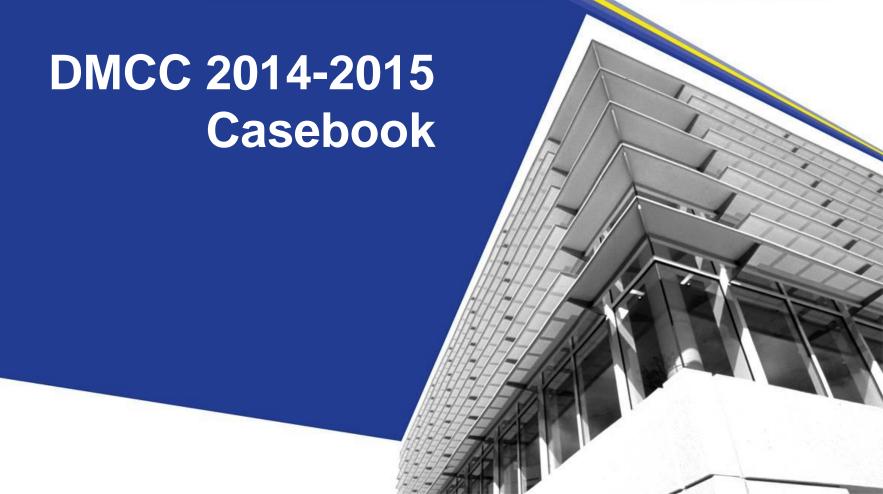


# RETHINKING THE BOUNDARIES







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### **Editor's Note**

#### Welcome first year students:

The Duke MBA Consulting Club (DMCC) is proud to present the official First Year Student 2014-2015 DMCC Casebook. This year we have included over 20 brand new cases. The objective of this book is to help you prepare for your upcoming consulting case interviews. Case interviews are an integral part of the hiring process for consulting firms. These interviews give you the opportunity to showcase your communication, client, creative and analytical skills to your interviewer. This book was developed to complement the Duke MBA Consulting Roadmap curriculum. We hope that using both will help lead you to success during the upcoming recruiting season.

A couple of changes have been made to enhance the training of those utilizing the book. First, we have included behavioral questions with each case. Through feedback it was communicated that structured opportunities to practice behavioral type questions was lacking so this should help address - please take the time to administer and answer these questions! Second, although we cannot prepare you for everything you might encounter during a your case interviews we went to great lengths to better diversify the case content. Current cases cover a wide variety of topics from pharmaceuticals to insurance sales, across several problem types.

This casebook could not have been completed without all of the wonderful cases submitted by your classmates and the valuable contributions of the DMCC Cabinet Officers. We would also like to thank our friends at other MBA programs for sharing with us their old casebooks to supplement the cases herein.

We wish you luck with your preparation and would like you to remember that your fellow DMCC members are here to help! Please reach out to anyone on the cabinet if you feel that you are not "cracking the case". Lastly, to the students of other top MBA programs using this case book during their preparation, we warmly welcome you to "Team Fuqua".

Good luck!

Jeff Kaloski and Vineet Hingwe



### **Overview of the Casebook and Recommendations**

- The first section provides an overview of the firms, followed by a case table of contents, then the cases
- Qualitative and quantitative case difficulty is identified within the case table of contents; difficulty is on a scale of 1 to 7
  (7 being the most difficult)
- Cases 24 and 25 were provided by BCG so these are <u>very representative</u> of the type of case you will receive in a BCG interview
- Case 26 was provided by Deloitte so this is <u>very representative</u> of the type of case you will receive in a Deloitte interview
- Ask the behavioral questions EVERY TIME you give a case!
- Most cases are adaptable so try to familiarize yourself with the case prior to giving
- Print exhibits before giving the case or be prepared to share digitally (we tried to ensure that all exhibits are effective when printed in black and white, but recommend double checking your print outs to be sure!)
- HAVE FUN!

# **The Firms**

### **Accenture**

High Performance, delivered. Accenture brings strategic thinking, innovative approaches and the ability to make a difference to companies and governments around the world.

Overview

Accenture has recently re-structured its Management Consulting practice. Most or all on-campus recruiting opportunities will fall into the Strategy group. Candidates will interview for the general Strategy group but may wish to express interest in a specific functional area or industry during the recruiting process.

- Strategy- Offerings in Mergers and Acquisitions; Operating Model Strategy; Sales and Marketing Strategy; Finance & Enterprise Performance Strategy; Operations Strategy; Talent & Organization Strategy; Technology Strategy; Digital Strategy
- Federal- Helping government clients solve complex problems

**Interview Overview** 

#### Round 1

2 Behavioral / Case interviews

#### Round 2

2 Behavioral / Case interviews

**Unique Interview Features** 

- <u>Cases</u>- Cases are often based on real client experiences. Cases may or may not have a
  quantitative component, so listen for verbal clues. Cases are often very conversational and are an
  opportunity to showcase your interpersonal skills.
- Behavioral/Fit- Fit is very important. The interviewer may have a "brief conversation" about your background and experience instead of a standard question & answer format. Also, in the first round at least one of the interviewers may focus much more heavily on behavioral/fit and place less emphasis on the case.

- Analyst
- Consultant
- (Business School); Summer Consultant
- Consultant
- Manager
- Senior Manager
- Managing Director

# **Bain & Company**

Bain is a leading strategy consulting firm based in Boston, MA with 49 offices across the globe.

Overview

Bain follows the generalist model. There is no need to align with a specific industry or area before interviewing.

- Strategy Influential experts and deep expertise in dozens of industries, provides consultants with a broad foundation on which to build their own expertise
- Private Equity Group (PEG) Work with private equity firms to assess potential deals

**Interview Overview** 

#### Round 1

- 2 Interviews (~45min. each)
- A few behavioral/fit questions and a case (Note: interview may start with the case)

#### Round 2

- 1 fit interview (~45min)
- 1 written case interview (~45min)
- 1 typical case interview (~45min)

**Unique Interview Features** 

- Shorter prompts- Most cases feature shorter prompts (2-4 sentences). Candidates should feel free to ask additional questions before creating a unique framework
- Charts and graphs- Bain has a few unique chart and graph formats that should be reviewed (marimekko and 100% stacked bars are most common – materials are on the website) before interviews to become familiar
- <u>Second level insights-</u> Candidates should focus on the business implications of information provided during the case (the "so what?"). Some of the data presented will not provide insights into the case sift through the data.
- Action-oriented recommendation The recommendation should be concise and contain specific
  actions the client could take immediately along with any additional work streams that are needed to
  complete the analysis

- Associate Consultant
- Senior Associate Consultant
- (Business School); Summer Associate
- Consultant
- Case Team Leader
- Manager
- Principal
- Partner

# **Boston Consulting Group (BCG)**

BCG is a premier strategy firm developing and implementing high-value opportunities for change for Private, Public and Not for Profit Organizations

**Overview** 

- Generalist in the beginning can choose to focus on industry as one moves into project leader
- Regional staffing model, though each office values its own culture and network
- Flat organization with a lot of transparency; communication is direct and feedback is highly valued
- "Chart your own course" philosophy you can specialize in a particular industry early or take on a variety of assignments across different countries or take a sabbatical to work for a non-profit for a year
- Strong mentoring culture, frequent interaction with partners on cases and lots of training opportunities if you join BCG full-time. Personal development is taken very seriously

**Interview Overview** 

#### Round 1

 Two analytical cases with a portion of the time dedicated to behavioral fit questions - 45 min each

#### Round 2

- Two to three analytical cases with a portion of the time dedicated to behavioral/fit questions
  - 55 minutes each

**Unique Interview Features** 

- Be prepared for the behavioral portion of the case to bleed into the analytical portion of the case. The break between the two is not always obvious and clear cut.
- Highly quantitative be prepared for lots of complex math.
- Partners look for driving the case and the application of common sense judgment. They look for creative thinkers who can structure their thoughts
- Not simply textbook knowledge

- (Undergrad); Analyst A1/A2 (denotes the years in the position)
- (Business School); Summer Consultant
- Consultant C1/C2
- Project Leader PL1, PL2, PL3
- Principal P1, P2, P3, Px
- Partner
- Sr. Partner / Managing Director

# **Deloitte Consulting LLP**

Deloitte is a leading strategy firm bringing executable strategies to the Fortune 500

Overview

Deloitte has three service areas (below). Student must align with a service area before applying.

- Human Capital professionals bring industry expertise in integrating business, HR and talent strategies to create business value through people
- Strategy and Operations professionals bring deep industry experience with capabilities spanning corporate and business unit strategy, M&A strategy, and sales and marketing
- Technology professionals focus on internal technology solutions, challenges, and innovation –and full-spectrum delivery across strategy, implementation, management and operations

**Interview Overview** 

#### Round 1

- Analytical Case

   30 min
- Behavioral

   30 min

#### Round 2

- Strategy Case– 60 min
- Behavioral- 30 min
- Group Case— 90 min

**Unique Interview Features** 

- Long prompts- Some cases feature multi-paragraph introductions that include lots of data. Make sure you capture all the information before moving on, since it's usually not repeated.
- <u>The Data Sheet</u>- Deloitte often hands you a page with multiple exhibits (chart, graph, list, or data table etc.), usually one in each of the four quadrants. Often you will need to combine information from different exhibits to synthesize an answer.
- <u>The Group Case</u>- You interview with 4-5 candidates. Each of you is assigned a role (usually different than your prior work experience) and presented with overall and role specific questions. Collaborate with your peers to successfully crack the case.

- Business Analyst
- Consultant
- (Business School); Summer Associate
- Senior Consultant
- Manager
- Senior Manager
- Partner/Principal/Director

# L.E.K. Consulting

L.E.K. is a global strategy consulting firm. It counsels its clients on key strategic issues, leveraging its deep industry expertise and using analytical rigor to solve clients' toughest and most critical business problems.

