The University of Pennsylvania Consulting Preparation Guide
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Consulting Preparation Guide

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A Note on the Case Book

Maximizing Your Practice

- This case book contains many tips, tricks, and discussion points throughout.

- The star rating signifies difficulty with 5 stars being the most difficult. However, there are critical skills to be gained from every case regardless of the difficulty.

- Cases are designed to be completed in 45 minutes unless otherwise specified.

- The slides marked “For Interviewee” should be shown to the interviewee/candidate while working through the case. These slides contain critical information and should allow the interviewee to drive the case forward.

- The slides marked “For Interviewer” contain prompts to be given to the interviewee, answers to quantitative questions, example frameworks, and other guides to help facilitate the case.

- After you have completed a case as the interviewee you will likely find it helpful to read through the entire case, including the “For Interviewer” slides, to gain additional insights.
What is Consulting?
### Is Consulting Right for Me?

**The Industry and Your Role**

#### What is Consulting?
- Consultants work with organizations to achieve strategic, operational or organizational goals.
- Work closely with management to provide advice and solve mission-critical problems.

#### What do they do?
- Consultancies often work across 5 broad buckets:
  - Strategy
  - Implementation
  - Finance
  - Research
  - Innovation & Design

- Consultancies often offer a mix of skills and specialties to best serve client needs.

#### What would I do?
- You will largely be responsible for conducting research, building a variety of models, analyzing data, and collaborating with the team and clients to develop presentations and recommendations.
- A passion for problem solving and analytical rigor coupled with a desire for a client facing role is critical.
Consulting at Penn

Facts and Figures

• 10% of rising seniors completed an internship in consulting
  o ~12% of College of Arts and Sciences and 19% of Wharton students chose consulting

• 16% of graduating seniors secured a post-graduate consulting role
  o 18% of College of Arts and Science and ~20% of Wharton students chose roles at a variety of firms

Illustrative Representation of Recent Recruiting Activity

Source: Career Services 2017 Summer Survey Report – Penn, College of Arts and Sciences, Wharton
Key Casing Concepts
Key Casing Concepts

The Building Blocks of Case Success

• A great case applies analytical thought and creative problem solving to a variety of real-world business issues
• Good News! You already have the building blocks to ace the case interview through your broad liberal arts background!
• You will find these classes and so many more incredibly helpful!
• A basic understanding of Accounting, Finance, and Strategy will complement your existing skillset

Mathematics  English  Physics

Economics  Biology  Political Science

Communications  Social Sciences  Chemistry
Key Casing Concepts: Accounting

Accounting is the language of business

• Key Line Items:
  o **Revenue / “Topline”:** Income generated from business activities
  o **Cost of Goods Sold (COGS) / Direct Expenses:** The costs directly attributable to the production of a good or execution of a service
    – Can include both labor and materials costs; often variable costs
  o **SG&A, Indirect Expenses:** Selling, General, and Administrative Expenses
    – Major non-production cost line items
    – Often examined as a % of Revenue
  o **Overhead:** Non-Labor expenses needed to run the business
  o **Maintenance Expense:** The cost to bring an asset back to working or earlier condition
  o **Depreciation & Amortization:** the reduction of asset value as a result of use
  o **Profit** = Revenue – Costs

• Key Concepts:
  o **Year over Year (YoY) Growth**
  o **Margins**
  o **Fixed vs. Variable Costs**

**Food for Thought:** How these line items interact is crucial

**Example:** You invest in a new machine (capex). This may increase your D&A but could decrease your variable costs and potentially increase your output (quantity)
Key Casing Concepts: Accounting

A Closer Look: Types of Costs

• **Fixed:**
  - Business costs that are **constant regardless of the quantity** of goods or services produced (subject to time horizon / production period)
  - Plant, Property, Equipment (PPE), Supervisor Salaries, Depreciation, Leases, Insurance, SG&A, contract/regulatory fees, R&D (if company is engineering/tech-heavy)
  - **Operating Leverage:** the proportion of fixed costs in a company’s profit structure coupled with the impact of additional volumes on bottom-line profitability
    - **Food for Thought:** The ability to allocate fixed costs over a larger number of units results in a lower total cost per unit

