks of this strategy are that we may lose a core customer base that is loyal to our brand because we have resisted bag fees. I would recommend that the next steps the client take are an in depth look at our customer base segments to figure out if the loss of 11% is temporary or permanent.

# Blue Ivy Airlines

## Recommendation (continued):

**“No, we should not charge for bags”**

- *Weak*
  - The client should not launch the bag initiative because the customers won't like it and it will cause a loss in revenue.
- *Strong*
  - The client should not launch the bag initiative for three main reasons. First, it will decrease revenue in the short term. Second, this will damage our company's brand and cause us to lose customers. Finally, our company occupies a unique position in the low cost market and we may lose our core customer base if we launch this initiative. The risks associated with this strategy are mainly that each of our competitors have launched this and we risk being left behind as we continue to lose market share. The next steps I would recommend to the client involve customer segment analysis and exploring whether or not competitors are gaining market share at the expense of profitability.

# Blue Ivy Airlines

- Recommendation: Interviewee may choose to recommend or discourage charging for bags.
- Charge- Recognize that this is motivated by revenue, and identify risk of moving forward
- Don't charge- explain how qualitative risks may outweigh the Revenue Benefits

## Interviewee Identifies next steps (suggestions below)

- Research into Customer satisfaction declining impact on Rev
- Competitive analysis
  - Will Blu Ivy Air be a 'survivor' if they charge for bags?
- Consumer price sensitivity (can we charge less and retain more passengers?)
- Long term Revenue gain/loss...will customers adjust?

# CASE #: 3

## Plastic Pellet Problems



Firm Style	Interview Round
AT Kearney	1

### Case Question

The client is a Private Equity investor who has recently purchased a plastic pellet manufacturing company based in South Carolina. She has approached our company searching for several alternative strategies to improve EBITDA and firm value so that she can sell the firm for a profit within five years.

### Clarifying information *(provide only if corresponding questions are asked)*

- Current EBITDA is \$100M
- Plastic pellet manufacturing is the process of procuring waste or recycled plastics and transforming them into a pellet form so that it can be sold to companies needing to reproduce other plastic products.
- They sell these pellets exclusively to companies who produce plastic products
- She wants to improve the value of the firm by at least 3x

# Plastic Pellet Problems

- **Framework**

- A poor framework will include only a profit tree
- A good framework will include:
  - A profit tree that isolates pricing, volume, product mix, and fixed/variable costs
  - An analysis of the strengths and weaknesses of the pellet company
  - A review of the customer base and opportunities to expand the base
  - Potential additional revenue streams (e.g., specialized products)
  - Attributes of the product
  - Market and competition trends
- An exceptional framework would include
  - Opportunities to create synergies within the PE companies portfolio

# Plastic Pellet Problems

- Case Facts
  - Plastic pellets is a highly commoditized market
  - Currently all national demand is being filled
  - There are two types of plastic pellets that the company makes, post-consumer and scrap manufacturing. Post-consumer plastics can only be used to make new consumer products while the scrap manufacturing plastic can be made into anything.
  - Due to the commoditized and unionized nature of the market, labor and material costs cannot be cut
  - Market growth is relatively flat
  - There are no synergies possible within the PE firms portfolio and there are no plans to acquire any new companies
  - Plant capacity is currently maxed out
- Allow the interviewee to walk through their framework
- The interviewee should drive the case, but steer them to a relevant solution if they become overly bogged down in an irrelevant area

# Plastic Pellet Problems

- Product Mix
  - Prompt the interviewee to brainstorm potential issues around product mix
  - Provide the following information if the interviewee asks:
    - Currently more of product A (post-consumer plastic) is being made than product B (manufacturing scrap)
    - Product B has a higher margin than product A
    - The company has an excess of inventory to produce product A
    - We are currently producing at full capacity
    - The company can sell all of the product it manufactures
    - We currently make more of product A than product B because of an excess of inventory for product A
- Key takeaways
  - The interviewee should realize that the company should try to move into the product that is higher margin
  - A strong candidate would identify that excess of inventory needs to be addressed and could be resolved by selling it to a competitor

# Plastic Pellet Problems

- **Capacity Constraints**
- Steer interviewee to explore the capacity constraints problem. Are there other ways operations can impact EBITDA? Good responses include:
  - Cost cutting & Waste reduction
    - Interviewee should explore opportunities to make the factory work more efficiently/cheaper
- Prompt the interview to list areas they may review to determine operational efficiency
  - Lead times, turn-around time, inventory, throughput, maintenance cost, downtime, etc
- Once interviewee explores operational areas, prompt to explain why that would reduce costs ( interviewee should provide a specific and tangible way that would reduce costs).
- **Key takeaways**
  - Good candidates would recognize that any changes would need to pay off in the given time frame, and that increasing capacity would not be realistic in 5 years.

# Plastic Pellet Problems

- **Supplier Issues**
- If the interviewee has not mentioned suppliers of raw materials, the interviewer should steer them in that direction
- The following is a list of suppliers that the company currently uses
- Create the optimal sourcing plan to procure 1000 tons of plastic

Supplier	A	B	C	D
Capacity (tons)	1000	500	200	100
Price (\$K)@100tons	3.00	2.40	2.40	2.50
Price (\$K)@500tons	2.50	2.35	N/A	N/A
Unit Transport Cost*	0.25	0.50	0.10	0.50

\*No other unit costs are different across the suppliers

# Plastic Pellet Problems

- **Solution:** The objective is to calculate the unit cost for all suppliers based on potential order quantity and procure based on cheapest sources

Supplier	A	B	C	D
Unit cost @100tons	3.25	2.90	2.50	3.00
Unit cost @500tons	2.75	2.85	N/A	N/A

- Based on the above,
  - C is cheapest, so procure all 200 tons
  - A is next cheapest but only if you buy 500tons, so procure 500tons from A
  - B is next cheapest for procuring less than 500tons, so procure remaining 300tons from B
- Sourcing plan = A:500 tons, B:300 tons, C:200tons
- Bonus (not necessary): Procurement cost for 1000tons is \$2,745K
- Notes to interviewer: Push the interviewee to think about other factors they would consider while picking suppliers

# Plastic Pellet Problems

- What recommendations would you give to the owner?
  - Switch product mix to focus on the higher margin product
    - Sell excess inventory of product A
  - Review operations for cost cutting opportunities
  - Seek new contracts with companies A, B, and C
- Risks
  - Changes not coming online within timeframe
  - PE firm restructuring could shake the companies foundation
  - Competitive landscape or customer demand prohibits a move into the higher margin product
- Next steps
  - Seek contracts with ABC
  - Begin a review of operational practices

# CASE #: 4

## Ski Resort



Firm Style	Interview Round
Deloitte	1

**Case Question**

You are riding up a chairlift at a small ski resort in West Virginia with a fellow classmate. It's a great spring skiing day and probably one of the last weekends the resort is open for the year. Your friend had heard a rumor that the resort might be up for sale and she asked you how much you think the ski resort might be worth. How might you go about determining the value of the resort?

### Clarifying information (provide only if corresponding questions are asked)

*This is an estimated valuation case. The candidate should ask for several details to know more about the ski resort. This case will follow a simple 'Revenue – Cost' estimation of cash flow. The value of the ski resort is the present value of future cash flows.*

#### **Give the Following Information if Requested:**

- Product mix: revenue from ticket sales and food purchased on site
- Open Hours: the ski resort is open Thurs-Sun from December 1 to April 30. In the summer it is used by a private Summer Camp who pays \$500,000 for full access.
- Staff: there are 20 staff at the resort
- Tax Rate: 30%
- Discount Rate: 14%
- Annual Growth Rate: 4%

*The candidate may not ask for all of this information up front.*

# Ski Resort

- Question 1: How would you measure revenue?
  - *Allow the candidate to make some assumption of how you would measure revenue. Watch for realistic assumptions and logical progression.*
  - *Answers would include things like:*
    - ticket sales
    - food/retail sales
    - Lessons, parking, services sales
- Question 2: What might drive variation in these numbers?
  - *Answers could include:*
    - snow conditions
    - Weather
    - Quality of food/lessons
    - Presence of other ski or winter outdoor entertainment offerings in area
    - Macro economy

# Ski Resort

- Hand the candidate Exhibit 1 to calculate Revenue.
  - If the candidate has not asked, tell them that the resort is open for skiing from Thurs-Sun for 20 weeks--8 are off season and 12 are peak season
  - Share with them that, in addition to ticket costs, skiers spend on average \$8 on food
  - Revenue should add up to \$9,265,600. (see next slide for math)
  - Candidate should recognize that this revenue is only for Dec-April. They should ask if there is any other revenue from the remainder of the year. Prompt them if not.
  - Tell them that there is an arrangement for a summer camp to use the land for the remainder of the year. The camp pays a flat \$500,000 fee for access to the land.
  - Thus annual revenue = \$9,765,600

# Ski Resort

- Revenue calculations

	Weekend		Weekday	
	Adult Ticket	Child Ticket	Adult Ticket	Child Ticket
<b>Off Season (December and April)</b>	\$ 50	\$ 35	\$ 45	\$ 30
<b>Average Attendance</b>	1,500	600	500	200
<b>Peak Season (January to March)</b>	\$ 65	\$ 45	\$ 50	\$ 35
<b>Average Attendance</b>	2,000	800	1500	600
	Adult Ticket	Child Ticket	Adult Ticket	Child Ticket
<b>Daily Off Season Ticket Revenue</b>	75000	21000	22500	6000
<b>Daily Peak Season Ticket Revenue</b>	130000	36000	75000	21000
<b>Total Weekly Off Season Revenue</b>	\$150,000	\$42,000	\$45,000	\$12,000
<b>Total Weekly Peak Season Revenue</b>	260,000	72,000	150,000	42,000
<b>Total Revenue from Off Season (8 weeks)</b>	\$1,992,000			
<b>Total Revenue from Peak Season (12 weeks)</b>	\$ 6,288,000			
<b>Total Ticket Revenue</b>	\$ 8,280,000			
<b>Total Weekly Off Season Skiers</b>	5,600			
<b>Total Weekly Peak Season Skiers</b>	9,800			
<b>Total Number of Skiers</b>	92,800			
<b>Food Revenue (\$8 per person)</b>	\$ 985,600			
<b>Total Revenue</b>	\$ 9,265,600			
<b>Total Revenue including \$500,000 from camp</b>	\$ 9,765,600			

# Ski Resort

- The candidate should then proceed to costs.
  - There are two components: fixed and variable. Have the candidate brainstorm potential costs. Under fixed costs they might consider: leasing the land, chair lift machinery, insurance, general maintenance, employees. The only real variable cost is the COGS of the food. Allow the candidate to brainstorm before sharing this data:
  - Variable costs are just 50% of the food revenue. Tell the candidate they can round the food revenue to \$1 million
  - Fixed costs are \$500,000 per month
  - Total costs equal \$6,500,000
  - After the candidate subtracts costs from revenue they should have a profit of \$3,265,600. Tell the candidate they can round to \$3,300,000
  - Do not forget that we need the after-tax cash flow number (approximately  $\$3,300,000 * (1 - .3) = \$2,310,000$ ). You now have the annual cash flows generated by the ski resort.

# Ski Resort

- *At this point a great candidate will move the case forward and recognize that they need to figure out a stream of cash flow going forward.*
- Question: how does one perform a valuation of the business?
  - To perform a valuation, the candidate must estimate the cash flows from the business and discount them back using a perpetuity formula. The discount rate is 14%. When the candidate asks about the growth rate, say the ski resort is growing by 4%. Thus whatever numerator the candidate arrives at should be divided by  $.14-.4=.1$ , an easy calculation using the  $CF/(r-g)$  formula for perpetuity.
  - In this case the answer is  $\$2,310,000/.1=\$23,100,000$

# Exhibit 1: Ski Resort Prices and Attendance

## Exhibit #1

	<u>Weekend</u>		<u>Weekday</u>	
	<u>Adult Ticket</u>	<u>Child Ticket</u>	<u>Adult Ticket</u>	<u>Child Ticket</u>
<u>Off Season</u> <u>(December and April)</u>	\$ 50	\$ 35	\$ 45	\$ 30
<u>Average Attendance</u>	1,500	2/5 <sup>th</sup> the # Adults	1/3rd the # Adult weekend skiers	2/5 <sup>th</sup> the # Adults
<u>Peak Season</u> <u>(January to March)</u>	\$ 65	\$ 45	\$ 50	\$ 35
<u>Average Attendance</u>	2,000	2/5 <sup>th</sup> the # Adults	3/4rs the # Adult weekend skiers	2/5 <sup>th</sup> the # Adults



# CASE #: 5

## Regional Bank Expansion

Firm Style	Interview Round
Accenture (IT Strategy)	1

### Case Question

Our client, a regional bank that has been growing inorganically, wants to build a new site for all of its app developers. The cities that the bank is looking to build the new facility are Detroit, Chicago, and Orlando.