Overview

L.E.K. follows the generalist model with new consultants. There is no need to align with a specific industry or area before interviewing. However, there is potential to specialize in a particular industry starting in your second year.

• L.E.K. has particular expertise include life sciences/ pharmaceuticals, aviation and travel, basic industries (building materials/ manufacturing), media & entertainment, retail, and private equity

**Interview Overview** 

#### Round 1

- 2 Interviews (~30min. each)
- Traditionally one qualitative and one quantitative (each will include a few behavioral/fit questions)

#### Round 2

- 1 written case interview with presentation(1 hour to prepare, 30 min to present)
- 1 typical case interview with Manager (~30min)
- 1 case/fit interview with Partner (~45min)

**Unique Interview Features** 

- Shorter cases L.E.K. cases are designed to be shorter than some of the other firms. First round interviews last only 30 minutes including behavioral questions, meaning candidates must get through the case within 20-25 minutes.
- Quantitative focus Each L.E.K. interview round will contain a significant quantitative component, and quantitative aptitude is very important in the evaluation of candidates. Many cases also require familiarity with financial statements or basic finance concepts such as NPV. First round cases typically include at least one market sizing case.
- <u>Leadership potential</u> in addition to standard behavioral questions such as "why L.E.K.?" interviewers look specifically for candidates able to take on immediate management responsibility, as consultants are given responsibility for managing associates on casework as soon as they join.

- Associate
- Associate Consultant
- (Business School); Summer Consultant
- Consultant (manages single project)
- Manager (manages multiple projects)
- Principal (managing director in training)
- Managing Director (Partner)

# **McKinsey & Company**

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

Overview

McKinsey recruits students into generalist and practice areas (Business technology, Operations, Marketing) Students can express an interest to apply as a generalist and/or for a practice area

Summer Associates are assigned to any of a wide range of industries, touching any point in the value chain. Project ("study") staffing is collaborative between SAs and Professional Development staff. Structured, formal feedback is provided by a senior firm member twice during the summer. Informal feedback is common, and is highly emphasized in the firm's culture. M-Th travel is typical.

**Interview Overview** 

Depending on office preference you will either have a one day "Power Round" session or the standard tiered process. The Southern office and international offices typically conduct "Power Round" style interviews.

Power Round (at or near Fugua, if intl. at office)

- 4-5 Interviews
- 20 min experience
- 30 min case

Round 1 (at or near Fugua)

- 2 Interviews
- 20 min experience
- 30 min case

Round 2 (at McK office)

- 3-4 Interviews
- 20 min experience
- 30 min case

**Unique Interview Features** 

- The Personal Experience Interview- Unlike other firm's behavioral interviews, McKinsey asks candidates one question before each case to asses behavioral/fit. These questions are rooted in at least one of the following areas: personal impact, entrepreneurial drive, problem solving, personal achievement, and leadership. The interview will ask the initial question and then probe deeper by asking several follow up questions to understand your thought process in that situation. It's not uncommon to spend 20 minutes on one experience.
- Highly Structured Cases- Cases often have discrete framework, brainstorming, and quantitative "sections" that focus on a question specific to that section. Although candidates must drive the analysis, the interviewer may redirect towards the next section.

- Business Analyst
- (Business School); Summer Associate
- Associate
- Engagement Manager
- Associate Principal
- Partner
- Director

# **Pricewaterhouse Coopers (PwC)**

PwC Advisory helps clients build their next competitive advantage. You will help our clients improve business processes, transform organizations and implement technologies.

Overview

Students must directly apply to one of the following practice areas:

- Health Industries
- Public Sector
- Financial Services
- Products & Services Industry

**Interview Overview** 

#### Round 1

- 2 Interviews (~45min. each)
- Only behavioral/fit questions

#### Round 2

- 2 behavioral/fit interviews (~45min)
- 1 case interview (~45min)

**Unique Interview Features** 

- <u>First/Second Round Behavioral Interviews PwC puts extra emphasis on your background and fit</u> with PwC. Your first interview will also include a discussion of which vertical (above) best fits with your work experience and career goals.
- Case Interview The case interview is a little different than other firms. The case is very conversational as the candidate and interviewer discuss a business situation. Candidates may be given a case to prepare 1-2 days in advance (usually 4-5 pages). On the interview day, candidates are given questions on the case and are asked to prepare a slide deck presentation in an hour before discussing it with the interviewer.

- Associate/ Experienced Associate (Undergraduate level)
- Summer Senior Associate (Business School internship)
- Senior Associate (After Business School)
- Manager
- Director
- Partner

### **ZS** Associates

Our singular focus over our 30 years has been to help global companies maximize their sales and marketing organizations' performance and results.

Overview

Students must directly apply for one of two roles:

- Business Consultant- serve on project teams that deliver high-quality marketing and sales strategy projects to clients. In particular, Business Consultants possess qualitative research and unstructured problem solving skills and/or advanced quantitative analytics skills
- Business Operations Consultant- manage overall projects and client engagements. They
  support our clients' sales and marketing activities and ensure productivity and profitability in their
  business operations.

**Interview Overview** 

#### Round 1

- 2 Interviews (~45min. each)
  - 1 behavioral
  - 1 case

#### Round 2

- 1 fit/behavioral interview
- 1 case interview
- 1 presentation case

**Unique Interview Features** 

- <u>Case Focus</u>- Although ZS rigorously tests a candidate's public math skills and ability to synthesize, do not neglect the qualitative component. In recent years ZS has begun to focus on both qualitative reasoning as well as quantitative skills.
- <u>Presentation Case</u>- Candidates are provided information and must synthesize a presentation to a panel of interviewers. ZS provides a laptop to create the slides. Expect to be challenged and questioned.
- Rounds- ZS holds its second round interviews within a few days of its first round. Candidates should plan accordingly to minimize potential conflicts.
- Interviewers- Partners and senior managers conduct the first round interviews on-campus, unlike some firms that use consultants and junior managers in the first round.

- Associate
- Associate Consultant
- (Business School); Business Consultant Intern
- Consultant
- Manager
- Associate Principal
- Principal



# **The Cases**

C #	Name	Difficulty (1 - 7)			
Case #		Qualitative	Quantitative	Industry / Sector	Page
1	Purple Pill Company	4	4	Pharma	15
2	Buy Low, Sell High	2	5	Financial Services	23
3	Oklahoma Gas Company	5	3	Oil & Gas	34
4	Heavy Things Fitness	5	6	Other	42
5	Orange Yoga Studio	6	4	Other	53
6	Surfboard Wax in Hawaii	2	2	Other	66
7	Pacific Northwest Telco	1	1	Telecommunications	74
8	The Everything Retailer	5	4	Retail	81
9	Gee & Gee's House of Brands	3	6	Retail	91
10	Going Green	4	5	Other	99
11	AllHealthy CRM	4	1	Human Capital	112
12	Coyotes	5	5	Non-Profit	117
13	Ferry Follies	3	4	Transportation	130
14	AutoDrivers	4	3	Insurance	138
15	Steel Works	5	2	Steel	151
16	WOEM	2	1	Hospitality	164
17	Money in Michigan	2	3	Public Sector	171
18	Pharma Co.	6	6	Pharma	179
19	Quality Control	4	2	Med. Devices	190
20	WorkIT	4	4	Insurance	195
21	So Fresh and So Clean	4	3.5	CPG	206
22	Kid Country	3	4	Media	216
23	Texas Oil	5	3	Oil & Gas	226
24	Consumer Products Strategy	N/A	N/A	CPG	236
25	Pharmaceutical Business Growth	N/A	N/A	Pharma	244
26	Insurance Co. – Business Restructuring	N/A	N/A	Insurance	250

# **CASE 1 – PURPLE PILL COMPANY**





### **Prompt**

Your client is a multinational pharmaceutical and biologics company. The client has a portfolio of drugs for major disease areas, including cancer, cardiovascular, and gastrointestinal diseases, to name a few. The client has experienced a decline in revenue over the last 18 months, and is fearful of further declines, especially given that its most commercially successful drug, which treats acid reflux disease, will be going off of patent in May of next year. What are the areas they should look into to change the course of this trend?

### **Behavioral Questions**

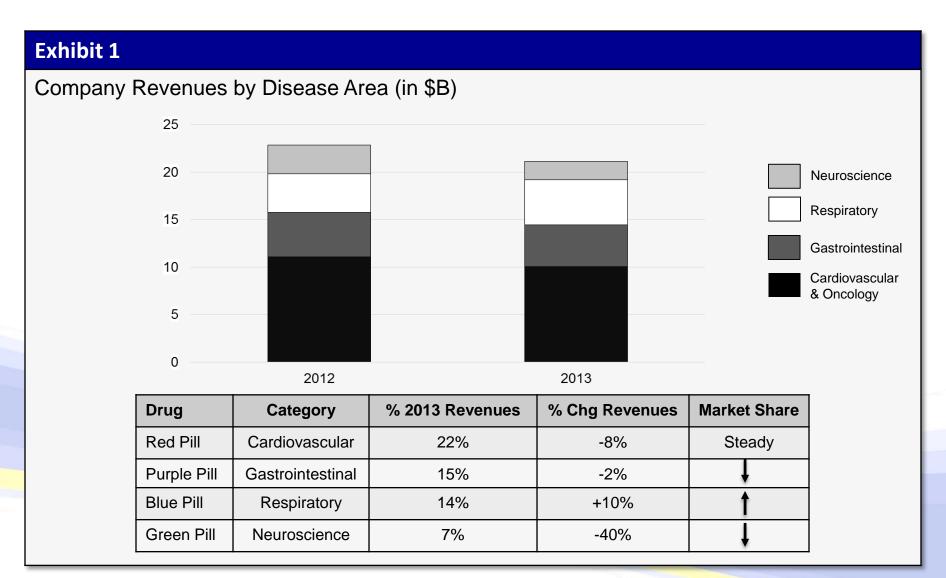
- Why consulting now (after xx years in xx industry)?
- Tell me one industry that you're interested in right now. What are the trends or opportunities for key players in this industry? (can also be a function, area of business, etc.)