• **Variable:**
  - Business **expenses that vary with the level of output**
  - Direct materials (raw materials, subcomponents), director labor (hour salary allocated per unit), utilities (some argue could be fixed or variable), freight/transportation to customers, tariffs/duties, maintenance/repair

• **Set up costs / changeover costs:** common for asset-heavy factory setting with multiple product lines
  - Case application: SKU management, manufacturing efficiency

• **One-time/special costs:** legal, regulatory, catastrophe-related, significant one time investments, one-time costs associated with a new product launch
  - **Case application:** breakeven analysis
**Key Casing Concepts: Accounting**

*Understanding these calculations is critical to case success*

**Major Line Item and Margin Calculations**

1. **Revenue** = Price x Quantity \( \rightarrow (P\times Q) \)

2. **Gross Profit** = Revenue – Direct Costs
   
   Gross Profit = Price * Quantity – Variable Cost * Quantity \( \rightarrow P\times Q – C\times Q \)

3. **Profit** = Revenue – Direct Costs – Indirect Costs – Other Costs

**Marginal Line Item and Margin Calculations**

- **Gross Profit Margin** = \( \frac{P\times Q – VC\times Q}{Q\times P} \)
- **Gross Profit Margin** = \( \frac{Q\times (P – VC)}{Q\times P} \)
Key Casing Concepts: Accounting

An Example Income Statement

- **Tips and Tricks:**
  - Look at YoY and 3 year trends
  - Calculate growth and margins to contextualize business trends

- **Questions to consider:**
  - What can you infer from a declining gross margin?
  - Are there any bright spots in this business?
  - Is a certain part of the business driving profit or growth challenges?
  - Is the business reinvesting enough to remain viable and continue to produce a quality good or service?
  - What are the critical performance drivers?

### ShoeCo. Income Statement ($ millions)

<table>
<thead>
<tr>
<th>Revenue:</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Women's Shoes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Heels</td>
<td>1,000.0</td>
<td>750.0</td>
<td>500.0</td>
</tr>
<tr>
<td>Boots</td>
<td>500.0</td>
<td>550.0</td>
<td>610.0</td>
</tr>
<tr>
<td>Sandals</td>
<td>60.0</td>
<td>66.0</td>
<td>72.0</td>
</tr>
<tr>
<td><strong>Men's Shoes</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dress</td>
<td>1,125.0</td>
<td>1,125.0</td>
<td>1,125.0</td>
</tr>
<tr>
<td>Casual</td>
<td>500.0</td>
<td>550.0</td>
<td>605.0</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td>$3,185.0</td>
<td>$3,041.0</td>
<td>$2,912.0</td>
</tr>
<tr>
<td><strong>YoY Growth</strong></td>
<td>-4.5%</td>
<td>-4.2%</td>
<td></td>
</tr>
<tr>
<td><strong>Cost of Goods Sold (Variable / Direct Expenses)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materials</td>
<td>1,194.4</td>
<td>1,140.4</td>
<td>1,092.0</td>
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<tr>
<td>Labor</td>
<td>318.5</td>
<td>304.1</td>
<td>291.2</td>
</tr>
<tr>
<td>Shipping</td>
<td>79.6</td>
<td>76.0</td>
<td>72.8</td>
</tr>
<tr>
<td><strong>Total COGS</strong></td>
<td>1,592.5</td>
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<td><strong>Gross Profit</strong></td>
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<tr>
<td><strong>Gross Margin %</strong></td>
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<tr>
<td><strong>Fixed Costs (Indirect Expenses)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SG&amp;A</td>
<td>500</td>
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<td>D&amp;A</td>
<td>300</td>
<td>330</td>
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<td><strong>Total Fixed Costs</strong></td>
<td>950</td>
<td>980</td>
<td>1010</td>
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<td><strong>Total Profit</strong></td>
<td>$642.5</td>
<td>$540.5</td>
<td>$446.0</td>
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<tr>
<td><strong>Margin %</strong></td>
<td>20.2%</td>
<td>17.8%</td>
<td>15.3%</td>
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**Key Casing Concepts: Accounting**