Recommend a city for our client to build its site in. Consider the current economy and employment.

### Clarifying information *(provide only if corresponding questions are asked)*

Does the client have offices in any of the cities? – No: this will be the only site in the city

Do we know the quality of the talent pool in each of the cities? – see exhibit

What's the square footage of the new site, and what kind of construction will be included? – 200,000 sqft; with a new data center for software/hardware

Is the bank leasing or buying the building? – see exhibit

How many headcounts does the bank want to employ at the new site? What are the costs for equipment and supplies per head? – see exhibit

Is the bank planning on providing relocation packages for existing app developers? Is it less expensive to train new employees? – Cheaper to retain employees; and costs are in the exhibit

What's the culture of the app development team? – Creative and open

# Regional Bank Expansion

## Framework / Structure

What should we consider? (this should be the framework)

- Financials for each city: fixed costs; variable costs; opportunity costs
- Culture/HR: relocation packages; hiring of new talents; level of creativity; life style/commute
- Concerns/Risks: feasibility of repurposing site (exit strategy); talent retention; cultural mix with existing employees

Take a look at exhibit 1, what do you take away from it? (data analysis)

- Identified risks are factors that the client and employees care for
- Since impact levels are the same for each city, it speaks to how much our client/employees care about the risks
- Probability speaks to the likelihood of the risks becoming real (in a negative way). For example, if the talent risk is high than it is more likely that the client will have a tough time attracting sufficient talent

# Regional Bank Expansion

## Insights

Candidate should work through Exhibit 1 and extract insights to support their hypothesis. Here are some examples of insights that can be extracted from the data. Note that the Exhibit is intentionally designed to be a bit vague. Great candidates will ask a sufficient number of clarifying questions to ensure they understand the exhibit before diving into analysis.

### Pros

- Detroit: No high probability risks, talent risk is low which is likely the most important
- Chicago: All probabilities are at the same level or lower than the other two, office picture shows a “hip” culture
- Orlando: Palm Trees

### Cons

- Detroit: Office looks stuffy which could stifle creative and open culture
- Chicago: None in the data, but the candidate can be creative here (higher cost of living for employees, more competitive market might mean higher compensation expenses)
- Orlando: 3 high probability risk factors; building does not support culture

# Regional Bank Expansion

## Recommendation

There is no “correct” recommendation in this case, but Orlando is an incorrect recommendation. The candidate’s recommendation should include a discussion of: (i) company culture and building fit (ii) relevant risks and their relative impacts (iii) risks around their desired location.

The focus of a strong recommendation should be on the data provided, particularly the high impact factors. Candidates should be encouraged to be creative and they may discuss factors from outside the data provided as part of their recommendation (such as higher costs in Chicago), but extraneous factors should not form the basis of their recommendation.

# Exhibit 1: Risks and Impact

Identified Risks	Detroit		Chicago		Orlando	
	Impact	Probability	Impact	Probability	Impact	Probability
Talent	high	low	high	low	high	high
Transportation	high	medium	high	low	high	high
Lease vs Buy	low	medium	low	low	low	low
Consolidation costs	medium	medium	medium	medium	medium	high
Not meeting business case	medium	low	medium	low	medium	medium

## Exhibit 2: Office Space in Detroit

### Detroit



# Exhibit 3: Office Space in Chicago

## Chicago



## Exhibit 4: Office Space in Orlando

**Orlando**



# CASE #: 6

## Jewelers-R-Us



Firm Style	Interview Round
Bain	1

### Case Question

Our client is a national jewelry retailer that has been experiencing declining profits over the past three years. Our client has hired us to understand the reason for the decline and provide recommendations on how to improve profitability moving forward.

### Clarifying information (provide only if corresponding questions are asked)

Have both profit margins and overall profitability declined?	Yes
Does the client have a specific profitability target or timeframe?	No
Any other questions	Will get into that later in the case

# Jewelers-R-Us

## Framework/Structure

### Weak

- Mentions revenue and cost and some general thoughts on how profits are generated

### Good

- Clearly breaks out revenue and costs and considers external factors
  - Revenues
    - Price: changes to retail prices, promotions, segments/change in product mix
    - Volume: decline in demand, capacity issues
  - Costs
    - Variable: material costs, labor
    - Fixed: advertising, cost of retail locations, manufacturing overhead
  - External
    - Competition: entrance of new competitors, M&A, competitive advantage
    - Customers: change in preferences, price sensitivity
    - Market: trends around revenue and profitability, technology innovations

### Great

- Identifies possible recommendations to improve profitability
  - Does above and provides specific examples, integrating creativity and industry-specific considerations

# Jewelers-R-Us

- Have interviewee review **Exhibits 1 – 2** and provide their observations. If asked, explain that unit contribution margins have not changed since 2010.

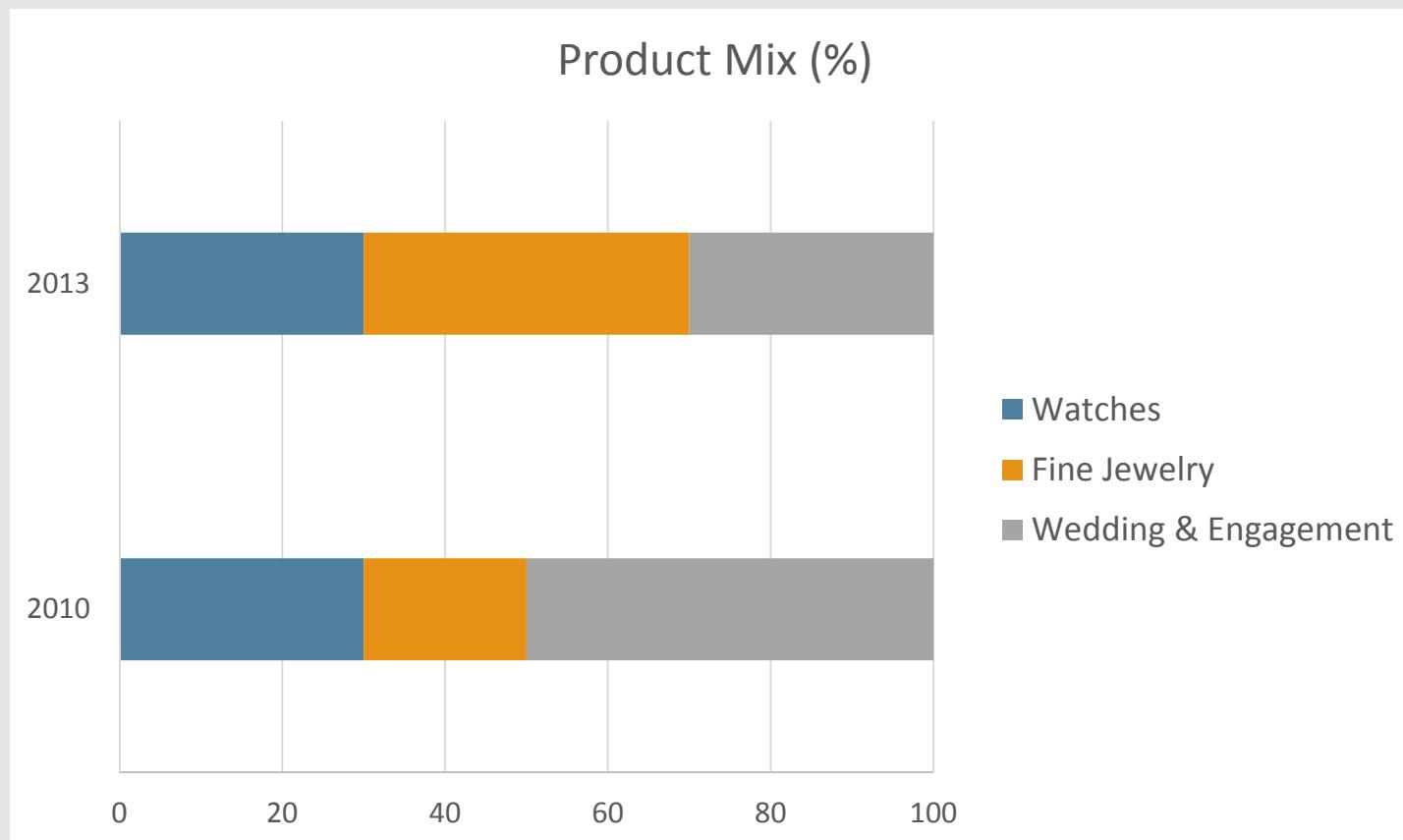
**Question 1:** After looking at Exhibits 1 – 2, calculate the decline in profitability from 2010 to 2013:

	2010	2013
<u>Product</u>	<u>Profitability Calculation</u>	<u>Profitability Calculation</u>
Watches	$\$1.5M * 30\% * 25\% = \$112,500$	$\$1.5M * 30\% * 25\% = \$112,500$
Fashion Jewelry	$\$1.5M * 20\% * 10\% = \$30,000$	$\$1.5M * 40\% * 10\% = \$60,000$
Wedding & Engagement	$\$1.5M * 50\% * 20\% = \$150,000$	$\$1.5M * 30\% * 20\% = \$90,000$
Total	\$292,500	\$262,000

- Decline in profitability is \$30K, or 10%

# Jewelers-R-Us: Exhibit 1

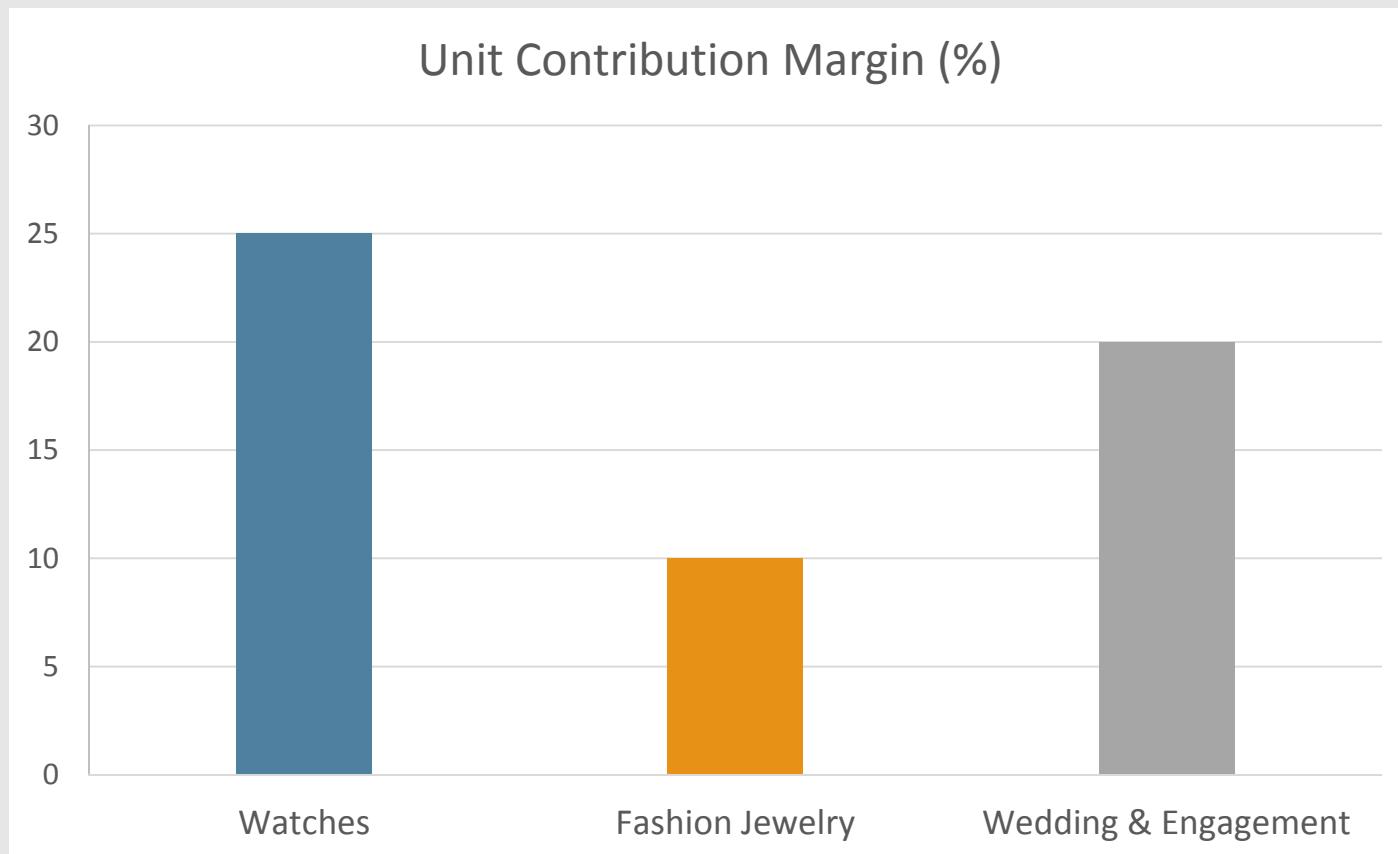
For the years ended 2010 and 2013



- Annual Revenues were constant at \$1.5M

# Jewelers-R-Us: Exhibit 2

For the year ended 2013



# Jewelers-R-Us

Question 2: What recommendations do you have for improving the profitability of each product line?