### **Interviewer Guidance**

The candidate should come up with a MECE framework that covers the following areas: product mix, industry trends, competitors

- The candidate should identify that this is a revenue problem, given the prompt.
- A good candidate will identify the patent expiration impact on revenues quickly.
- A good candidate may also discuss sales by region (since it is a global company) in addition to product mix.
- Additional information should be provided upon request:
  - Exhibit 1 Revenues by disease area (Product Mix)





### **Analysis**

What are the largest drivers of revenue decline over the last year? (Provide Exhibit 1 if not already provided)

#### Guidance:

- Give the candidate 20-30 seconds to review the chart. Then, prompt them to start sharing insights.
  - o E.g. Overall business is declining ~10%, driven by neuroscience, and cardiovascular & oncology
  - o E.g. Respiratory is driving growth, driven by the blue pill; has also gained market share
- Ask: Which drug is largest source of dollar declines from 2013 to 2012? How much is the loss?
- · Math:
  - Red Pill: 22% x \$21B = \$4.6B / .92 = \$5B  $\rightarrow$  4.6B 5.0B = \$0.4B, or \$400M loss
  - $\circ$  Purple Pill: 15% x \$21B = \$3.15B / .98 = \$3.21B  $\rightarrow$  3.21-3.15= \$0.06B, or \$60M loss
  - Green Pill:  $7\% \times \$21B = \$1.5B / .6 = \$2.5B \rightarrow 2.5B 1.5B = \$1B$  loss

### Recommendation

- Brainstorming Ask candidate: What are some issues that could have caused this decline?
  - Acceptable answers: lower price, lower tablet sales volume, generics coming on market, regulatory restrictions, out of stocks, currency and geographic trends
  - o Good candidates will connect generics coming on market to reduced market share in Exhibit 1.
- Additional information to be provided as confirmation:
- In addition to other issues, the decline is attributed to the introduction of generics in the US and other established markets. It's fair to attribute 50% of the decline to generics. The additional declines were related to Medicaid liability and other inventory related issues.



### **Analysis**

Given these issues with the Green Pill, the client would like your help in determining specifically how to maintain as much revenue as possible from the Purple Pill when it goes off patent next year. It has several options that it would like for you to evaluate.

#### Options:

- 1. Do nothing
- 2. License the brand to an over the counter (OTC) manufacturer for \$250M one-time revenue
- 3. Direct-to-patient campaign online and pay 3<sup>rd</sup> party for delivery

#### Additional facts and assumptions:

- With no action, Green Pill lost 20% of annual volume in the past (use this assumption)
- Current revenue per pill is \$1 at an 80% margin (remember, total revenue \$3.2B)
- 10% of current Purple Pill volume will transfer to OTC brand we get only one time revenue
- Direct to patient will retain 25% that would've been lost to generic but the margin would be reduced to 50%
- Over 2/3 of the Purple Pill's revenue comes from the US.

### Recommendation

Ask: What would you do and why? What are your assumptions on incremental or retained volume in each scenario? Why?

The head of Purple Pill brand needs to make a decision would like for us to share our recommendation today. Please share your analysis and recommendation.



### **Analysis**

#### Decision

#### Math:

- Do nothing: \$3.2B x .80 retained (20% lost) = \$2.5B revenue x 80% margin = \$2B gross profit
- License for \$250M: = \$2B + \$250M = \$2.25B (10% x \$3.2B x 80%) = \$2.25B \$0.256B = \$1.994B (This is a reduction of \$60K compared to doing nothing)
- Direct to patient program = \$2B + (20% lost x 25% of this retained x \$3.2B x 50% margin) = \$2B + \$.08B = \$2.08B

#### Guidance:

The math is important here, but more important is that the candidate can think through short-term and long term scenarios. For example, licensing may look like breakeven in year one and retain the brand, but it is a long-term loss as there is no additional revenue (the \$250B) in year 2. You would want there to be little to no cannibalization.

Also, if the direct to patient program cannibalizes more of your existing 80% margin business, you will lose money if you don't increase the price.

This case gauges the candidates comfort with making assumptions and making strategic decisions.



### **Performance Evaluation**

#### Expected:

- · Completes all math
- · Guides the conversation and probes for additional facts and data without prompting

#### Good:

- Is able to think creatively and drive the process forward
- Walks the interviewer through the logic
- · Provides next steps for the analysis

#### Excellent:

- Is comfortable providing own assumptions around cannibalization and patient retention
- Brings up the possibility of a merger with another drug producer or other out of the box ideas.
- Provides financials for multiple years and has a forward thinking strategy.



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

### **Case Interview feedback form**

Case	Case type	Interviewer
Execution		Case start time:
•Structure  ➤ Logical approach  ➤ MECE  ➤ Appropriate drive to solution	1 2 3 4 5 Comments:	Framework development min Framework explanation min Case discussion min
•Quantitative Ability	1 2 3 4 5	Case end time:
<ul><li>Speed</li><li>Accuracy</li><li>Comfort, reaction to mistakes</li></ul>	Comments:	Overall Rating: 1 2 3 4 5
•Business intuition  ➤ Practical	1 2 3 4 5	Strengths
<ul><li>Practical</li><li>Insightful</li><li>Breadth &amp; depth across multiple function</li><li>Creativity</li></ul>	Comments:	
Communication		
<ul><li>Professionalism</li><li>➤ Poise</li><li>➤ Confident-Persuasive</li></ul>	1 2 3 4 5 Comments:	
➤ Articulate-concise ➤ Client ready		Weaknesses
•Written  ➤ Clarity of writing and page layout  ➤ Ability to refer back  ➤ Comfort, reaction to mistakes	1 2 3 4 5 Comments:	
Behavioral (optional)		
•Quality of star stories 1 2 3 4 5 •Length 1 2 3 4 5	Comments:	

**Key**: 1=Bottom 10%, 2= 10<sup>th</sup>-25<sup>th</sup> percentile, 3= middle 50%, 4= 75<sup>th</sup>-90<sup>th</sup> percentile, 5=Top 10%

# CASE 2 – BUY LOW, SELL HIGH



### **Prompt**

Your client is a rich financier who has decided recently to the capital markets as a market maker. Market makers make % commissions off of transactions in capital markets, and are necessary to provide liquidity and orderly market action. The year is 2014 and he believes that we have recovered long enough from the financial collapse to warrant an investment in this sector. There are multiple opportunities in the financial market and you have been hired to advise him on how and where to invest his money. He is considering entry into one of four markets: Commodities, Options, Equities, and Fixed Income.

### **Behavioral Questions**

- What is one situation you have been in where you had to lead upwards (be a leader when you didn't have the authority)?
- · How would you deal with a team environment where you did not feel welcome?

#### Interviewer Guidance

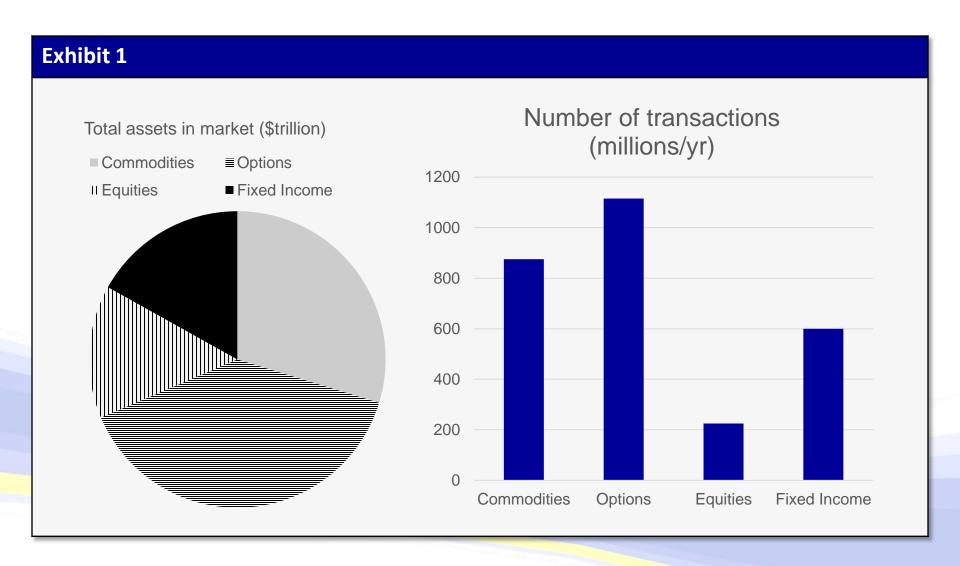
This case is designed to see if a candidate can perform an analysis of market segments and determine a profitable entry point into an established market. This is a two-part analysis.