**Key Questions (Answers)**

- **Questions to consider (Answers):**
  - What can you infer from a declining gross margin?
    - There could be a change in product mix – is it possible that a higher margin good is making up a smaller percentage of total volume sold?
    - Are the cost of inputs increasing faster than revenues?
  - Are there any bright spots in this business?
    - It appears that two product lines, Women’s Boots and Men’s Casual have experienced top line growth
  - Is a certain part of the business driving profit or growth challenges?
    - In addition to the product mentioned above it appears that Women’s high heels have been declining
  - Is the business reinvesting enough to remain viable and continue to produce a quality good or service?
    - Are we spending enough on Maintenance?
  - What are the critical performance drivers?
    - What do volumes look like? Gross profit margin trends?
    - Is SG&A as a % of Revenue fixed?

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**ShoeCo. Income Statement ($ millions)**

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Key Casing Concepts: Finance

A basic understanding will help you unlock new market entry and M&A cases

• A variety of financial calculations and vocabulary will appear in cases from New Market Entry to Private Equity Diligence

• Vocabulary:
  o M&A – Mergers and Acquisitions
  o Fund / Financial Sponsor / Private Equity Firm
  o Hurdle Rate
  o Hold Period
  o Organic vs. Inorganic growth
  o Leverage
  o Free Cash Flow
  o DCF
  o Greenfield
  o JV
  o Synergies (Revenue and Cost)

You may encounter others but this is a good start
## Key Casing Concepts: Finance

### 3 Key Calculations + Synergies

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valuation</td>
<td>( \text{Valuation} = \frac{\text{Free Cash Flows (Profit)}}{\text{Discount Rate}} )</td>
</tr>
<tr>
<td>Payback Period</td>
<td>( \text{Payback Period} = \frac{\text{Initial Investment}}{\text{Annual Cash Flow}} )</td>
</tr>
<tr>
<td>Return on Invested Capital</td>
<td>( \text{Return on Invested Capital} = \frac{\text{Value of Investment (@ Exit)}}{\text{Initial Investment}} - 1 )</td>
</tr>
<tr>
<td>Synergized Valuation</td>
<td>( \text{Synergized Valuation} = \frac{\text{Free Cash Flows + Synergies}}{\text{Discount Rate}} )</td>
</tr>
</tbody>
</table>

**What are Synergies?**
The cost savings and/or revenue enhancement resulting from the combination of two companies or as the result of new ownership.

**Note to Candidate:**
The valuation technique used in casing is simplified. You will not have to create a DCF in a consulting case interview.
Other Applications: The Breakeven Calculation

A consulting must

• Breakeven is critical in a number of cases and will be a powerful analytical tool in the case interview

• The inputs will vary but at the end of the day you are trying to figure out how long it takes to get your money back

• Examples:
  o Making an investment decision
  o Considering start-ups costs
  o Contemplating a large one-time cost

Example Calculations

<table>
<thead>
<tr>
<th>Fixed Costs</th>
<th>One Time Start Up Costs</th>
<th>Total Incremental Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue per Unit – Variable Costs per Unit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Case Examples:
• The Philadelphia Zoo Buys a Panda
• You Buy a Coffee Maker
• Fabio’s: Hair Salons and Headshots
Math Tips and Tricks

Utilize Short Cuts to enhance mental math speed and accuracy

1. You will often encounter large numbers with more than four zeros. **Utilize scientific notation** when performing calculations to ensure that you don’t drop a zero
   - $2,000,000 \times 300 \times 20 = 2 \times 10^6 \times 3 \times 10^2 \times 2 \times 10^1 = 12 \times 10^9$
   - Remember: $10^6 = \text{million}$, $10^9 = \text{billion}$

2. **Use fractions and factoring** to simplify the calculation

   $55.5556\% \text{ of } 45,000 = \left(\frac{5}{9}\right) \times \left(\frac{5 \times 9 \times 10^3}{1}\right) = 25 \times 10^3$

3. Know **your fractions to simplify percentages**
   - You should know the decimal equivalent of $\frac{1}{2}$ through $\frac{1}{16}$
   - Keep in mind that many of these fractions are fractions of other fractions
   - $12.5\% \text{ of } 80 = \left(\frac{1}{8}\right) \times \left(\frac{8 \times 10^1}{1}\right) = 10^1$
The Case Interview: Overview
The Case Interview: At a Glance