Possible recommendations include:

- **Revenue:**
  - Volume
    - New Channels: Department Stores, Online, etc.
    - New Customers: US/International, Men/Women
    - Product Extensions
  - Price
    - Increase prices, especially of fashion jewelry given market share growth
    - Steer interviewee away from price reduction given our brand image and our already struggling margins
  - Value added services: repair, etc.
- **Costs:** If interviewee mentions costs, state that because we are a luxury provider, we don't believe there is any way to reduce costs.
- **Competition:** Consider focusing marketing efforts on weddings given higher profitability than fashion jewelry and recent decline
- **Diversify:** given stagnation of market, consider getting into new relevant businesses

# Jewelers-R-Us

- **Weak Answer:**

- Mention only one of provided alternatives and not mention both revenue and cost side of equation. Flusters at the question of “anything else?”

- **Average Answer:**

- Mention 2-3 of given options without depth, focusing on both revenue and cost.

- **Great Answer:**

- Provide 3 options (suggested or otherwise) touching on revenue and costs. Ideas should show strong high-level thinking and also offer specific, relevant examples. Bonus points for a creativity in addition to solid, expected answers.

# Jewelers-R-Us

Question 3: The CEO is thinking about entering the handbag market. How would you approach this question?

Brainstorming format. Interviewee should hit on **at least three** considerations and explain logic. Bonus points if the brainstorm is structured (Internal/External, Opportunities/Threats, Revenue/Cost, etc.)

- Current handbag market
  - Historic Growth/Profitability
  - Level of competition
- Synergies with existing products
  - Capabilities/Capacity (Can we manufacture? Supplier relationships? Handbag experience?)
  - Brand Carryover
- Entry Options
  - JV/Partnership
  - M&A
  - Organic (mention this would likely be the most expensive and time consuming option)
- Financial
  - Can this extension be afforded in the short/long term?
  - Are there other projects on the table with better rates of return?

# Jewelers-R-Us

Question 4: The CEO just walked in. What would you recommend?

- **Weak Answer:**

- Provides 2 average/predictable recommendations.
- No mention of possible risks or next steps.

- **Average Answer:**

- Provides 2-3 recommendations well explained with mention of possible risks and/or next steps.
- Candidate recognizes that core issue is related to increase in volume in lowest margin product line (Fashion Jewelry)

- **Great Answer:**

- Provides 2-3 recommendations followed by mention of possible risks and/or next steps.
- Answer shows insight and directly ties to discussions/data that have come up throughout the case.

# CASE #: 7

## SuperTech Electronics

Firm Style	Interview Round
Deloitte	1

### Case Question

SuperTech is an electronics retailer in India. Over the past few years, SuperTech has experienced a decrease in profitability and has engaged us to identify the causes and possible solutions.

### Clarifying information *(provide only if corresponding questions are asked)*

- This is not an industry-wide issue
- The company only operates in India
- There's been no change in their mix of product offerings
- SuperTech is not vertically integrated, they are a retailer of third party products

# SuperTech Electronics

- Question 1: What are some potential causes of the issue that you'd want to explore?

(In the first round, Deloitte typically does not give you time to create frameworks. This is typically brainstorming aloud. Be as structured and thorough as possible.)

- Answer: A good answer will cover:
  - Profitability
    - Revenue - Changes in price or volume
    - Traffic in stores, purchases by category and related margin on products
  - Costs – Fixed and variable
    - Store locations, overhead, inventory, staff
  - New competitors in marketplace; competitors altering their strategy
  - Change in customer preferences
  - Change in market demographics
  - Product obsolescence
  - Brand/reputation/promotion issues

# SuperTech Electronics

- Question 2: Let's take a dive into the numbers. What can you infer from Exhibit 1?
  - A good answer will cover:
    - Revenue is increasing yearly
    - Costs are increasing at a faster rate than revenue, particularly COGS

- Can you calculate the gross margin for each year? (If candidate has already correctly calculated gross margins, move on to the next question)

- Answer:

	2011	2012	2013
Revenue	\$ 500,000	\$ 525,000	\$ 550,000
Costs	\$ 300,000	330,000	\$ 360,000
SG&A	\$ 45,000	\$ 48,000	\$ 50,000
Margin	\$ 155,000	\$ 147,000	\$ 140,000
Margin/Rev	31%	28%	25.5%

# SuperTech Electronics

- Question 3: What do you think is driving this increase in costs?
  - A good answer will brainstorm several reasons for increasing costs relative to growing revenues:
    - Increasing labor costs in a developing country
    - Increased gas prices makes transportation more expensive
    - Warehousing and other inventory-related costs
    - Loss of negotiating power with suppliers
    - Increase in raw material costs of products

If the candidate doesn't mention inventory costs as a potential driver, probe for more ideas. Once the candidate finishes brainstorming and/or identifies inventory as a driver, move to Question 4.

# SuperTech Electronics

- Question 4: I'm glad you mentioned inventory. Here's some data we collected from the Client (see Exhibit 2)
  - Candidate should mention we are looking at one product category and seeing several months of the year where the client stocks out of the product. It looks somewhat seasonal.
  - A good candidate should recognize that, with this information they would want to get a sense of the financial implications of this stock out. They need to ask the case reader for annual revenue or contribution figures to assess the financial impact of the stock outs.
- Provide candidate with Exhibit 3
  - A good candidate will notice cell phones have the highest contribution margin and comments on the risk of such frequent stock outs in the product category
  - Candidate should recognize that on average there are 5 stock out days per month; tell them to assume a 360-day year that is equivalent to 1/6-year lost contribution.
- Candidate should quantify this loss of margin as follows:
  - Total Revenue (\$240M) / (5/6 year) = \$288M Total Revenue w/o stock outs
  - \$48M \* 60% Contribution Margin = \$28.8M in lost contribution (2013)
  - $(\$140M + \$28.8M) / \$550M = 30.69\%$  (may round to 31) (\$140M margin is from completed exhibit 1)
  - $30.69\% - 25.5\%$  represents a loss of 5.19% on the margin

# SuperTech Electronics

- Question 5: What would you tell the client? Are the rising costs due to the stock out issue only? What else would you want to know?
  - Candidate should comment that there are other things to investigate— for example, is this stock out issue with cell phones also an issue with the other product categories? How significant?
  - The loss from cell phones is a ~5% loss on the margin. The client should want to explore options to prevent these stock outs either by optimizing order quantities or fixing other supply chain issues
- What are some initial recommendations you have for the client if they want to reduce the number of cell phone stock outs?
  - Candidate should be structure in their brainstorming. Potential recommendations include:
    - Alter supplier contracts: Add option for rushed additional orders from suppliers OR increase inventory on hand going into summer and end of year months
    - Reassess their sales demand forecasting in the summer and end of year months
    - Adjust their cell phone promotions to align to months when inventory is most likely on hand
  - Keep asking “what else” until they have exhausted ideas