#### Facts (to be provided if asked)-

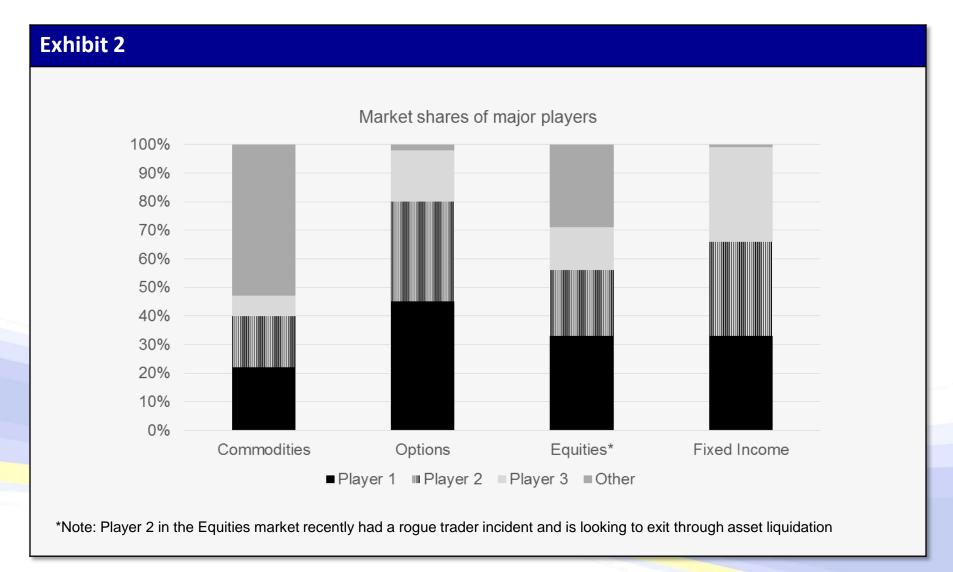
- Amount to be invested: up to \$2.5 billion.
- · Client has experience in finance, but not in trading
- Investment to be focused inside of United States
- Goal is to have a positive NPV investment. Limited to only one investment (he feels his attention can only be focused on one opportunity at a time)
- · Size and market shares of four markets to be provided upon asking
- Market makers make a fixed % commission on each transaction, so more volume and bigger \$ value of transactions is usually better. These markets each intrinsically have different commission rates (which we don't have).

Candidate should be handed Exhibit 1 and Exhibit 2 after he has walked through the structure of the problem and finished asking questions. He should perform an analysis of market attractiveness with this data.











### **Interviewer Guidance**

Exhibit 1: Candidate should be able to conclude from the two charts that total asset value and number of transactions suggest options and commodities are the most attractive markets to enter. However, none of these charts show actual profit earned in the four markets, so more information is necessary (what are the levels of commissions?).

Exhibit 2: From this exhibit, commodities and equities seem the most attractive for an entrant, since there are fewer major players in commodities and there is a major player exit in equities. Again, actual profit from entry is not apparent.

### **Prompt**

Our analysts have done some research on the costs of entry and expected profits from entering these markets. Please look at their analysis in Exhibit 3 and tell me what you can extract from these findings.

### Guidance

Candidate should perform an NPV analysis based on the data provided.



# Exhibit 3

\$MM	Commodities	Options	Equities	Fixed Income
Expected Revenue	200	??	150	160
Salaries	50	40	20	30
Rent & Utilities	50	40	40	30
Depreciation	??	30	25	50
Operating Profit	60	70	65	??
Interest expense	30	20	20	40
Earnings before tax	30	50	45	10
Taxes	10	10	??	2
Net Income	20	40	30	8
Expected Investment	2,000	2,500	1,500	2,100

<sup>\*</sup>Cost of capital = 5%, all income assumed to last forever and begin in year 1, depreciation constant YoY



### **Exhibit 3 Guidance for Interviewer**

\$MM	Commodities	Options	Equities	Fixed Income
Expected Revenue	200	180	150	160
Salaries	50	40	20	30
Rent & Utilities	50	40	40	30
Depreciation	40	30	25	50
Operating Profit	60	70	65	50
Interest expense	30	20	20	40
Earnings before tax	30	50	45	10
Taxes	10	10	15	2
Net Income	20	40	30	8
Expected Investment	2,000	2,500	1,500	2,100
EBITDA	100	100	90	100
Investment return	2,000	2,000	1,800	2,000
NPV	-	(500.00)	300.00	(100.00)

<sup>\*</sup>Cost of capital = 5%, all income assumed to last forever and begin in year 1, depreciation constant YoY



### **Analysis**

#### Market attractiveness:

Initial analysis should show commodities and options to be most attractive in terms of market size, with commodities as the most attractive due to the lack of major players to inhibit entry. Both Options and Fixed Income seem to be markets where a few players dominate, making potential entry very difficult. Equities is interesting because of potential for cheap entry due to the liquidation of a major player's assets, so further analysis is necessary

#### Valuation:

Based on NPV analysis, equities are the investment to make due to the cheap entry cost. This carries an added benefit of leaving \$1 billion free for other uses. Candidate can include this excess sum in calculation, but that isn't necessary.

### Recommendation

Recommendation should be to invest in equities. Ask candidate to give a recommendation to a the actual investor ("he is about to come into the room," etc...)

Next steps may include: ascertain process for buying liquidated assets, determine if there are other buyers, look at other passive investments for excess funds.

Potential risks: regulatory delays, volume of equities market is low, market at all time highs and crash could mean future profit projections are off

Next steps and risks are open ended and don't have to be these suggested options. Make sure candidate has thought out logical points and can explain his reasoning.



### **Performance Evaluation**

#### · Initial problem solving:

**Distinctive** - Well-structured problem solving that is MECE and covers major factors to be considered. This is very open-ended so there are no "musts", but candidate should quickly realize this is an investment/market entry problem and approach it as such.

**Very strong** - Structured analysis that covers many aspects, but may not be fully MECE. Candidate might need some guidance to ask for right information.

**Strong** - Analysis covers many factors and is thoughtful. Needs some guidance to direct candidate towards data and crux of problem.

**Needs improvement** - Analysis is fragmented. Candidate unable to structure problem and needs a lot of guidance to proceed.

#### • Exhibit 1&2 - market analysis:

**Distinctive** - Candidate quickly grasps what the three charts are trying to say and comes to conclusions quickly. Realizes that there is some possibly conflicting information and asks for data (potentially asks to do NPV).

**Very strong** - Candidate comes to solid conclusions from the charts and is ready to proceed. May need prompting before next step.

**Strong -** Candidate can handle multiple tables but may struggle to fully realize the conflicts embedded in the data. Might try to end case here. Needs some prompting to proceed.

**Needs improvement** - Analysis is fragmented. Candidate cannot handle the multiple charts and needs a lot of guidance to proceed.



### **Performance Evaluation Continued**

#### • Exhibit 3- valuation:

**Distinctive** - Candidate understands how to do an NPV and performs calculations quickly and accurately. Exceptional if candidate understands most of data is superfluous and calculates from Operating Profit and Depreciation numbers only. **Very strong** - Candidate performs calculations in a timely manner. May make some mistakes. **Strong** - Candidate takes a bit of time to perform calculations. May need some guidance on where to start. **Needs improvement** - Candidate does not understand what an NPV is. May try a breakeven analysis or other kind of calculation. Interviewer needs to cut calculations short to get to recommendation.

#### Recommendation:

**Distinctive** - Candidate concisely gives accurate recommendation and covers logical next steps and reasonable risks. **Very strong** - Candidate gives accurate recommendation with some next steps and risks. May be a little long-winded. **Strong** - Candidate gives a recommendation but may forget next steps and risks. May need some guidance on where to start. **Needs improvement** - Candidate isn't structured and struggles to give a recommendation.



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

### **Case Interview feedback form**

CONSULTING CLUB	Case	Case type	Interviewer
Execution			Case start time::
•Structure  ➤ Logical approach  ➤ MECE  ➤ Appropriate drive	e to solution	1 2 3 4 5 Comments:	Framework development min Framework explanation min Case discussion min
<ul> <li>Quantitative Ability</li> </ul>		1 2 3 4 5	Case end time:
➤ Speed ➤ Accuracy ➤ Comfort, reaction	n to mistakes	Comments:	Overall Rating: 1 2 3 4 5
•Business intuition  ➤ Practical		1 2 3 4 5 Comments:	Strengths
➤ Insightful ➤ Breadth & depth ➤ Creativity	across multiple functio	ons	
Communication			
<ul><li>Professionalism</li><li>➤ Poise</li><li>➤ Confident-Persuasive</li></ul>		1 2 3 4 5 Comments:	
➤ Articulate-concise ➤ Client ready			Weaknesses
•Written  >Clarity of writing >Ability to refer ba >Comfort, reaction	ck	1 2 3 4 5 Comments:	
Behavioral (option	nal)		
<ul><li>Quality of star stories</li><li>Length</li></ul>	1 2 3 4 5 1 2 3 4 5	Comments:	

**Key**: 1=Bottom 10%, 2= 10<sup>th</sup>-25<sup>th</sup> percentile, 3= middle 50%, 4= 75<sup>th</sup>-90<sup>th</sup> percentile, 5=Top 10%

# CASE 3 – OKLAHOMA GAS COMPANY (OGC)



# Case 3: Oklahoma Gas Company (OGC)

### **Prompt**

(~Present day) The Oklahoma Gas Company (OGC) is a medium-sized private company that has a rich history of drilling and producing natural gas wells in Oklahoma. They possess a diverse, and they believe valuable, set of land assets where more wells could be drilled. The company is well capitalized, but profits have been falling the last few years and are projected to be negative next year. One of the key drivers in the drop in profitability is the price of natural gas, which has dropped substantially, thanks in part to companies like OGC, that have perfected unconventional drilling techniques and have subsequently oversupplied the North American natural gas market. Natural gas prices are currently at a five year low.

A larger competitor has approached management about acquiring OCG for \$250 M. Management would like your help in assessing the offer as well as identifying alternate strategies.

### **Behavioral Questions**

- If you could only do one of the experiences on your resume over, which would it be and why?
- If you could change one experience on your resume, which would it be and why?



### **Interviewer Guidance**

The interviewee will likely dwell on the acquisition offer. Guide them away from this, as it will only serve as the baseline for option selection. The objective of the case is for the interviewee to evaluate viable options before recommending a course of action. Ideally the candidate creates a basic profitability framework, and focuses on what OPTIONS the company has.

- Present Valuation of OCG is not readily available. Tell the interviewee that more data on the topic will become available later
- · Costs have remained stable
- While Natural Gas demand fluctuates seasonally, the annual demand has been stable over the past few years
- Land Assets = OGC owns 100% of the mineral rights of their land
- While regulations have changed, and may continue to change, they have yet to have a large impact on OGC's business
- OGC has not drilled oil wells in the past, but would likely have the competency to do so in the future
- Natural gas and oil prices are volatile and out of the control of OGC. Future prices are difficult to predict.
- Only operated in Oklahoma



### **Interview Guidance**

Note: This case is meant to be adaptable. The interviewer can make it more or less difficult at anytime based on their discretion.