Unlike anything you have done in school

• A great case interview combines analytical rigor, creative problem solving, and interpersonal skills to “crack the case”

Meet and Greet
• Arrive to interview suite early
• Check-In and Introduce yourself
• Interviewer will pick you up

Fit Questions
• Walk through resume
• Answer behavioral questions

The Case
• Interviewer will read the prompt
• ~35-40 minutes for the case

Conclusion
• Your chance to ask the interviewer questions
• Walk back to the interview suit

The Process

Tips & Tricks
• Be warm, confident & professional
• Have pens, paper, resume and padfolio ready

• Demonstrate that you are a fit for this firm and that you want to work there
• Pass the Airport Test

• Stay confident, upbeat, and drive to conclusions
• The best way to excel is to prepare!

• No stock questions
• Prepare 5 – 6 questions in advance
Ace each part of the case

- The case is broken into four parts

1. **The Prompt**
   - **Interviewer**
     - Presents the case
     - Often a paragraph outlining the problem at hand
     - Many times the consultant worked on this case
   - **Interviewee**
     - Listen intently and take notes
     - Repeat a summary of the prompt back to ensure clarity

2. **Clarifying Questions**
   - **Interviewer**
     - Confirm that your understanding of the prompt is correct
     - Will not always ask you if you have any questions!
   - **Interviewee**
     - Clarify the industry, value chain, product, or process
     - Think: How do Dollars go in and out of the Company?

3. **The Case**
   - **Interviewer**
     - Interviewer will work through framework, show exhibits, ask you to brainstorm, and help you drive toward a conclusion
   - **Interviewee**
     - Prepare your framework
     - Stay organized
     - “Why is this important”
     - “So what?”

4. **Recommendation**
   - **Interviewer**
     - Will prompt you to wrap up
     - Will often give you 30 seconds to structure your thoughts
   - **Interviewee**
     - Synthesize the information
     - Make a solid recommendation
     - Support your recommendation with facts
The Case Interview: Preparation

*Preparation is the cornerstone of success*

- Casing is a **new way of thinking** that will require extensive, deliberate practice to be interview ready
- Focus should be on **developing a flexible, disciplined way of thinking** that can be adapted to any problem
- There is **no “magic number”** of cases
  - Some students do 10, others do 70
  - The most important thing is that YOU feel prepared
  - Don’t do “reps” without targeted goals for improvement
- The **best practice** deliberately reinforces strengths and best practices while providing opportunities to target weakness for continuous improvement
- **Goal: seamlessly tackle any case in any industry**
Interviewer vs. Interviewee Led Cases

What to expect

• Interviewer Led Cases
  o The interviewer often has a specific set of questions to address
  o You may have created a spectacular framework but the interviewer may disregard it – Do not worry if this happens!
  o Concentrate on tackling each question

• Interviewee Led Cases
  o You must develop the structure and drive the case forward
  o Emphasis on your initial framework as it will be the foundation of the interview
  o These types of cases can arguably be harder

• Similarities
  o Structure; problem solving; clear, concise communication; creativity; organization; and confidence will be important regardless of case type
Ander Ericsson’s Theory of Deliberate Practice

1. Identify skills to be developed based on specific needs
2. Receive immediate and specific feedback and adapt as necessary
3. Perform repetitive tasks designed to improve weaknesses
4. Practice outside of your comfort zone
Tracking Case Progress – Positive and Negative Feedback

Targeted practice creates results

• Each case you do should be done in a deliberate manner – quality practice is key

• After mock case, review the case later that day and do the case correctly all the way through
  o Examine the framework and understand how you could have improved
  o Glean every insight you can out of each graph and practice discussing your findings
  o Re-do any calculations you struggled with
  o Review terms that were unfamiliar

• Keep track of both the cases you complete and the areas for improvement
  o Some use a tracker, others keep a sticky note for each case

• Review points of improvement prior to tackling another case to ensure that you targeting weaknesses
Preparing for the Case – Interviewee and Interviewer