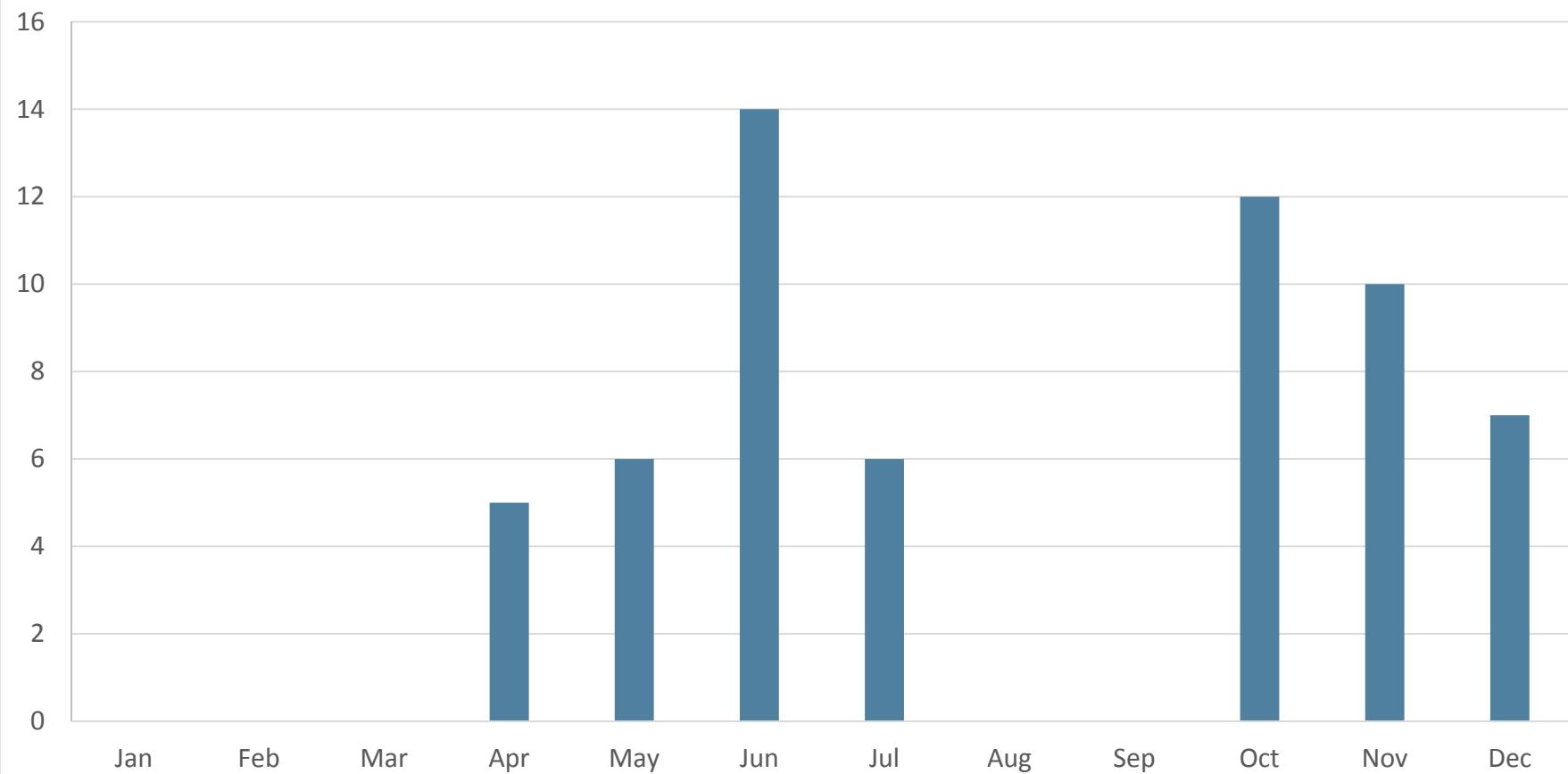
# SuperTech Electronics – Exhibit 1

*(\$000's)*

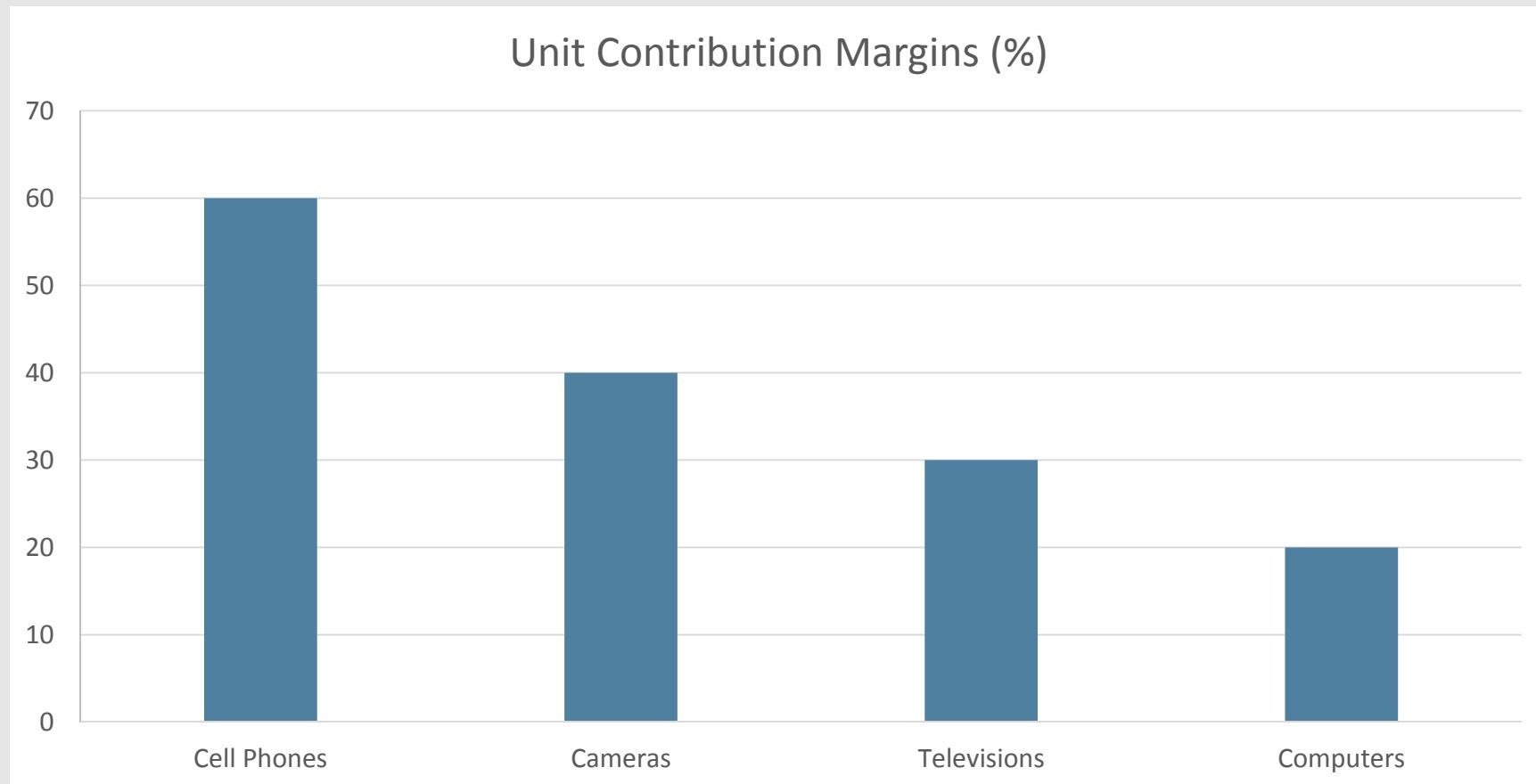
	2011	2012	2013
Revenue	\$ 500,000	\$ 525,000	\$ 550,000
Costs	\$ 300,000	330,000	\$ 360,000
SG&A	\$ 45,000	\$ 48,000	\$ 50,000
Margin			
Margin/Rev (%)			

# SuperTech Electronics – Exhibit 2

Cell Phone Stock Out Days 2013



# SuperTech Electronics – Exhibit 3



Total Rev: \$240M

\$120M

\$90M

\$100M

# CASE #: 8

## Kyle's Brick Company



Firm Style	Interview Round
McKinsey (Operations)	2
Case Question	
<p>Kyle's Brick Company manufactures, distributes, and sells bricks to a wide variety of clients in the southeastern United States. They have historically grown by approximately 7% per year. They have recently experienced flat growth and have asked for your recommendations.</p>	

# Kyle's Brick Company

## Clarifying information (*provide only if corresponding questions are asked*)

Is this profit or revenue growth at 7%	Their margins (as a percentage) have grown slightly over the past 5 years. The growth they are seeking to resume is revenue growth and not profitability.
Has there growth historically been through new customers or same customers?	Both. They have expanded conservatively through geographic expansion as well as increasing same customer sales.
Have they changed anything about their selling process?	No.
Have they lost any major clients?	No. The client portfolio has been expanding at expected levels and no major clients have been lost over the last year.
Are competitors experiencing revenue declines?	No. The overall market for bricks has grown at 5% the past 2 years.
Have costs increased?	Costs on a per unit basis have declined slightly over the past 2 years.
Are all ordered being filled?	No. There is a large number of backlogged orders due to insufficient factory production.
Have our competitors or our client changed anything about their processes?	No. Bricks are a commodity and quality across competitors is similar.

# Kyle's Brick Company

- Question 1: Why have sales stayed flat? Where would you like to investigate next?
  - **Sample “Great” Answer:** Revenue has flattened recently due to our client’s inability to meet demand. This is likely due to an issue somewhere in their supply chain. The problem could exist in distribution or manufacturing, but my initial hypothesis is that our manufacturing capabilities have not expanded in line with increasing sales. The recent decline in cost per unit may reflect stable variable costs with decreased fixed costs per unit. This would indicate a need for additional capital expansion at the factory level to meet demand. I would also be interested in exploring the capabilities of our distribution channels.
  - **Sample “Good” Answer:** Our client is experiencing flat sales because our factories are unable to make enough bricks for our clients. We should investigate the brick factory and consider capacity expansion.
  - **Acceptable answers should ignore irrelevant areas such as the changes in the sales process, changes in demand for bricks, and competitive pressure.**

# Kyle's Brick Company

- Question 2: Hand over exhibit 1 (revenue and profitability). What conclusions can you reach about the data? Push the candidate to figure out the fixed costs for 2012 and 2013 and ask for insights.
  - **Sample “Great” Answer:** *Revenue has flattened while profitability has increased. Our variable costs on a per ton basis are also flat. This likely indicates that our distribution and labor costs are under control. I would like to take a closer look at our fixed costs, particularly capital assets at the factory level. My thought is that we may have been underinvesting in our manufacturing capability to boost profits at the expense of capacity.*
  - **Sample “Good” Answer:** *Profit margins have gone up while revenues have remained flat. I suspect this is due to something in the brick factory regarding costs. I would like to see a breakdown of costs within our manufacturing facility.*
  - **Acceptable answers will acknowledge that this issue is related to a lack of investment in fixed costs. They will notice variable costs have been stable on a per ton basis and recognize the components of the profitability equation.**

# Kyle's Brick Company

- Question 3: The factory manager has informed you that maximum capacity of the brick factory is 3700 tons per year (the current level). He attributes this limitation to the baking process. We suspect that this machine may have additional capacity. What would you want to know to figure out if purchasing the machine is necessary? Once the candidate realizes this is a utilization issue hand them Exhibit 2 and ask them to figure out the utilization rate.
  - ***"Great" answers will recognize that the components of output are actual cycle time, yield, and utilization. They will realize that the utilization of this particular asset is low and can be improved upon. They will recognize the operator consistency is a critical issue and the utilization could be increased if the root cause of the inconsistent brick loading could be solved.***
  - ***"Good" Answers will acknowledge that utilization is the core issue and will recommend further exploration to increase utilization***
  - ***Acceptable answers will realize the potential capacity is high enough to meet demand and that something within the manufacturing is the reason why demand cannot be met and revenue is flat***
  - Note that Exhibit 2 should only be provided if the candidate specifically asks about utilization at the baking step. This requires the candidate to break down the value chain first and then to ask specifically about the loading or utilization of the baking process only.

# Kyle's Brick Company

## Clarifying information (*provide only if corresponding questions are asked*)

What does the value chain look like?	Raw materials come in and are formed in a molding machine, treated with chemicals at treating, and then baked and packaged. The bottleneck has been confirmed to be located at baking.
What is the cycle time of the baking machine?	It can handle 16 batches per day.
How many hours does the facility operate?	The facility operates 24/7 – 365
Does the baking machine experience downtime?	Yes, the current utilization is around 60%. The baking machine typically outputs 9.6 batches per day against a potential output of 16 batches/day.
Does the baking have significant yield loss?	No, the machine yield is 99.9%
Has the baking machine changed over time?	No, the output has been consistent over the past 3 years.
Why is the machine utilization so low?	Machine utilization is at 60% because the machine can handle 1000 bricks per batch, but there is tremendous variation in the loading amount due to operator preference. (provide Exhibit 2)

# Kyle's Brick Company

- Question 4: What recommendations would you make? Should our client buy another brick baking machine?
  - **Sample “Great” Answer:** *Inconsistent loading patterns on the baking machines by operators have had an adverse impact on utilization at the brick factory. I recommend further studies to implement standardized work at the loading job to increase utilization at the baking machine and subsequently increase output. This should help solve the flat revenue issue. The main risk of this recommendation is that there is a legitimate process reason for the inconsistent loading patterns. I would recommend further exploration of inconsistent loading with the operators and engineers as the next step.*
  - **Sample “Good” Answer:** *Utilization needs to be increased at the baking process to improve output and improve revenue.*
  - **Acceptable answers will acknowledge that additional capital expenditures are unnecessary and that there is an operations solution to the revenue/ capacity problem**

# Kyle's Brick Company

## Exhibit 1: Revenue and Profitability

Year	Revenue (\$Millions)	Profit Margin	Bricks Produced (tons)	Variable Costs (\$Millions)
2011	62	20%	3100	31
2012	70	22%	3500	35
2013	74	25%	3700	37
2014	74	25%	3700	37

# Kyle's Brick Company

## Exhibit 1 Interviewer Cheatsheet: Revenue and Profitability

Year	Revenue (\$Millions)	Profit Margin	Bricks Produced (tons)	Variable Costs (\$Millions)	Profit	Fixed Costs (\$Millions)	Fixed Costs/Unit
2011	62	20%	3100	31	12.4	18.6	0.006
2012	70	22%	3500	35	15.4	19.6	0.0056
2013	74	25%	3700	37	18.5	18.5	0.005
2014	74	25%	3700	37	18.5	18.5	0.005