#### **Potential Options for OGC:**

- 1. Explore oil wells (Obvious if candidate is aware of booming shale oil revolution in the US or current price of oil)
- 2. Continue drilling gas wells in the areas that they own
- 3. Sell some land assets
- 4. Acquire land and drill gas wells elsewhere
- 5. Acquire smaller competitor
- 6. Go Public
- 7. Sell for \$250 M
- 8. Negotiate the \$250 M offer upwards

Guide the candidate towards (1) drilling oil wells, (2) continue drilling gas wells, (3) considering the acquisition offer While continuing to do what is NOT working may seem counterintuitive, but OGC is very good at drilling gas wells. Key takeaway from

this case is that all the assumptions and projections made my OCG and the candidate are based on highly volatile commodity prices.

### **Interview Guidance**

OCG has found an oilfield in South Texas that it can acquire and drill on immediately.

The candidate should begin asking for **DATA** to analyze the three options on a present value basis:

NPV = 
$$\sum_{t=1}^{T} \frac{C_t}{(1+r)^t} - C_o$$

- **Natural Gas**
- The present value of all OCG's currently producing gas wells is \$50 M
- The Price of gas is \$3.00/mcf (thousand cubic feet)
- Cost of capital = 10%
- Cost of acquiring and drilling the additional natural gas wells is \$50 M Each well will come online in the Year 0 and stop producing after Year 2
- Year 0 Gas production projected = 40,000 mmcf (million cubic feet unit change)
- Year 1 Gas production projected = 30,000 mmcf
- Year 2 Gas production projected = ~17,000 mmcf
- At a price of \$3.00 this gives you a total PV of \$194 M
- PVs:
  - Year 0- \$70 M (include the \$50 M drilling cost)
  - Year 1- \$81.8 M
  - Year 2-\$42.1 M → NOTE: A \$.20 increase in the price of Natural Gas would mean the wells' PV is greater than\$210 M



### **Interview Guidance**

Note: This case is meant to be adaptable. The interviewer can make it more or less difficult at anytime based on their discretion.

Oil – if the candidate got the the PV for Gas correct, begin giving them the data below. Go straight to last bullet if they struggled.

- Current Price of oil is \$120 (NOTE: historically high \$)
- The cost of acquiring and drilling all necessary wells in the oilfield is \$100 M
- Cost of capital = 10%
- Production horizon for each well is 10 YEARS at this point candidate should realize that the math is too much, and even if they do the math, the value is far too dependent on the price of oil
- State that projected PV of the oilfield is \$210 M

Candidate now has three values - \$210 M for drilling oil wells (+\$50 M in legacy gas well), \$250 M to sell the company, \$194 M to continue drilling gas wells (+\$50 M in legacy gas well). At this point they will likely give a firm answer that acquiring the new oilfield and drilling is the correct path forward.



### **Interview Guidance**

#### The interviewer should then push back:

- Is OGC sure they can successfully drill oil wells, out of state, with no experience?
- Where did the \$210 M value come from projecting oil recovery is VERY DIFFICULT?
- Drilling costs are highly variable, likely to run over?
- Finally, how sure are they about FORECASTING PRICES?

The correct answer to the case is that there is not enough information given to provide a firm answer at this point. Thorough price forecasting (for both oil & natural gas) needs to be done. A counter offer should be made. OGC's competency to drill and produce oil wells should be reviewed. A second opinion should be taken on the PV projection of the oilfield. Assumptions play a huge role in the valuations.

Note: candidate may push back regarding the chances that gas prices rise because of the oversupply situation. As we see in reality today, large oil & gas companies will stop drilling for gas when prices drop, and gas wells inherently produce for shorter lifespans, thus a significant change in the supply of natural gas is possible.



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

## **Case Interview feedback form**

CONSULTING CLUB	Case	Case type	Interviewer
Execution			Case start time:
•Structure  ➤ Logical approa  ➤ MECE  ➤ Appropriate d		1 2 3 4 5 Comments:	Framework development min Framework explanation min Case discussion min
•Quantitative Ability		1 2 3 4 5	Case end time:
➤Speed ➤Accuracy ➤Comfort, reac	tion to mistakes	Comments:	Overall Rating: 1 2 3 4 5
•Business intuition  >Practical  >Insightful  >Breadth & dep  >Creativity	oth across multiple function	1 2 3 4 5 Comments:	Strengths
Communication	1		
•Professionalism ➤Poise ➤Confident-Per ➤Articulate-con		1 2 3 4 5 Comments:	Weaknesses
<ul> <li>➤ Client ready</li> <li>Written</li> <li>➤ Clarity of writing and page layout</li> <li>➤ Ability to refer back</li> <li>➤ Comfort, reaction to mistakes</li> </ul>		1 2 3 4 5 Comments:	
Behavioral (opt	ional)		
•Quality of star stories •Length	1 2 3 4 5 1 2 3 4 5	Comments:	

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# **CASE 4 – HEAVY THINGS FITNESS**



## **Prompt**

Your client is Heavy Things Fitness, a small fitness center chain with 15 locations in a minor metropolitan area in the US, established during the fitness boom in the late 70s. After decades of continual growth, Heavy Things has seen membership decline by alarming rates. Over the past 5 years, it has seen total membership numbers decrease an average of 6% annually. The client has asked us to determine what is causing this trend and how they can reverse this trend to begin growing again. Based on what you know about this industry, what do you believe is causing this membership attrition?

## **Behavioral Questions**

- Tell us a time when you had a conflict with your manager or peers. How did you resolve it?
- · When was the last time you were creative in solving a problem?



### **Interviewer Guidance**

The focus of this case is on market segmentation and determining/targeting the optimal segment. The candidate should demonstrate an understanding that profit is the ultimate goal. Various strategies will have different implementation costs and potential revenues, and the candidate should return to these numbers at every step.

If they ask for more information on the city, tell them it has a population of about 1-1.5M, similar to Providence, RI; Milwaukee, WI; or Jacksonville, FL. No other information is relevant (such as location within the US), as this is not the focal point of the case.

#### Relevant additional information:

- · Gym memberships in this city have been growing 3% each year, both in this city and in all regions of the country
- · Heavy Things Fitness gyms offer cardio rooms, free weights, and weight machines
- Membership prices and payment plans are in line with their closest competitors
- Heavy Things Fitness targets serious fitness enthusiasts, believing that these are the most loyal customers

When interviewee asks for industry or client customer demographic information, provide Exhibit 1 and 2, respectively.

#### **Potential Causes:**

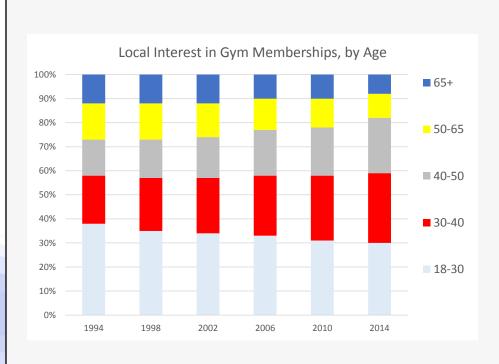
- Changing fitness trends, such as towards class-based fitness or high intensity training
- Negative attributes of Heavy Things, such as poor customer service or deteriorating facilities
- Competitors offer better services, such as personal trainers or basketball courts
- · Shifts in city or industry demographics, away from Heavy Things' target demographic

#### **Unlikely Causes:**

- Decreasing city population (as the rest of the city's gyms are seeing increasing memberships)
- Competitors offer lower cost (already established that Heavy Things' costs are comparable to competitors



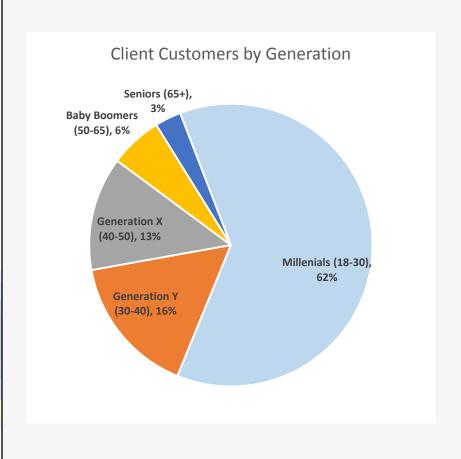
# **Exhibit 1: Local Interest in Gym Memberships, Demographic Segmentation**

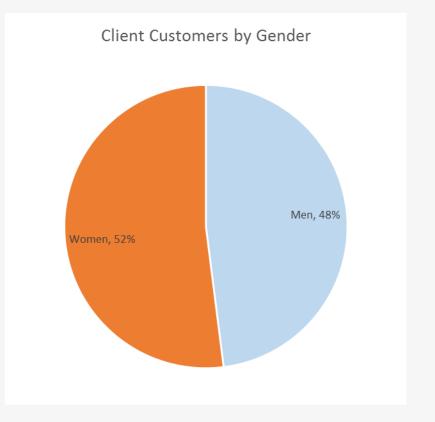






# **Exhibit 2: Client Customers, Demographic Segmentation**







## **Prompt 2**

Given the information in Exhibits 1 and 2, what do you believe is the source of Heavy Thing's declining membership?

### Guidance

**Clarifying Note:** The legend order corresponds with the Generation graphic in Exhibit 1. In other words, the top portion of the chart represents Seniors, and the bottom represents Millennials.

#### **Extractable Facts:**

- Local gym memberships are trending towards Gen X and Y and away from Millenials, Baby Boomers and Seniors
- · Genders seem to have shifted towards men, then back to women
- Heavy Things' membership is heavily concentrated in the Millennial generation
- · Heavy Things' membership is evenly split between men and women

### **Key Takeaways:**

- Heavy Things' membership gender profile parallels local industry gender profile
- Heavy Things' membership generation profile is focused on the declining Millennial population rather than the growing Gen X and Y populations

#### **Potential Conclusions:**

- Target Gen X and Y customers
- Become more of a niche gym for declining millennial customer segment



## **Prompt 3**

After reviewing this data, Heavy Things leadership agrees that they should target Gen X and Y customers. What are some possible ways that Heavy Things Fitness can target these growing demographics? What would be the risks of each of these solutions?