Deliberate Practice is key

**For Interviewee**

- Make sure you have 6 or more sheets of blank paper out and ready to go
- Have extra pens, pencils and highlighters out in the event you need a new one
- At the conclusion of the interview, take notes on how you can improve
- Review the case later that day - walk through the framework, calculations and conclusion correctly
- Maintain a log of errors and completed cases

**For Interviewer**

- Spend time reviewing the case prior to giving the case
- Walk through the clarifying questions, calculations, brainstorming and conclusion
- The better you know the case, the more the interviewee will benefit from the practice case
- Be prepared to give feedback in an organized manner - taking notes and sending comments in an email is a great way to stay organized!
A Closer Look: The Prompt & Clarifying Questions
The Prompt: An Example

Your interviewer will read this to you

Your client, Palm Beach Capital, is a private equity firm that specializes in the Travel and Tourism industry. They have recently asked you to help them evaluate the potential acquisition of a cruise line, CruiseLine Co. The Company expects a purchase price of no less than $1.2 billion.

They would like to know what you think the cruise line is worth and if you believe they should acquire the target?

Note to Candidate / Interviewee:
At first, listening to the prompt, pulling out the important information, writing it down, and clarifying the prompt will be overwhelming. It will get easier with practice!
The Prompt: An Example

A clear understanding of the prompt sets you up for success

- Neat, organized notes will help you repeat the prompt back to the interviewer and refine your understanding

Organize your notes on the left side of the page. Bucket your notes to keep things organized.

Examples:
- Qualitative vs Quantitative
- PE Firm vs Portfolio Co.
- National vs. International

Clearly write the question / problem you are tasked with solving at the top of the page.
Clarifying Question

After the prompt is confirmed, you can ask clarifying questions

- These questions help you understand the world in which the case is taking place
- If needed, clarify the scope of the case and the question at hand
- These questions should not be specific and detailed – save those for the framework

Is this an industry wide trend?  Can we discuss the attributes of the product?
Can we clarify the value chain?  What is the firm’s objective?
Rev or Profit Margins declining?  Do they operate internationally?

What are the margins of the ABC business segment?
Is there a discount rate we should be mindful of?
What is the ROI on marketing spend?
How many different fabrics are they using to produce the product?

How do dollars go in and how do dollars go out?
The Prompt: Example Clarifying Questions

*In this case, you should inquire about the Fund and the Target*

**Palm Beach Capital**

- Have they acquired a cruise line before?
- Investment rationale?
- Will this investment go into an existing fund?
- Are there any hurdle rates that we need to be aware of?
- Have they specified a hold period?
- Are there any other bidders?

**Target**

- Would like to create a comparison in my mind. Is Carnival Cruise line okay?
- Clarify value chain to confirm understanding of income statement
“We don’t have that information.”

*Clarifying Questions as an initial guide*

- There will be times you ask for clarifying information and the interviewer does not have the information you are asking for.

  - **Do not view this as a set back!**

- If the interviewer does not have the information then it is not relevant to the case!

- Use this as an opportunity to focus on the information you are given as you work through your framework.
Frameworks
Frameworks: An Overview

Tips, Tricks, and Common Misconceptions

• A **framework** is a template that helps break down and solve problems in an organized and detailed manner
  - Ensure that a framework is **MECE** (mutually exclusive / collectively exhaustive)

• There are **many frameworks that can be applied successfully** for each case

• You have **1.5 – 2 minutes** to sketch out your framework

• **Do not memorize frameworks**, rather use those on the next page as a starting point as you design your own – understanding a few case types will take you a long way!

• David Orhvall’s “Crack the Case”, Mark Cosentino’s “Case in Point”, and Victor Cheng’s “Case Interview Secrets” are popular resources

• When presenting your framework, start with the most important buckets or levers first

• Understanding if this is a commodity or differentiated product or service could be helpful when thinking through critical levers
**Frameworks: Change in Profits**

**Question:** Your client’s profits have declined and/or growth has stalled. What are your recommendations to increase profits?