***Key Calculation:*** Profit Margin \* Revenue = Annual Profit

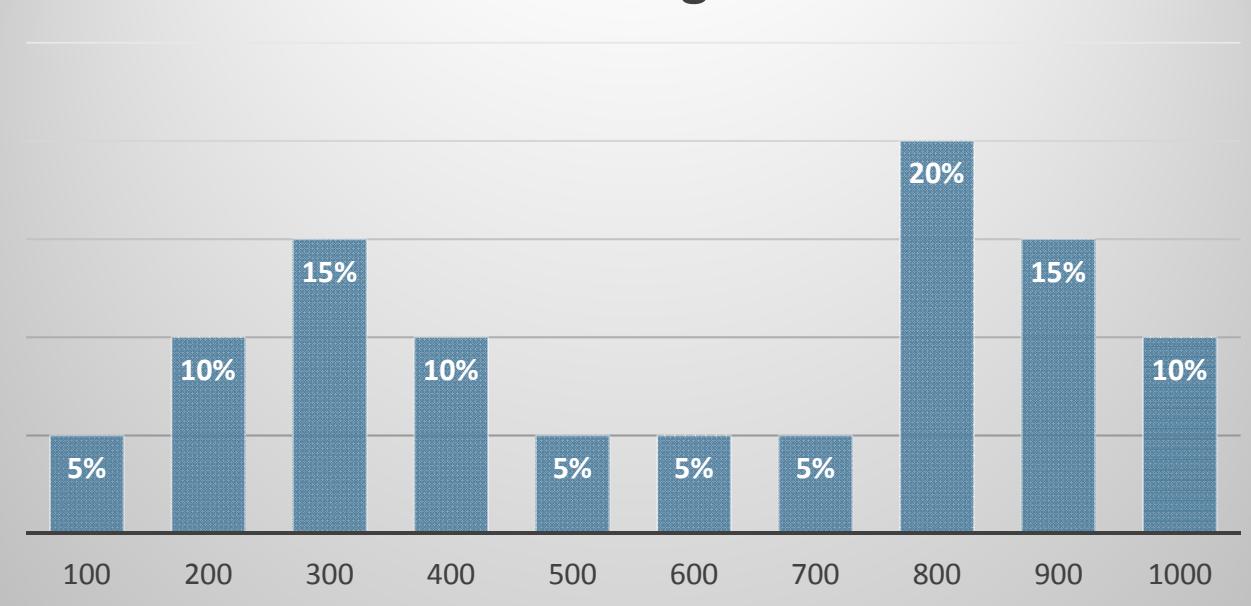
***Key Calculation:*** Annual Profit = Revenue – Fixed Costs – Variable Costs

# Kyle's Brick Company

## Exhibit 2: Brick Load of Baking Machine Histogram

*Provide only if asked specifically about the loading process at the baking machine*

**Relative Frequency of Bricks Loaded per Batch at Baking Machine**



# Kyle's Brick Company

## Exhibit 2 Interviewer Cheatsheet: Brick Machine Utilization *(Provide the data, but not the calculations, if asked)*

- Batch Output per Day \* Utilization = Batches / Day
  - Utilization is .6 because the capacity of the brick baking machine is 1000 bricks per batch and, on average, it is only loaded with 600 bricks.
- Batches / Day \* Days/ Year = Output per Year in Batches
- Batches per Year in Batches \* Batch Size = Output per Year
- Output per Year = 3700 tons
- *Note that these calculations aren't necessary to solve the case, but the underlying concepts are critical for understanding that the issue is utilization and the core issue is inconsistent loading with the operators*

Batch Output per Day	16
Utilization of baking machine	0.6
batches/ day	9.6
days/ year	365
output / year (batches)	3504
Batch Size (tons)	1.06

# CASE #: 9

## Car Radio



Firm Style	Interview Round
BCG	2

### Case Question

A luxury car company offers an option to include a top of the line stereo system in their cars. The stereo unit is operated as a separate P&L within the car company. Profits are lower than their competitors and they are wondering why and what to do?

### Clarifying information *(provide only if corresponding questions are asked)*

The radio is sold as an upgraded feature that is offered at the dealership when the car is sold

The radio's quality and features are in line with that of competitors

All sales are handled by the same national dealership. There is no option to switch to other dealers or expand geographically.

# Car Radio

- Question 1: A good framework should include:
  - Profit Model
    - Students should clarify what is driving the low profits. Costs? Sales? Price?
    - Ask students to discuss possible VC (Parts, Manufacturing, Distribution, etc). Let them know that FC don't matter.
    - Let them discuss VC, then let them know the total VC per unit is \$500.
    - If they ask, indicate that sales are low at the dealerships
    - Pricing – The radio is sold for \$1,500
  - Customers
    - Customers are purchasing luxury cars so the student should wonder about their price sensitivity. If they ask, provide them with Exhibit 1.
    - *Interviewer Note: If they candidate has asked about price sensitivity, interrupt their framework and launch into Exhibit 1.*

# Car Radio

- Question 1: A good framework should include(Con't):
  - Sales Channel
    - Students should seek to understand the sales structure of the radio. How is it sold to consumers. Who is advertising/marketing the radio. If asked, explain that the sales people who work at the dealership are responsible for offering it as an option.
    - Students should ask how dealers are compensated, salespeople at the dealership are provided with a commission.
    - Students should ask “How much is the commission”
  - Competition – Doesn’t matter, the product is as good as if not better than competitors and prices accordingly.
  - There is no differences in terms of Brand Awareness, geographic location, etc that would explain this difference. Encourage students for mentioning these things, but let them know that in this case they aren’t relevant.

# Car Radio

- Question 2: What do you think of Exhibit 1?
  - *Interviewer Note: If the candidate has asked about price sensitivity, interrupt their framework and launch into Exhibit 1. If they haven't let them exhaust their framework and then provide Exhibit 1.*
  - Key Insights that the candidate should acknowledge
    - Although sales change slightly with changes in prices, students should realize that buyers are not that price sensitive.
    - They should suggest that raising the price might be a possible avenue for increased profit, but push them to brainstorm other ideas.
    - *Interviewer Note: Tell the candidate that, "The client is aware of this solution, but are also interested in increasing volume. They want to know "Why aren't the radios selling at the same volume as competitors?"*
    - *Promp*

# Car Radio

- Question 3: What can the client do to increase volume?
  - *Interviewer Note: Good candidates will return to their framework and/or ask to draw out the value chain. Once they realize that this is sold as an option by salespeople provide Exhibit 2.*
  - Key Insights that the candidate should acknowledge upon examining Exhibit 2
    - As the car company provides more commission, the dealerships will be incentivized to sell more cars with radios.
    - Extra Credit: Students mention that this is “push” marketing. Salesmen at dealership will talk up the radio's because they make more money if they are sold. If they have a lower commission, they are less interested in pushing it.

# Car Radio

- Question 4: If we increase commissions how much will we decrease profit?

- The student should understand the following insights:

- Student's should perform the math below to see if changing the commission structure will improve profits.
- Realize that changing the commission deal, although it increases volume does not change the overall margin significantly and it increases profitability (slightly)

	Sales	Price	Commission	Per Unit Margin	Total Margin
10%	70	\$1,500	150	850	59500
15%	80	\$1,500	225	775	62000
20%	90	\$1,500	300	700	63000
25%	100	\$1,500	375	625	62500

# Car Radio

- Question 5: The CEO has walked in and wants your recommendation. What do you recommend?
  - **Acceptable Answers** will acknowledge that raising commissions is the key to increasing volume.
  - **Good Answers** will acknowledge that profitability can be increased by increasing prices because customers are not price sensitive
  - **Great Answers** will involve thinking about the potential competitive response associated with raising prices and commissions. It will also involve creative ideas such as pull marketing, package deals, partnering with XM radio or other high end brands.
  - This is a good test of marketing concepts and the student's ability to brainstorm.

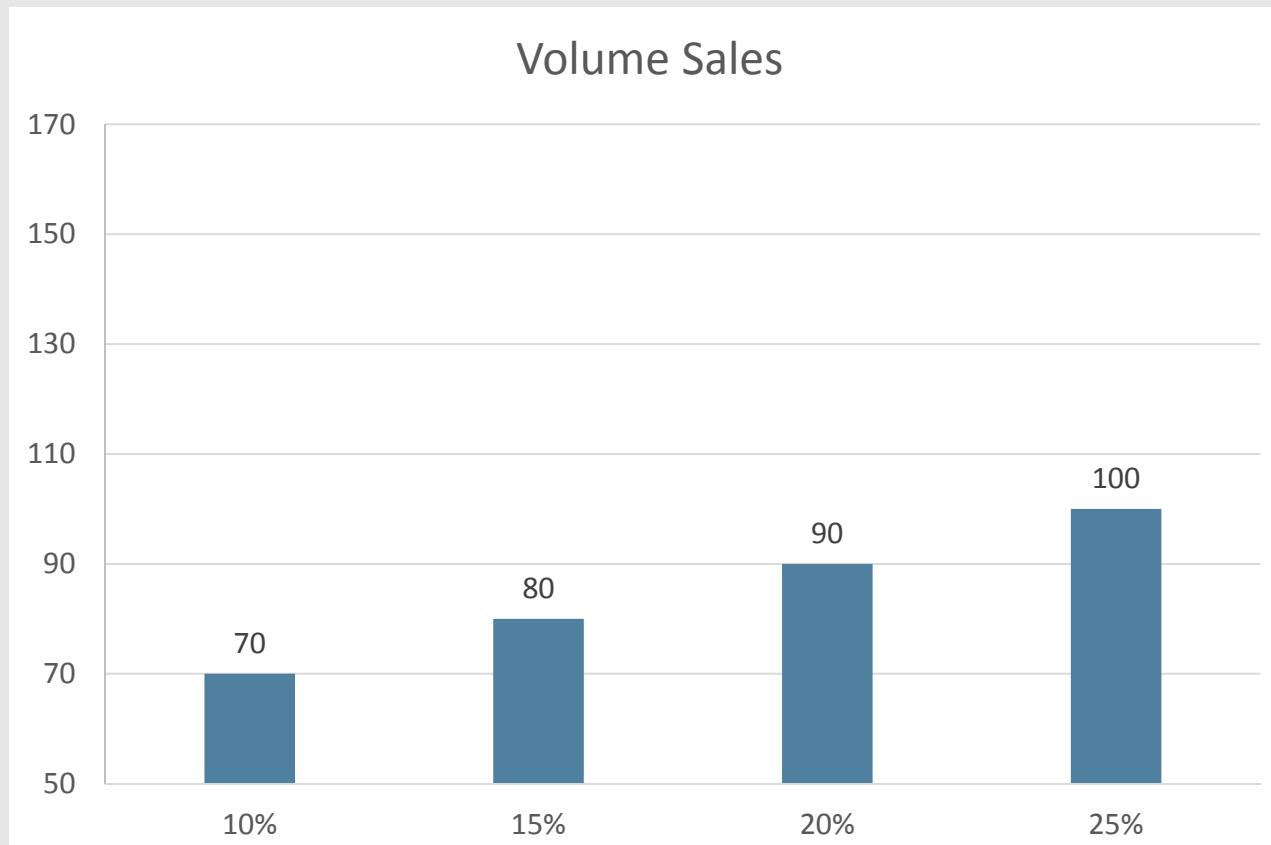
# Car Radio – Exhibit 1

Projected Sales (in Millions) by price



# Car Radio – Exhibit 2

## Radio Sales by commission per dealer



# CASE #: 10

## Big Bob's RV Generators



Firm Style	Interview Round
McKinsey	2

### Case Question

Our client, Big Bob's RV Generator Co., makes high efficiency generators for RVs. Recently, profits have been declining. Bob has hired your team to figure out why and what can be done to improve profitability.

### Clarifying information *(provide only if corresponding questions are asked)*

- \*Big Bob only makes generators. There are no other product lines.
- \*Big Bob only makes one type of generator.
- \*Big Bob sells the generators to a large RV manufacturer who then uses them as a component in their RVs products. This is Bob's only customer.
- \*High efficiency generators = highest quality, but also highest price generator. The BMW of RV generators.
- \*Bob is the only player in the high efficiency generator market.

# Big Bob's RV Generators

- **Advice for giving this case:**

- This case is a brainstorming heavy case and the most time should be spent on Q1. Push interviewee until they run out of ideas, then push further by using leading questions.
- When discussing price increases or decreases of the generators, push interviewee to keep in mind how this impacts the price of RV through the value chain to the end consumer. EX: increasing generator price by \$300 is not likely to increase consumer price of RV from \$24,999 to \$25,299. Consumer RV prices not likely to increase/decrease by increments other than \$500 or \$1000.

# Big Bob's RV Generators

- Question 1: What are some strategies for improving profitability?

Push interviewee to segment ideas and strategies into Revenue and Cost categories.