### Guidance

#### **Good Potential Solutions:**

- Marketing campaign targeting consumers aged 30-50
  - Spokesperson in that age range
  - Ads run in areas of interest for these consumers
  - o Explanation that this gym is for these consumers (a la Planet Fitness ads)
- Offer new services more to the liking of middle aged customers
- · Make prices more appealing to middle aged customers
  - o If price is believed to be a primary concern, lower prices
  - o If not, raising prices would help offer more services and prevent younger customers with less disposable income from joining
- Make the gym an exclusive club where only those members can join

Top level candidates will address the inherent risk of cannibalization when switching from one target demographic to another, and include solutions that will minimize such cannibalization. If the candidate does not mention cannibalization, lead them to it. Some such solutions would be:

- Convert some existing locations to more Gen X and Gen Y-friendly establishments, while keeping the rest the same, enabling current customers to go to another Heavy Things if theirs gets shut down
- Develop a brand extension in brand new clubs that target these customers
- Divide the physical space of each gym into two distinct gyms (like a combination Pizza Hut and Taco Bell)



## **Prompt 4**

We presented your findings to the client at a recent status meeting, and Heavy Things leadership liked the idea of a brand extension of 5 facilities targeted at Gen X and Y customers, called "Fast Class Fitness", which will focus on the class-based fitness programs that our client's research has shown appeals to Gen X and Y customers. They want us to determine whether it is more profitable to convert existing Heavy Things properties into Fast Class properties, or to expand into new properties in which to open Fast Class centers.

## **Guidance**

Pertinent Information (let candidate brainstorm what information is necessary to calculate revenues and costs before providing):

#### Revenues

- Membership Dues at Heavy Things Facilities = \$50 per month
- Membership Dues at Fast Class Facilities = \$75 per month
- Average Memberships at Heavy Things Facilities = 300
- Average Memberships at Fast Class Facilities = 400

#### Costs

- Rent of All Facilities (Including Cost of Fitness Equipment), Heavy Things and Fast Class = \$10K per month
- Labor at Heavy Things Facilities = 2 Employees at \$36K per year each
- Labor at Fast Class Facilities = 4 Employees at \$48K per year each
- Retention of Members from Converted Heavy Things Gyms= 33% of Each Gym's Membership
  - o This is a small city, so when a club is converted, members can simply move to a neighboring location
  - o In other words, when a gym is closed, 1/3 of the members will join a different Heavy Things gym, but 2/3 of the members will leave Heavy Things for a competitor
- Assume Heavy Things Can Maintain These Membership Levels



# **Analysis**

### **Sample Calculations:**

	Convert		Expand	
Costs (Monthly, in \$K)				
Heavy Things Rent	10 locations, \$10K each	\$100	15 locations @ \$10K each	\$150
Heavy Things Labor	10 locations, 2 employees per location, \$3K per employee	\$60	15 locations, 2 employees per location, \$3K per employee	\$90
Fast Class Rent	5 locations, \$10K each	\$50	5 locations, \$10K each	\$50
Fast Class Labor	5 locations, 4 employees per location, \$4K per employee	\$80	5 locations, 4 employees per location, \$4K per employee	\$80
Revenues (Monthly, in \$K)				
Heavy Things (current members)	10 locations, 300 members per location, \$50 per member	\$150	15 locations, 300 members per location, \$50 per member	\$225
Heavy Things (retained members)	5 locations, 33% of 300 members per location, \$50 per member	\$25	N/A	\$0
Fast Class	5 locations, 400 members per location, \$75 per member	\$150	5 locations, 400 members per location, \$75 per member	\$150
Total Corporate Income (Monthly, in \$K)		\$35		\$5

However, the fastest way to calculate this is to realize that the revenues and costs from Fast Classes are constant, so the only necessary calculation is subtracting the additional cost to maintain the 5 heavy things locations (\$80K) from the revenue gained by keeping all 15 Heavy Things locations (\$50K).

Either way, the correct conclusion is that it is more profitable to convert the 5 locations rather than expand.



# **Prompt 5**

Olaf Dungren, the CEO of Heavy Things Fitness, is about to walk into this office, and he'd like to hear our recommendation. How would you summarize our findings?

### Guidance

### Answers may vary, but should include:

- · Recommendation to convert five Heavy Things fitness centers to Fast Classes fitness centers
- Justification based on the ability to attract new members and increase profitability at a more efficient rate than by expanding to new properties
- Potential risks to this suggestion that include five not being the optimal number to convert, increasing properties serving as advertising that would generate additional memberships, the 33% estimate of retention being inaccurate
- Next steps, such as hiring class teachers for the new gyms, developing an advertising campaign to build the Fast Class brand, and hiring contractors to convert the Heavy Things gyms to Fast Class centers



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

## **Case Interview feedback form**

CONSULTING CLUB	Case	<del></del>	Case type	Interviewer
Execution				Case start time:
•Structure  ➤Logical approach  ➤MECE  ➤Appropriate drive	e to solution	1 2 3 4 5 Comments:		Framework development min Framework explanation min Case discussion min
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<ul> <li>Business intuition         <ul> <li>Practical</li> <li>Insightful</li> <li>Breadth &amp; depth</li> <li>Creativity</li> </ul> </li> </ul>	across multiple function	1 2 3 4 5 Comments:		Strengths
Communication				
<ul> <li>Professionalism</li> <li>Poise</li> <li>Confident-Persuasive</li> <li>Articulate-concise</li> <li>Client ready</li> </ul>		1 2 3 4 5 Comments:		
				Weaknesses
•Written  ➤Clarity of writing ➤Ability to refer ba ➤Comfort, reaction	nck	1 2 3 4 5 Comments:		
Behavioral (optio	nal)			
•Quality of star stories •Length	1 2 3 4 5 1 2 3 4 5	Comments:		

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# **CASE 5 – ORANGE YOGA STUDIO**



### **Prompt**

Your client is Yoga Jones, the owner of Orange Yoga Studio. Orange Yoga is a very popular, up-scale yoga studio in New York City known for high quality instruction and a relaxed vibe. Yoga Jones has owned and operated Orange Yoga for the past 5 years. For its first four years, Orange Yoga was very financially successful; however in the past year, Yoga Jones noticed that her profits are declining. She doesn't keep very good financial records and has made a few big investments lately, so is having a hard time figuring out a) whether she is actually losing profit and b) how to fix her financial problems

How do you help Yoga Jones?

### **Behavioral Questions**

- Please give an example of a time you led in an ambiguous or uncertain context
- What are you most proud of?

### **Interviewer Guidance**

Note: This case requires extensive guidance by the interviewer. Make sure to review carefully before giving.

### Provide the following background information upon request, or to help provide clarity after the initial framework

- Orange Yoga offers 5 classes daily on weekdays. On weekends, they offer 4 classes. All of of their classes are "Vinyasa Flow" style
- Orange Yoga clients pay on a per-class basis. There are currently no "package" deals or membership rates.
- The competitive landscape for yoga studios in NYC has remained unchanged over the past three years.
- Yoga Jones' recent investments were major maintenance upgrades for her studio (installing hardwood floors, fresh paint, and new shower facilities). These investments were financed primarily through loans.



## **Analysis**

The candidate should quickly get to a  $\pi$  = **Revenue-Cost framework.** Framework considerations may include:

- Revenue: Price per class, number of clients per class, potential other sources of revenue (i.e. yoga mats, water bottles, etc.)
- **Cost**: Rent, insurance, instructors, utilities, loan payments
- Other Considerations (a strong candidate will think of these): potential decline in popularity of yoga, marketing promotions, etc.

### Information on Cost (provide when asked)

- No variable costs on a per-customer basis all costs are fixed.
- 5 main fixed costs: Rent/utilities building = \$3500 a month; Liability Insurance = \$1800 a year; administration costs (including owner salary, supplies, computer system, marketing supplies) = \$800 a week; Yoga instructor salaries: \$50 a class; Loan Payments (to pay off major paint/floor/plumbing renovations) = \$500 a month

#### Information on Revenue (provide when asked)

- Class fees are Orange Yoga's only source of revenue
- All classes cost \$12 and there are average of 8 students per class on weekdays and 6 students per class on weekends
- Assume every month has 22 weekdays and 8 weekend days



## **Analysis Continued**

#### **Answers:**

Revenue: (\$12 per class \* 5 classes per day \*8 students per class \* 22 weekdays in a month) = \$10,560 a month on weekdays (\$12 per class \*4 classes per day \*6 students per class \* 8 weekend days in a month) = \$2304 a month on weekends Total Revenue per month = \$12,864 (can be rounded to \$12.8K)

Costs: Monthly costs = \$3500 in rent per month+150 in insurance per month (\$1800/12) + \$3200 in admin costs per month (\$1000\*4) + \$5500 in yoga teacher salaries on weekdays (\$50 a class \* 5 classes a day \*22 weekdays a month) + \$1600 in yoga teacher salaries on weekends (\$50 a class\*4 classes a day\*8 weekend days a month) + \$500 a month in loan payments.

Total Costs per month = \$14,450 (can be rounded to \$14.5K)

After being provided information on cost and revenue, the candidate should realize that Yoga Jones currently is losing approximately \$1.7K (\$1650) a month in profit.



### **Prompt #2: Brainstorm**

(Note: A strong candidate will naturally begin to go into the "So What" after analyzing the profit scenario, and begin to hypothesize on the potential ways to improve revenue or lower costs. Steer the conversation by using the following prompt)

Prompt: "After analyzing her books, Yoga Jones realizes that her decline in profit began after a \$2000 per month rent increase last year and a decision to raise all teacher salaries by \$10 per class. She does not want to move and believes strongly in paying her teachers a high wage for their work.