### Revenue

<table>
<thead>
<tr>
<th>External</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Customers</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

### Competition

<table>
<thead>
<tr>
<th>• Price vs. Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>o Price Elasticity</td>
</tr>
<tr>
<td>o Ability to meet demand</td>
</tr>
<tr>
<td>o Capacity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>• Product / Revenue Stream Mix</th>
</tr>
</thead>
</table>

| • Key Levers / Drivers within revenue segments |

### Profit

<table>
<thead>
<tr>
<th>• Historical performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Benchmarks vs. Competitors</td>
</tr>
<tr>
<td>• Product Differentiation</td>
</tr>
<tr>
<td>• Points of Product Parity</td>
</tr>
</tbody>
</table>

### Costs

<table>
<thead>
<tr>
<th>• Supplier Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Commodity Pricing</td>
</tr>
<tr>
<td>• Industry Benchmarks</td>
</tr>
<tr>
<td>• Regulations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>• Operating leverage and economies of scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Purchasing Power</td>
</tr>
<tr>
<td>• Fixed vs. Variable Cost Business Model</td>
</tr>
<tr>
<td>• Trends of various cost components</td>
</tr>
</tbody>
</table>

**Not all of these levers are applicable to each case**

---

See Business Primers Section for definitions and key accounting concepts
### Frameworks: Change in Profits – a Different Approach

**Question:** Your client’s profits have declined **and/or** growth has stalled. What are your recommendations to increase profits?

<table>
<thead>
<tr>
<th>Market</th>
<th>Revenues</th>
<th>Costs</th>
<th>Customer / Channel</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Industry</strong></td>
<td><strong>Product Mix</strong></td>
<td><strong>Client Cost Structure</strong></td>
<td><strong>Customer Segments</strong></td>
</tr>
<tr>
<td>• Growth</td>
<td>• Points of Product Parity vs. Competition</td>
<td>• Fixed vs. Variable</td>
<td>• Which segment do we serve? With what product / service?</td>
</tr>
<tr>
<td>• Revenues</td>
<td>• Changes in product mix</td>
<td>• Cost of Goods Sold – Labor &amp; Materials</td>
<td>• Which segment is the most profitable? How does this compare to our product mix?</td>
</tr>
<tr>
<td>• Profits</td>
<td>• # of Product lines – Complexity?</td>
<td>• SG&amp;A</td>
<td>• Concentration</td>
</tr>
<tr>
<td>• Headwinds</td>
<td><strong>Pricing</strong></td>
<td><strong>Marketing</strong></td>
<td><strong>Channels</strong></td>
</tr>
<tr>
<td><strong>Competition</strong></td>
<td>• Price elasticity</td>
<td>• IT / Systems</td>
<td>• Current sales mix?</td>
</tr>
<tr>
<td>• Market share by competitor</td>
<td>• Parity in Pricing</td>
<td>• Specific expenses by industry</td>
<td>• Cost of Channels?</td>
</tr>
<tr>
<td>• Commodity vs Differentiated Good</td>
<td>• Changes in Price Volume</td>
<td><strong>Benchmarks</strong></td>
<td>• Do these channels attract the correct customers?</td>
</tr>
<tr>
<td>• Fragmented Market vs Defined Market Leaders</td>
<td>• Our market share</td>
<td>• Client vs. Industry</td>
<td>• Incentive structures / performance</td>
</tr>
<tr>
<td>• Threat of New Entrants</td>
<td>• YoY Trends by product line</td>
<td>• YoY Changes in line items</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Does Capacity meet Demand?</td>
<td><strong>Supplier Power</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Defect Rate?</td>
<td>• Who has the leverage?</td>
<td></td>
</tr>
</tbody>
</table>

**Not all of these levers are applicable to each case**
**Frameworks: New Market Entry / Investment in New Technology or Project**

**Question:** Your client is considering entering a new market. Should they?

| Why / Strategic Reasoning | • Why are they considering this?  
|                           |   • Growth, Stagnant Market / Product Segment, Response to Competition  
|                           | • How are they going to do this? / Resources and Current Capabilities  
|                           |   • What will make this successful?  
|                           |   • Prior expertise, Brand, IP, Geographic Footprint, Adjacent Expertise etc.  |
| Economics of the Decision / Project | • New Market Conditions  
|                                           |   • Competitive landscape, Market Size (#, Rev, Profit)  
|                                           | • Economics  
|                                           |   • Investment required (One time investment)  
|                                           |   • Payback period, profitability, ROIC, valuation  
|                                           |   • Share of Revenues and Profits  |
| Risks / Other Considerations | • Barriers to Entry / Challenges in Execution  
|                             |   • Regulation, Access to Points of Sale, $ available to invest  
|                             |   • Cultural Differences  
|                             | • Risks  
|                             |   • Political, currency, financing risk?  
|                             |   • Macroeconomic Changes  
|                             |   • Implementation → Experience and ability to execute  |