## Revenue Ideas:

- Add new customers
- Sell direct to consumers for other uses of generators (home, tailgate, etc.)
- Add new revenue streams: different products, do financing for RV sales
- Increase price
- Add additional components to generators to save the customer steps in manufacturing process

## Cost Ideas:

- Negotiate with suppliers
- Vertically integrate
- Wage decrease
- Invest in new technology to decrease per unit manufacturing costs
- Consolidate SG&A

# Big Bob's RV Generators

- Question 2: A new player, Company A, is threatening to enter the high efficiency generator market with a lower quality and lower priced generator. What should Bob do?
- Provide the following information when asked:
  - Company's A new generator will be \$250 cheaper than Bob's
  - Bob is able to create a lower quality generator himself sooner than the competitor.
- Ask interviewee what price they would choose for Bob's lower quality generator. Make them justify the price.
  - Push interviewee to ask about cost information of new generator. Then move to question 3.

# Big Bob's RV Generators

- Question 3: Calculate the margins of Bob's high quality and low quality generators. Calculate breakeven profit in units for new generator profit to equal old generator profit.
  - Provide the following information:
    - Existing generator: Price: \$5000, COGS: \$3000
      - Answer: 40% Contribution Margin, \$2000 per unit
    - New Generator: Price: \$4750, COGS: \$2950
      - Answer: 38% Contribution margin, \$1800 per unit
    - Annual Fixed Costs: \$10,000,000
    - Annual existing generator units sold: 10,000
  - Answer:
    - Current profit =  $\$10,000,000 = (\$5,000 - \$3,000) * 10,000 - \$10,000,000$
    - Breakeven profit for new generator:  $\$20,000,000 / \$1,800 = 11,111$  units
    - Need to sell 1,111 more units of new generator to give same profitability.

# Big Bob's RV Generators

- Question 4: If Bob does not make a new generator, current unit sales will drop 45% when the competitor enters. If Bob makes the new generator, we believe Bob will not lose any sales, but the new generator will cannibalize 45% of existing generator sales. What should Bob do?
  - No new generator:
    - Sales in units =  $10,000 * .55 = 5,500$
    - Contribution =  $5,500 * \$2,000 = \$11,000,000$
    - Profit =  $\$11 \text{ million} - \$10 \text{ mil (FC)} = \$1 \text{ million}$
  - With new generator:
    - Old generator contribution:  $\$11,000,000$
    - New Generator Sales =  $4,500 = 10,000 * .45$
    - New Generator Contribution =  $4,500 * \$1,800 = \$8,100,000$
    - Profit =  $\$8.1 \text{ mil} + \$11 \text{ mil} - \$10 \text{ mil} = \$9.1 \text{ million}$

# Big Bob's RV Generators

- Question 5: Make a recommendation to Bob.

- A good recommendation will recognize that profits will decline in both scenarios investigated, but the second option (develop new generator) is the better choice due to higher expected profits.
- Risks:
  - Did not examine cost of developing new generator.
  - Competitive response – competitor may still enter market.
- Next Steps to increase profitability:
  - Possible ideas include: sell to new customers, explore related product lines, investigate ways to decrease costs
  - Any other ideas from initial brainstorming.

# CASE #: 11

## Magazine Pricing Power



Firm Style	Interview Round
BCG	Second Round
Case Question	
Conde Nast Traveler costs \$4.00 and Travel and Leisure costs \$4.50. Do you think Conde Nast should raise the price of their magazine to \$4.50?	

### Clarifying information (provide only if corresponding questions are asked)

Not much information available. If asked for additional information state that you don't know. The interviewer should adopt a tone that encourages the candidate to make assumptions and quickly move past the clarifying questions stage.

# Magazine Pricing Power

- **Question 1: Framework**

- Good frameworks should include:
  - Basic Profit Tree (Revenue Streams incl. ads and sales)
  - Value Chain (where they're sold, how)
- Great frameworks should include:
  - Customer Segments
  - Product Differentiation
  - Competitive Landscape / Responses

# Magazine Pricing Power

- Question 2: After they walk through the framework, hone in on the profit tree. Try to focus more on revenue, and ask candidate to brainstorm what constitutes revenue for the magazine.
  - Good answers should include:
    - Subscriptions
    - Newsstand Sales
    - Advertising Sales (Bonus points if they note that this is dependent on number of copies)
  - Great answers should include:
    - Number of pages per magazine (can increase ads/ magazine)
    - Price elasticity of demand (raising prices may decrease volume)

*Interviewer Note: Press the candidate to create an exhaustive list. Continue to ask “What Else” until the candidate is out of ideas*

# Magazine Pricing Power

- Question 3: What numbers would you want to see to determine if we should raise the price?
  - For both the \$4 and \$4.5 level, the candidate should ask for:
    - Subscriber Volume + Price
    - Newsstand Volume + Price
    - VC per copy
    - Advertising revenue per 1,000 magazines purchased
    - Note that fixed costs aren't relevant since we can assume they are the same regardless of price
  - There are other possibilities, but these are the numbers that will be provided. Once the candidate has asked for the majority of the information provide them with Exhibit 1

# Magazine Pricing Power

## Exhibit 1

Variables	Price: \$4.00	Price: \$4.50
Subscriber Volume	20MM	15MM
Newsstand Volume	10MM	8MM
Subscriber Price (annual)	\$30	\$40
Newsstand Margin	20%	20%
VC per copy	\$2	\$2
Ad Revenue per 1,000 People	\$120	\$120

# Magazine Pricing Power

- Question 4: Which scenario has a higher contribution margin?
  - Good answers should immediately start doing calculations when they receive the exhibit. This should take some time:

Variables	Price: \$4.00	Price: \$4.50
Subscriber Volume	8MM	4MM
Newsstand Volume	10MM	8MM
Subscriber Price (annual)	\$30	\$40
Newsstand Margin	20%	20%
VC per copy	\$2	\$2
Ad Revenue per 1,000 People	\$1,200	\$1,200
Subscriber Sales Contribution Margin	$(\$30 - (\$2 * 12)) * 8MM = \$48MM$	$(\$40 - (\$2 * 12)) * 4MM = \$64MM$
Newsstand Sales Price	$\$4 - (\$4 * 20%) = \$3.20$	$\$4.50 - (\$4.50 * 20%) = \$3.60$
Newsstand Sales Contribution Margin	$(\$3.20 - \$2) * 10MM = \$12MM$	$(\$3.60 - \$2) * 8 = \$9.6MM \text{ (or } \$10MM\text{)}$
Ad Revenue (All Contribution Margin)	\$1.2MM per million	
Ad Revenue (All Contribution Margin)	$\$1.2MM * \$18MM = \$21.6MM$	$\$1.2MM * 12MM = \$14.4MM$
Total Contribution Margin	$\$48MM + \$12MM + \$21.6MM = \$81.6MM$	$\$64MM + \$9.6MM + \$14.4MM = \$88MM$

# Magazine Pricing Power

- Question 5: After the candidate calculates the contribution margin, ask them for their recommendation.
  - Either answer works as long as it's supported by the data.
  - If they choose to raise the price some points could include:
    - Increased profits, especially with subscribers which is the largest contribution margin bucket
    - Prestige / Protect Brand (same price as competitor)
    - Does this really move the needle? Should we focus more on the bigger picture?
    - Risks – Subscriber losses are larger than predicted, Quality of advertisements declines due to lower circulation, Newsstands may try to increase margin.
  - If they choose to keep the price as is some points could include:
    - While there are increased profits, this comes with a large reduction in volumes, particularly steady subscriber volumes.
    - May want to look into competitive response
    - Not raising the subscriber price, but only raising the newsstand price
    - Adding more pages to grow ad revenues per 1,000 customers.
    - Pursuing new distribution channels / increased product differentiation.
    - Risks – Lower profits, Less brand prestige, Competitive Response.

# CASE #: 11

## Movie Theaters Today



Firm Style	Interview Round
Accenture	2

### Case Question

Our client, a national chain of movie theaters, has come to us concerned that they aren't doing as well as they used to. What do you recommend they do?

### Clarifying information *(provide only if corresponding questions are asked)*

They are down in both Revenue and Profitability.

Revenue Sources are: Tickets, Concessions, and other (Theater Rentals and Ads.)

Movies being seen have not declined, but there is a shift to online viewing over attendance at the theater

# Movie Theaters Today

- Question 1: Give the candidate time to develop their framework. Once revenues are identified provide them with Exhibit 1 and ask for insights.
  - Candidate should notice that ticket sales are the largest portion of revenue and are declining. Concession sales are actually up indicating more consumption per customer, potentially because of a lack of price sensitivity or higher volume per customer.
  - Great candidates should ask what constitutes the “other revenue” category. Challenge the candidate to brainstorm their own ideas. Creativity is encouraged here; some examples could be advertising revenue associated with pre-film commercials, parking revenue, and renting the theater out for events.

# Movie Theaters Today

- Question 2: Once the candidate mentions costs provide them with Exhibit 2. Ask for insights.
  - The candidate should recognize that film rentals are becoming a much more significant percentage of cost.
- Follow-up: Why would these film rentals be increasing in price?
  - Encourage the candidate to be creative. Once they have exhausted their list provide them with the answer below. A good candidate may not arrive at the exact answer, but will demonstrate sufficient creativity and will not be rattled if the interviewer provides the answer below and it was not one provided by the candidate
  - *With the advent of iTunes, Netflix, etc; movie studios now have many more distribution options than just theaters and DVD sales, offering them higher margins by having leaner middlemen/less costs.*

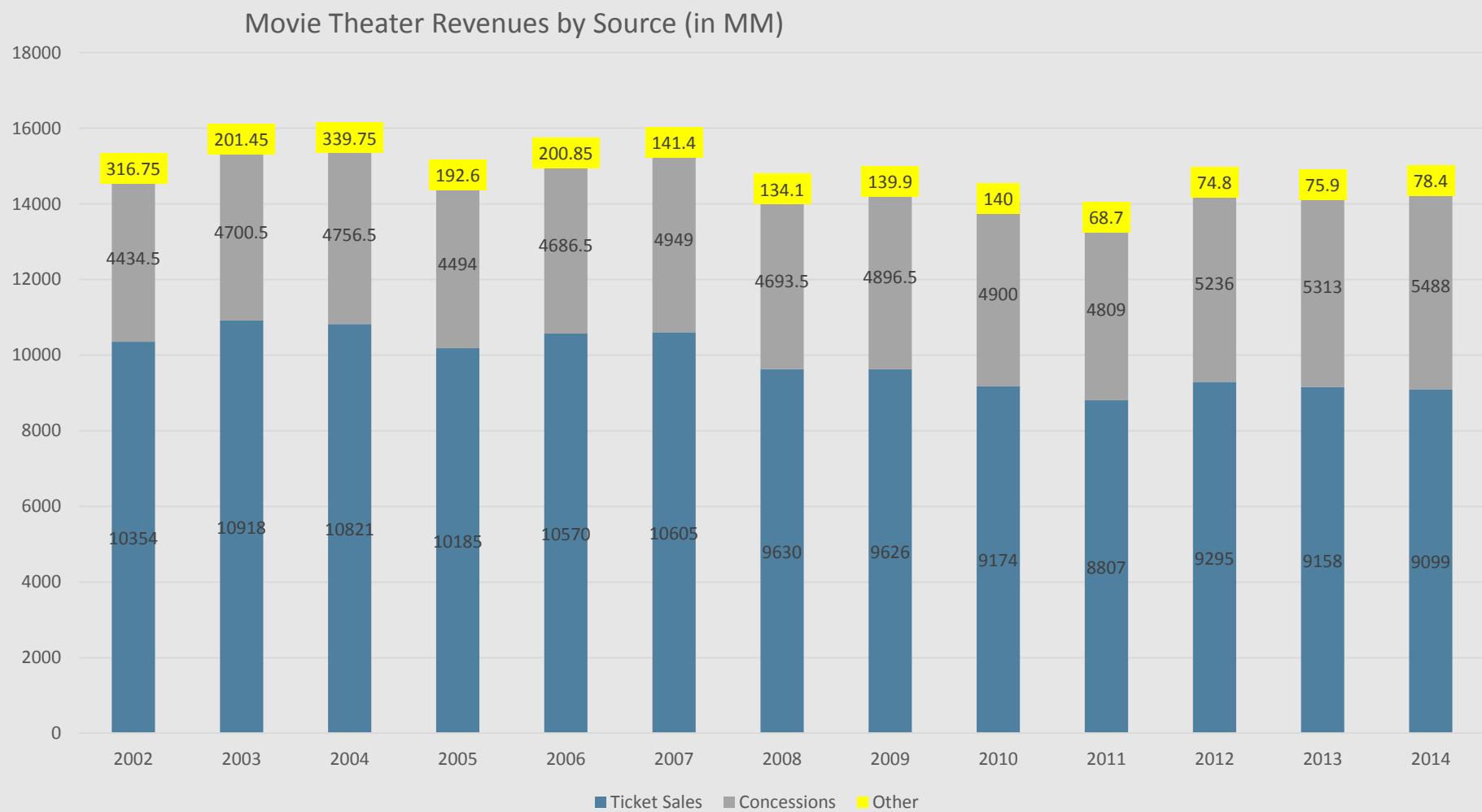
# Movie Theaters Today

- Question 3: Interviewee should ask about market/customers. Present Exhibits 3 & 4. When they make observations, ask what can be done?
- Answer: Should identify that number of viewers is falling. If they compare with Ticket Revenue numbers, they will see that ticket prices have increased 40%. It is probably unsustainable to maintain revenues in the face of falling volume by simply raising prices.
- Should also identify in exhibit 4 that they are losing many of their most frequent customers. Extra points if they suggest frequent movie-watcher programs or unlimited movie/monthly passes.