What else can she do?"

## **Analysis**

#### **Potential solutions**

#### Revenue:

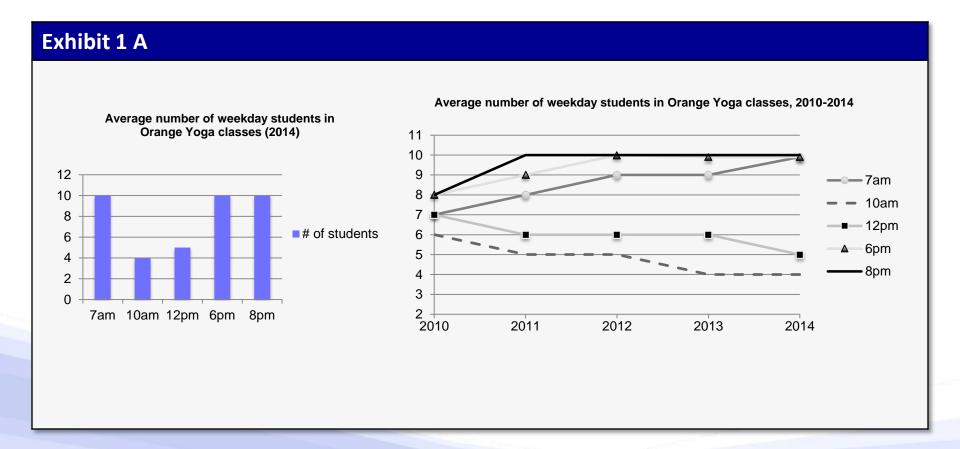
- Charge more for classes
- Variable pricing: charge more for certain clients or for certain classes
- Diversify products: Offer higher-priced classes, like pilates; start offering private classes or teacher-training classes; or start selling related products, like yoga mats or water bottles
- Offer more classes
- · Get more clients

#### Cost:

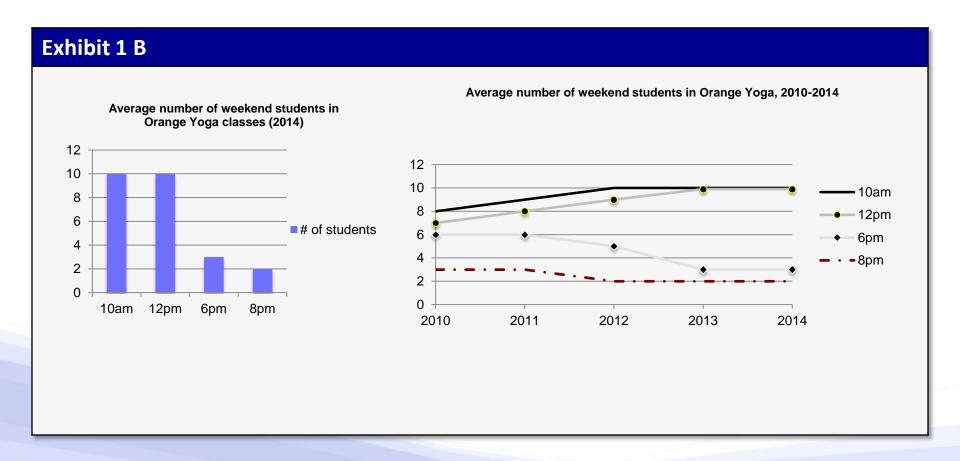
- Eliminate unprofitable classes, cut down on her own salary, etc..
- (Not a great idea: refinancing loans—her loan payments are relatively small)

After the candidate has run out of ideas, show them Exhibit #1 and ask: "Yoga Jones feels that she may not be meeting her students demands with class times and this could be creating problems. Here is some information that may help."











## **Analysis**

Chart insights: The presentation of information on the four graphs is deliberately overwhelming. All candidates should realize that the top two graphs both pertain to weekday trends and the bottom two graphs pertain to weekend trends; strong candidates will structure their analysis separately for weekends and weekdays. No detailed calculations are necessary for this graph - just insights

### **Key Weekday Insights:**

- Midday classes have a lower number of students than morning and evening classes
- This trend has become more pronounced over last 5 years
- Strong candidates will note that the 10am classes are not generating enough revenue to even cover teacher salary

### **Key Weekend Insights**

- Has opposite profile of weekday classes: midday classes are much more popular than evening classes
- This trend has remained somewhat steady over past 5 years, though has become slightly more pronounced
- Strong candidates will note that evening classes are not generating enough revenue to even cover teacher salary

A strong candidate will also notice that the max number of average participants peaks at 10 for both weekday and weekend classes

Strong candidates will also begin to hypothesize potential solutions, including restructuring class times to better meet the needs of clients, eliminating unprofitable classes, and perhaps adding additional classes/instructors in the evening

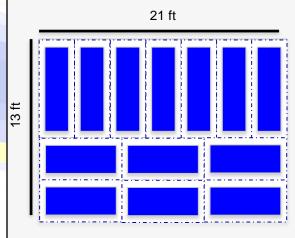
# **Prompt #3: Increase Class Size**

(Note: A strong candidate will notice that the max number of average participants peaks at 10 for both weekday and weekend classes. If they do not realize this, steer them towards this realization).

Prompt: "Good point. Yoga Jones currently allows a max of 10 students per class in order to keep the classes small. However, upon looking at her registration records, it appears that she is almost always turning away students for her weekday evening classes and weekend morning classes.

She would like to see if she can fit more students in her studio. Her studio is 13ft long and 21 ft wide. The average yoga mat is 6 ft long and 2 ft wide. Yoga Jones feels that the minimum distance between 2 mats should be one foot, and the minimum distance between a mat and a wall should be 6 inches. How many mats can she fit in her studio?"

# **Analysis**



### There are two acceptable solutions:

- The max she can fit is 13, thought this very tricky to figure out. See chart at left. The only real way that candidates can solve this is by drawing it out (at left). Some candidates may realize that each mat will need a total of 21 square feet (6 inches on each side) and the studio is 273 square feet. 273/21=13 (however very strong candidates will point out that this mathematical equation doesn't always hold true spatially).
- If a candidate says 12, that's fine as well, as long as they acknowledge that there will be wasted space in this configuration.

(The instructor does not need a mat)



## **Prompt #4: Implementation**

Prompt: Assume all current classes that currently have 10 students always have a lengthy waiting list. If Yoga Jones increases her class size, will this be enough to save her studio?

### **Analysis**

The studio is currently losing \$1650 a month. Therefore the new students must bring in at least \$1650 in new revenue a month.

#### Cost

· Costs will remain the same

### New Revenue if they calculated 12 as the max class size

- New students: 6 new students on weekdays, 4 new students on weekends.
- 6\*22\*\$12=\$1584 extra weekday revenue
- 4\*8\*\$12=\$384 extra weekend revenue
- \$1968 total new revenue. Yes, this is now profitab (although barely).

#### New Revenue if the calculated 13 as the max class size:

- New students: 9 new students on weekdays, 6 new students on weekends.
- 9\*22\*\$12=\$2376 extra weekday revenue
- 6\*8\*\$12= \$576 extra weekend revenue
- \$2952 total new revenue. Yes, this is now profitable.

Strong candidate should also suggest cutting classes that don't cover variable costs to manage costs and adding additional evening classes to increase revenue.



### Recommendation

What are your final recommendations to Yoga Jones?

## **Analysis**

All candidates should summarize their analysis and recommend increasing the max class size and eliminating classes.

Strong candidates will briefly summarize their analysis and results, but focus primarily on risks and next steps.

Risks include: losing long-term clients who valued flexible class times, upsetting clients who enjoyed small class sizes, and upsetting valued teachers whose classes were eliminated.

Next step include: Mitigating against risks mentioned above - but more importantly, exploring some of the other options that were outside of the scope of this case, including raising prices, diversifying products, etc...



### **Performance Evaluation**

#### What does the case test?

This case has both quantitative and qualitative elements. None of the math in this case is particularly tricky, but does require a lot of quick calculations, as well as tying multiple pieces together to get a holistic recommendation. It also tests creativity by encouraging candidates' brainstorming and "thinking outside the box" ability.

### What should good interviewee be doing/asking/providing throughout the case?

There are many different potential paths that this case could take—a good candidate should test a variety of hypotheses with the interviewer throughout the case.

### Provide examples of what exceptional interviewees are doing throughout this case.

This case may be tricky for candidate who have no familiarity with yoga; however strong candidates should put themselves in the shoes of the small business owner and try to see the problem for her perspective.

Exceptional candidates will always be thinking one step ahead, and provide next steps and hypotheses throughout the case.



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

## **Case Interview feedback form**

CONSULTING CLUB	Case	Case	type	Interviewer
Execution				Case start time:
•Structure  ➤Logical approach  ➤MECE  ➤Appropriate drive	e to solution	1 2 3 4 5 Comments:		Framework development min Framework explanation min Case discussion min
•Quantitative Ability		1 2 3 4 5	Case end time:	
➤ Speed ➤ Accuracy ➤ Comfort, reaction	n to mistakes	Comments:	Comments:	Overall Rating: 1 2 3 4 5
<ul> <li>Business intuition</li> <li>▶ Practical</li> <li>▶ Insightful</li> <li>▶ Breadth &amp; depth</li> <li>▶ Creativity</li> </ul>	across multiple functio	1 2 3 4 5 Comments:		Strengths
Communication				
<ul> <li>Professionalism</li> <li>Poise</li> <li>Confident-Persuasive</li> <li>Articulate-concise</li> <li>Client ready</li> </ul>		1 2 3 4 5 Comments:		Weaknesses
				vveakilesses
<ul> <li>•Written</li> <li>➤Clarity of writing and page layout</li> <li>➤Ability to refer back</li> <li>➤Comfort, reaction to mistakes</li> </ul>		1 2 3 4 5 Comments:		
Behavioral (optio	nal)			
•Quality of star stories •Length	1 2 3 4 5 1 2 3 4 5	Comments:		

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# **CASE 6 – SURFBBOARD WAX IN HAWAII**



# **Prompt**

Your client is a surfboard manufacturer based in Hawaii. The company has high brand recognition and a strong distribution network in the state. The CEO wants to expand the company's product line and revenues and is thinking of entering the market for surfboard wax. It has hired us to help them determine how big the market for surfboard wax is in Hawaii.