**Tips & Tricks**

Your thought process should be centered around three key points:

1. What is the project’s probability of success based on external market conditions and Company capabilities?
2. How do I assess the risk of the project?
3. What metrics do I need to signify success?
## Frameworks: M&A Transaction

**Question:** Your client is considering purchasing a company. Should they?

### Why / Strategic Reasoning
- **Investment Thesis**
  - Fit with existing portfolio companies
  - New geographic reach or new capabilities
  - Synergies
- **Type of Deal**
  - New Market Entry
  - Vertical or Horizontal integration
  - Industry diversification

### Economics of the Deal
- **Target Valuation**
  - Profit = Revenue – Costs
  - Profit / Discount Rate = Valuation
  - Deal Price and Multiple
- **Synergies**
  - Revenue and / or Cost Synergies
- **Pre Synergized Value < Synergized Value**

### Risks / Other Considerations
- **Ability to Execute the Transaction**
  - Has the Company done this before?
  - Will they be able to get financing?
  - Ability to capture synergies?
- **Cultural Fit and Risk of Integration**
  - Will the two cultures work well together?
- **Other**
  - Regulatory approval

### Tips & Tricks
You may also need to calculate ROIC and payback period in these types of cases.
## Frameworks: Outsourcing / Offshoring

**Question:** Your client is considering outsourcing a process. Should they?

| Why / Strategic Reasoning | Why is the Company doing this?  
|  | • Cost savings, New capabilities, Competitor  
|  | • What is affected?  
|  | • Customers – needs? Segment?  
|  | • Quality of product?  
|  | • Availability and speed to market?  
| Economics of the Deal | **Current Costs**  
|  | • Understand value chain and process  
|  | • Projected Outsourced Costs  
|  | • Key changes in costs  
|  | **Initial Investment**  
|  | • Breakeven, Payback period, ROIC  
|  | **Net Cost Savings**  
| Risks / Other Considerations | **Ability to Execute**  
|  | • Do they have the expertise?  
|  | • Where are they doing this?  
|  | • How with currency affect this?  
|  | • Regulatory Risk  
|  | • Cultural integration  
|  | **Partner Capabilities**  
|  | • Do they have the right technology? Access to the right labor pool? Capacity to handle demand? Satisfactory terms?  
|  | **Stakeholder Management**  
|  | • How do you manage lost jobs? Messaging? Media?  

---

**Similar buckets to M&A and New Market Entry**

**Tips & Tricks**

This can be a people intensive process. You must have great change management capabilities to manage changes across the company.
Targeted Practice – Quant vs Qual

_Strengthening case specific skills_

- **Quantitative practice**
  - You must apply the math tips and tricks (scientific notation, fractions, and factoring) each time you practice a case
  - You will (likely) not have a calculator so you must be comfortable with these calculations
  - Use tools like Fast Math ([https://www.fastmath.net/ace-the-case/](https://www.fastmath.net/ace-the-case/)) or Rocket Blocks ([https://www.rocketblocks.me/](https://www.rocketblocks.me/)) to practice drills
  - Practice heavily quantitative cases like CruiseLine Co. in this book

- **Qualitative practice**
  - A great candidate masters the quantitative and qualitative
  - Practice structured brainstorming – create your buckets, understand the levers that will have the biggest impact on the business
  - Understand critical non-quantitative factors and how they apply across industries
  - Practice presentation skills – the best case interviews feel like a conversation
Market Sizing
Market Sizing: Thinking like a Consultant

Opportunities to practice your consulting skillset are everywhere!