# Movie Theaters Today

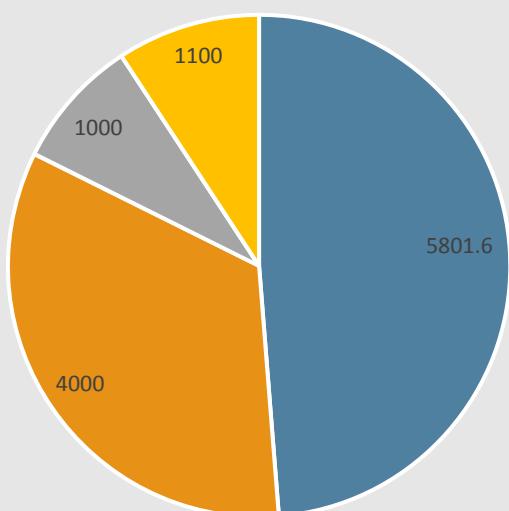
- Question 4: Please make a recommendation.
  - Should mention changing customer dynamics, move to online, leading both to fewer viewers, and increase in film rental costs.
  - Should express concern over using raises in ticket prices to maintain revenues on decreasing volume.
  - Should mention that they are losing their highest value, repeat customers and mention a way to fix this, whether it be with monthly tickets or loyalty programs.
  - Bonus points if they come up with new revenue streams such as making a push towards renting out their theaters for events, etc. The candidate should remember that the largest revenue sour

# Exhibit 1



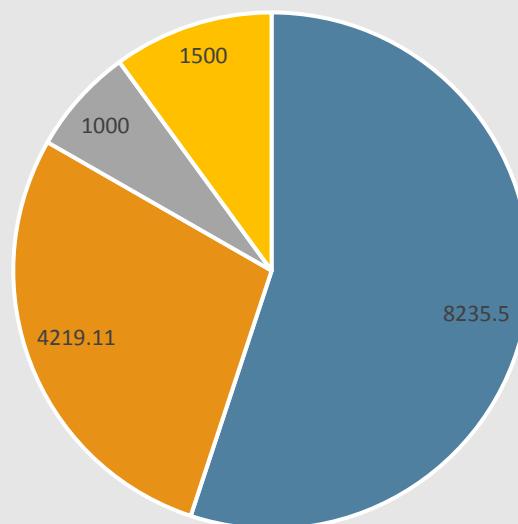
## Exhibit 2

2002 Expenses



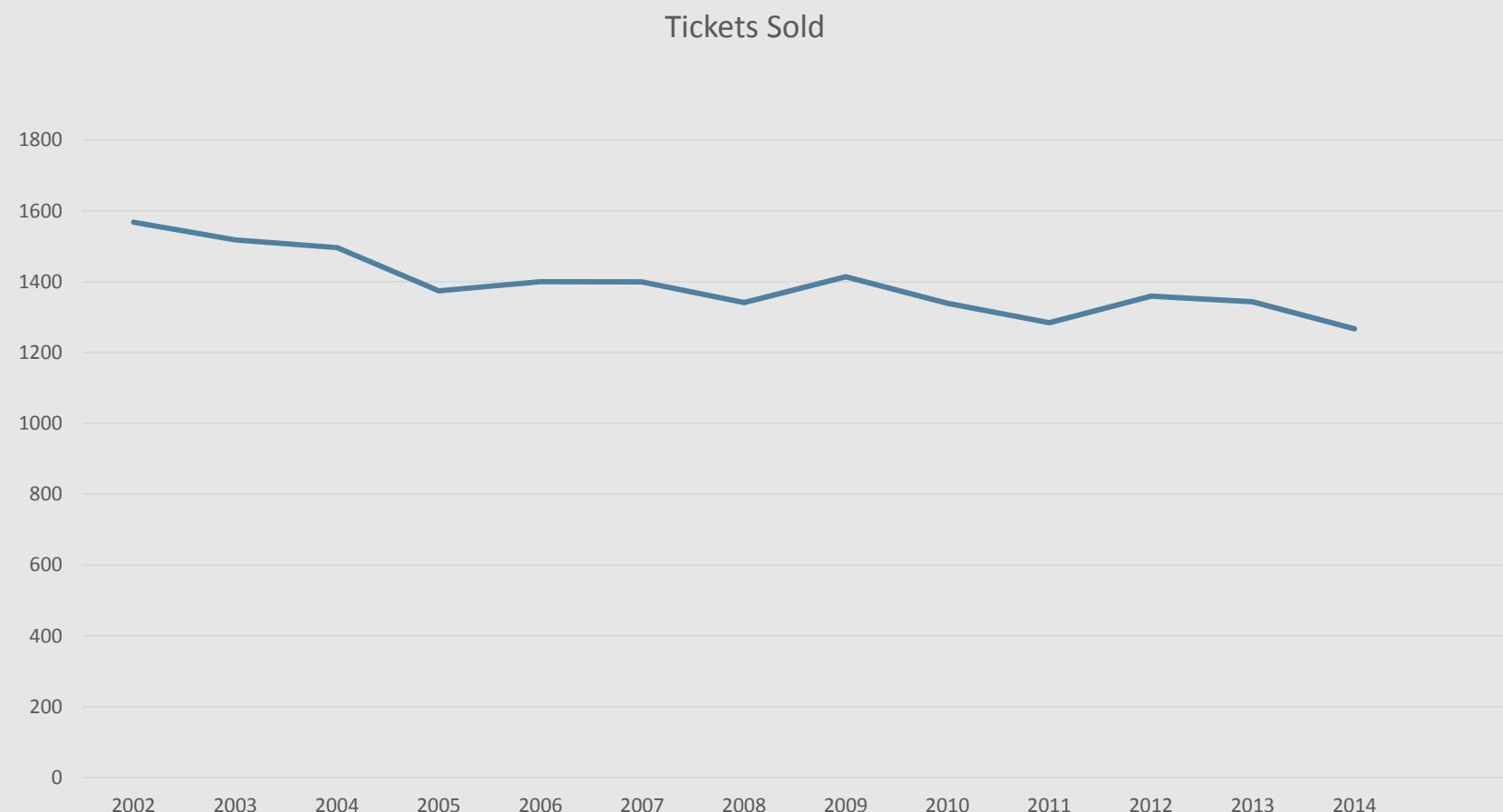
■ Film Rental ■ Staff ■ Concession ■ Facilities

2014 Expenses



■ Film Rental ■ Staff ■ Concession ■ Facilities

## Exhibit 3



## Exhibit 4

Movies Watched/Month by  
Average Moviegoer

	Movies Watched	2002	2014
	4+	27%	9%
	3	16%	13%
	2	20%	19%
	1	37%	59%

# CASE #: 12

## Semi Truck Wing Spoilers



Firm Style	Interview Round
McKinsey	2

### Case Question

Our client, WhistleTips, is an R&D firm located in the United States who has recently patented a semi truck spoiler technology that reduces air resistance for semi trucks of all types (*show picture from page 2*). When installed, the spoiler improves fuel efficiency by 25%. WhistleTips has no experience in the trucking or automotive industry, but they believe that this is a game changing product and want to enter the market. They have asked us for help identify how they should enter this market and sell their product (*continue to question 1*).

### Clarifying information (*provide only if corresponding questions are asked*)

The wings are useful because they improve a semi trucks MPG.  
WhistleTips has not yet developed specific manufacturing, distribution, or sales strategies.

# Semi Truck Wing Spoilers



# Semi Truck Wing Spoilers

- Question 1: In what ways could WhistleTips enter the market, both on a manufacturing and distribution basis?
  - Manufacturing answers:
    - Production Style:
      - Made-to-order
      - Large batch production
    - Manufacturing Capabilities:
      - Create own manufacturing facility
      - Contract manufacturing
  - Distribution answers:
    - Physical storefront
    - Online presence
    - Partnership with current semi truck retailers
    - Wholesale to trucking companies
    - Outreach to independent semi truck drivers

# Semi Truck Wing Spoilers

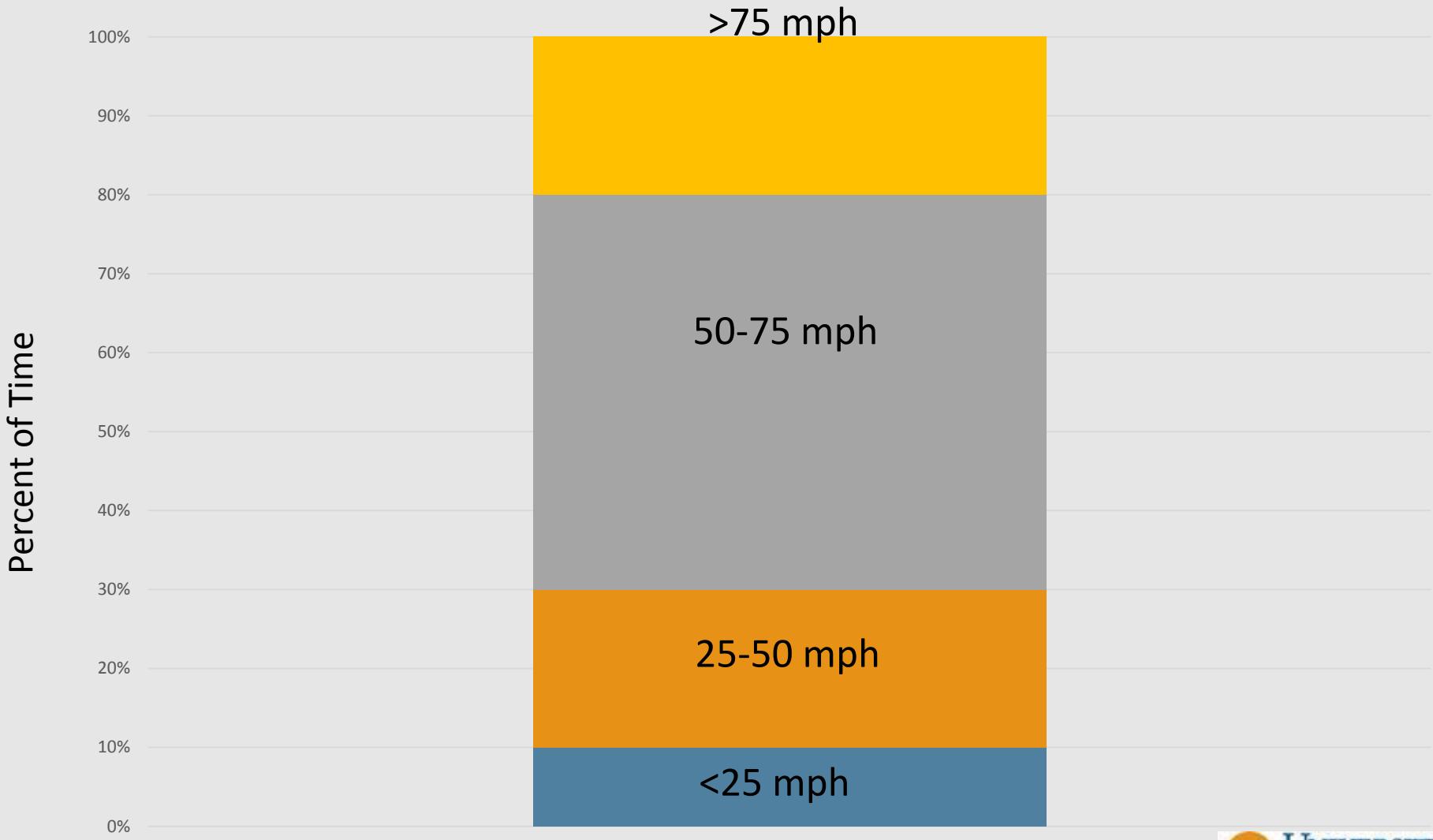
- Question 1 Guidance

- Ask the interviewee to dive further for an explanation of the benefits and risks for each of the potential options
  - Up-front-costs for own manufacturing plant, quality issues with contract manufacturing, difficulties of reaching a new consumer base without partnering with current retailers,
- Push the interviewee to find out what additional information would help make the decision easier (i.e.)
  - Initial investment costs
  - The size of the market
  - The patent protection outside of the United States.
  - Potential competitors in the market
  - The willingness of the industry to adopt the new technology
  - The industry's fragmentation