- **Market sizing is a critical consulting skill** and popular topic in many case interviews
- Market sizing can be an entire case or as part of a broader question like entering a new market or launching a new product
- Goal: Test your quantitative and logical reasoning skills
- The interviewer is less interested in your final answer compared to your methodology and approach in getting there
- **Your chance to demonstrate that you have strong quantitative skills, can handle ambiguity, and are able to support your assumptions**
- It is critical that you maintain a structured thought process and communicate your methodology

**Chances to practice are everywhere**
Two Approaches to Market Sizing

Top Down and Bottom Up

- **Top Down**
  - Think of this as a funnel
  - Start with your largest population and work to refine
  - Populations to know:
    - U.S. Population: 300M people
    - U.S. Families: 100M
    - It could be helpful to understand similar metrics for international offices

- **Bottom Up**
  - Start at the smallest unit and work your way up
  - Think of this like you are working your way up a pyramid
Let's Try!

*Top Down and Bottom Up Market Sizing*

- Some examples for you to try:
  - How many people are in Huntsman hall at 10:30 am?
  - How much money does Soul Cycle make nationally?
  - How many coffees does Starbucks sell globally?
  - How many cheeseburgers does McDonalds sell in the U.S.?
Huntsman Hall: Top Down

Top Down Market Sizing is like a funnel

<table>
<thead>
<tr>
<th>Metric</th>
<th>Undergrad</th>
<th>MBA</th>
<th>Faculty &amp; Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>10,000</td>
<td>2,000</td>
<td>5,000</td>
</tr>
<tr>
<td>% Class @ 10:30</td>
<td>50.0%</td>
<td>75.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Class @ 10:30</td>
<td>5,000</td>
<td>1,500</td>
<td>5,000</td>
</tr>
<tr>
<td>Class in Huntsman</td>
<td>50.0%</td>
<td>66.67%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Total Students w. Class in Huntsman</td>
<td>2,500</td>
<td>1,000</td>
<td>500</td>
</tr>
<tr>
<td>Attendance</td>
<td>80.0%</td>
<td>50.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Students in Huntsman @ 10:30</td>
<td>2,000</td>
<td>500</td>
<td>500</td>
</tr>
</tbody>
</table>

Total People in Huntsman: 3,000

**Tips:**

- Think about the **calculation like you would a framework** – take a moment to collect your thoughts and plan your metrics / key drivers.
- Mental math is critical here – use **rational but easy to calculate percentages and numbers**.
- Be ready to **discuss the logic and reasoning behind your assumptions** – the interviewer is interested in your ability to support your decisions.

**Tip:** Choose reasonable but easy to calculate numbers. Think through the calculation before you choose the assumption.

**Tip:** Visualize Huntsman as you work through this case.
Huntsman Hall: Bottom Up

Think about your assumptions as building blocks

### Piememeal Estimation

**Number of Class Rooms in Huntsman**

<table>
<thead>
<tr>
<th># Floors</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classrooms per Floor</td>
<td>10</td>
</tr>
<tr>
<td>Total Class Rooms</td>
<td>30</td>
</tr>
<tr>
<td>% Have Class at 10:30</td>
<td>100.0%</td>
</tr>
<tr>
<td>Classrooms in Use</td>
<td>30</td>
</tr>
<tr>
<td># Seats per Classroom</td>
<td>75</td>
</tr>
<tr>
<td>Average Attendance</td>
<td>80.0%</td>
</tr>
<tr>
<td>Total Student Attendance</td>
<td>1,800</td>
</tr>
</tbody>
</table>

**MBAs in MBA Café**

| Number of Tables | 10 |
| People at a Table | 10 |
| Total at Tables | 100 |

**Total - Couches, Chairs, Outside**

| Numbers of Couches / Chairs, Outside | 100 |

**Other Potential Staff Members**

| Maintenance | 10 |
| Security | 10 |
| Pret | 30 |
| Total Other Staff Members | 50 |

| Total Work Spaces | 400 |
| Attendance | 100.0% |
| Total Faculty & Staff | 400 |
| Total People in Huntsman at 10:30 am | 2,450 |

### Notes:

- It is completely fine that the two estimates are different!
- Choose easy to calculate numbers!

### Tips and Tricks:

- It is critical that you stay case specific – imagine yourself walking through Huntsman
  - Where are the people? What do I need to be aware of?