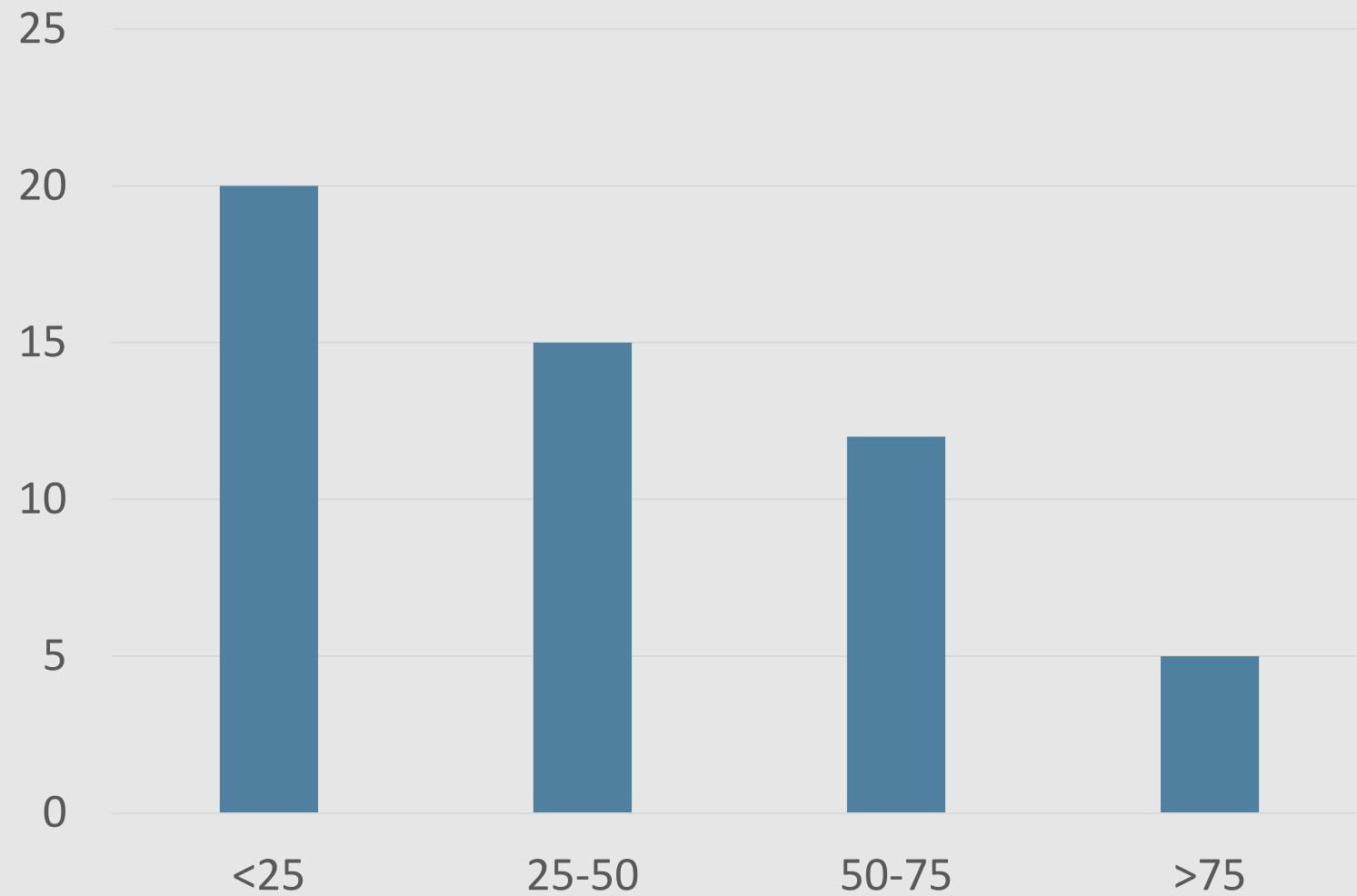
# Semi Truck Wing Spoilers

- Question 2: Our client has provided us the following information on truck driving statistics. How many more miles (on average) will the truck travel per gallon with the spoiler installed?

# Relative of Frequency Driving Speeds



# MPG for each Speed



# Semi Truck Wing Spoilers

- Question 2 Guidance

- Interviewee should determine the following using the graph:

MPH Range	MPG	Time Spent in Range
<25	20	10%
25-50	15	20%
50-75	12	50%
>75	5	20%

- Using this information, find the weighted average of MPG:
    - $(20*0.1 + 15*0.2 + 12*0.5 + 5*0.2) = 12 \text{ MPG}$
  - Recall that spoiler improves efficiency 25% from prompt:
    - $12*(1+0.25) = 15 \text{ MPG}$
  - Therefore, the truck will travel 3 more miles per gallon with the spoiler installed

# Semi Truck Wing Spoilers

- Question 4: What is the total savings per truck by installing the spoiler?

# Semi Truck Wing Spoilers

- Question 4 Guidance

- Provide the following only when asked:
  - Miles driven per year: 18,000
  - Cost per gallon: \$2.60
  - Expected useful life of wing: 5 years

- Simplified Math Analysis:

- Total gallons used without spoiler:  $(18,000/12) = 1,500$
- Total gallons used with spoiler:  $(18,000/15) = 1,200$
- Gallons saved per year:  $1,500 - 1,200 = 300$
- Total savings per year =  $2.6 * 300 = \$780$
- Total savings over useful life =  $\$780 * 5 = \$3,900$

# Semi Truck Wing Spoilers

- Question 5: WhistleTips has decided to enter the market using a contracted manufacturer. They would like to recoup their R&D costs in the first year. Based on a market size of 20,000 semi trucks in the United States, how would you suggest WhistleTips price the spoiler? What concerns do you have about this price?

# Semi Truck Wing Spoilers

- Question 5 Guidance

- First, the interviewee would want to calculate the required contribution margin to cover R&D costs assuming a specific market penetration:
  - Provide when asked:
    - R&D cost: \$8,000,000
    - Production cost (push interviewee to list potential costs)
      - COGS for the spoiler using the contracted manufacturer: \$900
      - SG&A per Spoiler: \$100
    - Assume 20% penetration: 4,000 trucks (can vary, must justify answer)
    - Required contribution per unit to cover R&D:  $\$8,000,000 / 4,000 \text{ trucks} = \$2,000$
    - Therefore, price must be at least:  $\$2,000 \text{ (margin)} + 1,000 \text{ (cost)} = \$3,000$ 
      - Recognize that this is less than the total expected savings on the truck, so there is still value being delivered to the truckers

# Semi Truck Wing Spoilers

- Question 5 Guidance continued

- Price could be anywhere between \$3,900 and 3,000: push to answer what exact price they would sell at and why
  - Delayed savings (5 years) for truck may lead to low sales at the \$3,900 price due to time value of money
  - Selling at \$3,000 would cover R&D first year but minimize overall profitability
- Discuss concerns about selling at your given price target:
  - Market Penetration (is 20% or whichever value they give achievable?)
    - No established brand or sales team
  - Competition (new player entering market undercutting price)
  - Savings based on gas price (variable, if price goes down overall savings per truck go down)

# CASE #: 14

## Frozen Slushy Drinks



Firm Style	Interview Round
Bain	2 <sup>nd</sup> Round

### Case Question

Our client is a national convenience store chain that has historically been the market leader in frozen slushy drinks. Recently, other brands are entering the frozen slushy drink market, and the client has hired our team to create a strategy to build brand equity. What ideas can you come up with to build our client's frozen slushy drink brand?

### Clarifying information *(provide only if corresponding questions are asked)*

- Currently, the drinks are sold only on premise in the convenience stores.
- Target market is (generally) children
- Yes, think Slurpee.
- Any ideas are on the table – anything to build brand equity and awareness to maintain the drink's #1 market position (in terms of revenue dollars, not profit or unit volume)

# Frozen Slushy Drinks

- Question 1: What ideas do you have for building brand equity for the drinks?
  - Push interviewee to come up with an extensive list of creative ideas.
  - The key point here is for the candidate to come up with a structured list that shows creativity. The secondary point is to push the candidate to expand their list, ask “What Else?”
  - Two ideas to push for if interviewee does not arrive at them alone:
    - Sell slushy drinks at amusement parks
    - Sell slushy drinks at popular fast food chain (ie McDonalds)

# Frozen Slushy Drinks

- Question 2: Lets think more closely about two ideas: selling the drinks at amusement parks and at fast food restaurants. What are some factors you would use to evaluate each idea?

Factor	Amusement Park	Fast Food
Branding impact	Positive – no competition on site, captive audience	Negative – brand would compete with fast food brand on site. Could be confusing for customers
Target Audience: kids	Positive – kids and families go here	Positive – kids and families buy food here
Cost	Neutral – could be expensive to set up infrastructure.	Positive – food infrastructure already in place
Margin/price point	Positive – you can charge outrageous prices at amusement parks	Negative – have to have low prices at fast food
Any other ideas	Evaluate appropriately	Evaluate appropriately

# Frozen Slushy Drinks

- Question 3: Given the list we just created, what idea would you pursue and why?
- Answer: Either answer can be justified, but the ability to charge higher prices without diminishing the brand or competing with a fast food restaurants other offerings makes it a marginally better choice.
- Ask candidate to dive into the costs a bit more. What costs do we need to consider in undertaking this project?

Fixed Costs	Variable Costs
Initial build out of space: plumbing, counters, machinery, signage	Cups
Operating Overhead	Straws
Labor	Lids
	Ingredients

# Frozen Slushy Drinks

- Question 4: What percentage of amusement park guests need to buy a slushy drink to break even?
- Give following information when asked:

Fixed Costs	Variable Costs
Initial build out of space: plumbing, counters, machinery, signage: \$100,000	Cups: \$.20 ea.
Operating Overhead: \$100,000/year	Straws \$.15 ea
Labor: \$100,000/year	Lids: \$.15 ea
	Ingredients: \$.50 ea
<b>Slushy drink price: \$7 each *Feel free to ask candidate what price they feel is appropriate</b>	<b>Average annual attendees: 1.3 million</b>

# Frozen Slushy Drinks

- **Question 4: Calculations**

- Consider initial build out a sunk cost and ignore
- Fixed costs: \$200,000 per year
- Contribution Margin:  $\$7 - (.20 + .15 + .15 + .50) = \$6$
- Breakeven units:  $\$200,000 / 6 = 33,333$  units
- Percentage of attendees:  $33,333 / 1.3 \text{ million} = \text{approx. } 2.6\%$
- Candidate should arrive at the conclusion that this is a good idea given that less than 3% of attendees need to buy a slushy to breakeven

# Frozen Slushy Drinks

- Question 5: What is your recommendation?
  - Candidate should go back to the initial question of brand equity and recommend that to build brand equity, moving into the amusement park space is a good idea
    - This is a good idea given that less than 3% of attendees need to buy a slushy to breakeven
    - High margin operation
    - Low upfront build out costs
    - Best venue for building the brand – recap of initial brainstorm