### **Interviewer Guidance**

#### **Before the Framework:**

The candidate should recognize that this is a market sizing case and confirm this with the interviewer. If the candidate asks what surfboard wax is, you can tell them that the wax comes in a bar form (similar to soap) and is used to coat the top of the surfboard in order to provide surfers with a surface that their feet can grip. The candidate may ask how much the wax costs and is used. You can explain that we will discuss this later in the case. A strong candidate will also ask if the client is looking for an annual dollar amount and you should respond yes. Typically, all market sizing cases are in dollars but it's good to clarify this upfront.

#### Framework:

A strong candidate's framework will have the units needed to calculate the market size at the top of the paper. In this case, the units are the average number of bars of wax sold annually \* the average price of a bar of wax. The candidate should demonstrate an understanding that he/she needs to know the number of surfboards in Hawaii, usage frequency, amount used and price in order to crack the case. A good framework will outline an approach for how he/she will estimate the numbers for all of these units and present this to the interviewer. For average number of bars of wax sold in a given year, the candidate would need to know the number of surfboards in Hawaii, how frequently wax is applied to each surfboard and how much wax is used with each application. For price, the candidate should show some approach for how the price might be estimated. Some suggested approaches are discussed later in this case.

A common mistake is that the candidate will immediately attempt to estimate the population of Hawaii without explaining how this will determine the market size. If the candidate does this, interrupt them and ask why they are estimating the population of Hawaii. If they are unable to link the population of Hawaii with the number of surfboards and therefore units of wax sold in Hawaii, guide them until they are able to correctly identify the units that are needed to solve the case.



### **Interviewer Guidance**

#### After the Framework:

### **Calculating the Number of Surfboards**

A strong candidate will recognize that Hawaii has a large tourism industry and would therefore have to estimate the number of resident surfers and number of tourists who surf and the average number of boards per surfer for each population.

#### **Resident Surfers**

One approach is to estimate the population of Hawaii by starting with the estimated US population of 300 million divided among 50 states. This gives each state an average population of 6 million. Hawaii is a smaller state – bigger than Wyoming, which has a population of 500k but smaller than Maryland which has a population of 6m. (The actual population of Hawaii is 1.4m). Assuming that the candidate is not wildly off, you can provide this number to the candidate after he/she estimates the population and allow for rounding of 1m or 1.5m to make the math easier.

The candidate can then calculate the number of surfers by segmenting the population by age (0-20, 21-40, 41-60, 61+ is easiest) and estimating the percentage who surf. An estimate of 25%-50% is acceptable. Another approach is to draw from personal experience. A candidate from Minnesota might say 25% of Minnesotans play hockey, the state's most popular sport. Since surfing is the most popular sport in Hawaii, I'll assume that 25% of the population surfs. After the candidate calculates the number of resident surfers, you can tell the candidate that the average number of surfboards per surfer is 2.

The candidate should calculate the number of surfboards owned by residents is 25%\*1m\*2=500,000 on the low end and 50%\*1.5m\*2=1,500,000 on the high end.



### **Interviewer Guidance**

#### **Tourists**

Companies that rent surfboards to tourists comprise the other major segment of the market and there are many ways to estimate the number of surfboards in this segment. Ask the candidate to brainstorm what the number might be and how they would calculate the number of surfboards needed to serve tourists. The key here is to check whether the candidate understands that tourists are sharing/renting boards so the number of surfboards in this segment be much smaller than the number of tourists who visit might imply. It also is meant to showcase the candidate's ability to structure an approach to solve a very complex problem. One approach is to start by estimating the number of tourists who visit Hawaii. Since Hawaii's primary industry is tourism, it is safe to assume that the number is going to be a multiple of the state's population since the vast majority of the state's jobs depend on it. Think about how many tourists would be needed in a hotel to cover the cost of overhead and pay for the salary of one hotel worker.

At the end of the brainstorm, the interviewer should tell the candidate that there are 7m tourists who visit Hawaii a year staying an average of 10 days. Twenty-five percent of tourists surf an average of two days. It is assumed that all of them rent surfboards. The candidate should calculate the number of surfboards needed for rental: 7m\*25%\*2=3.5m/365 days = 9,589 boards needed per day (Rounding the year to 350 days or the solution to 10k is fine). Therefore, the total number of surfboards in Hawaii ranges from 510k or 1.51m.

### Usage

If there is time, ask the candidate to brainstorm the amount of how wax used per waxing and how frequently the product is used. One approach is for the candidate to relate it to something they are more familiar with such as car wax. A candidate might say that they wax their car 4 times a year and use 25% of the jar per use. In this case, the interviewer can share that a surfboard is waxed every three months and uses 50% of the bar with each use. Therefore, there are 510k\*4\*50%=1.02m bars of wax sold annually on the low end and 1.51m\*4\*50%=3.02m on the high end.



### **Interviewer Guidance**

### **Pricing:**

If there is time, ask the candidate how they might determine the average price. There are two approaches to this. The candidate can either estimate costs on the value chain or identify comparable products (like car wax) and what their costs are to provide an estimate. Since a value chain approach is more difficult in this case, the candidate should use a comparable product to estimate what the average price of wax is. The interviewer can then share that the average price is \$2 per bar.

#### Market size:

The candidate can then calculate the total market size: 1.02\*\$2=\$2.04 M or 3.02\*\$2=\$6.04 M

### **Ending the Case:**

Market sizing questions don't typically need recommendation but the candidate could end the interview with something like this: The total market size we calculated is \$2.04m. We arrived at this estimate by calculating the total number of surfboards in Hawaii among residents and at rental companies and multiplying this by how frequently wax is purchased - which in this case is every three months, and the average price of wax at \$2. If our client is looking to expand its product line and revenue, it may want to consider selling higher revenue items like clothing or sell its surfboards in the mainland.



## Case 6: Surfboard Wax in Hawaii

#### **Performance Evaluation**

#### **Exceptional Candidate:**

Candidate asks clarifying questions at the beginning of the prompt and recognizes that this is a market sizing case. Framework is appropriately customized and has correct units listed and a clear plan for how the candidate will estimate those units. Candidate drives case, executes mathematical computations flawlessly and provides a market size within the accepted range.

#### **Strong Candidate**

Candidate asks clarifying questions at the beginning of the prompt and recognizes that this is a market sizing case. Framework is appropriately customized and has correct units listed and a clear plan for how the candidate will estimate those units. Candidate may need some guidance on moving forward in the case and may make small mistakes on mathematical computations. The candidate provides a market size within the accepted range.

#### **Borderline Candidate**

Candidate recognizes that this is a market sizing case. Framework is appropriately customized and has correct units listed but may lack a clearly defined plan for how the candidate will estimate those units. Candidate may need guidance on moving forward in the case and may make some mistakes on mathematical computations. The candidate provides a market size within the accepted range.

#### **Weak Candidate**

Candidate recognizes that this is a market sizing case. Framework is not customized, does not have correct units listed and lacks a defined plan for how the candidate will estimate those units. Candidate may begin to estimate Hawaii's population without conveying how this will help them size the market. Candidate needs guidance on moving forward in the case and makes many mistakes on mathematical computations. The candidate does not provide a market size within the accepted range.



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

## **Case Interview feedback form**

CONSULTING CLUB	Case	Case type	Interviewer
Execution			Case start time:
•Structure  ➤ Logical approach  ➤ MECE  ➤ Appropriate driv		1 2 3 4 5 Comments:	Framework development min Framework explanation min Case discussion min
<ul><li>Quantitative Ability</li></ul>		1 2 3 4 5	Case end time:
➤Speed ➤Accuracy ➤Comfort, reactio	n to mistakes	Comments:	Overall Rating: 1 2 3 4 5
•Business intuition  >Practical >Insightful		1 2 3 4 5 Comments:	Strengths
•	across multiple function	ons	
Communication			
<ul><li>Professionalism</li><li>Poise</li><li>Confident-Persu</li></ul>	asive	1 2 3 4 5 Comments:	
➤ Articulate-concis ➤ Client ready			Weaknesses
•Written  >Clarity of writing >Ability to refer b >Comfort, reactio	ack	1 2 3 4 5 Comments:	
Behavioral (option	nal)		
•Quality of star stories •Length	1 2 3 4 5 1 2 3 4 5	Comments:	

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# **CASE 7 – PACIFIC NORTHWEST TELCO**



## **Prompt**

Your client is a large, regional telecommunications provider in the Pacific NW. Amidst increased competition, the client has brought you on to explore ways which it can increase customer relationship and revenue. What are your thoughts?

## **Behavioral Questions**

- What's your favorite hobby?
- Tell me about something interesting you've done that's not on your resume?

#### **Interviewer Guidance**

- The client's goal is to increase revenue and stabilize customer base. Costs should not be considered
- The client provides the following services: cable television, fixed telephone lines, internet, and mobile phones
- Profitability and revenue have remained constant, but the client is concerned about new market entrants (Verizon and AT&T, among others)
- Interviewee should first walk through an analysis of where money is made in this business
  - After creating a profitability tree, ask where they see opportunities to increase revenue



## Exhibit 1

## **Potential bundling options**

4X bundle		3)	( bunc	lle		2x bundle No E		No Bun	dle						
Feature	e P	rice / mo	nth	Componen	ts	Price / mo	nth	Compone	nts	Price /	month	Compone	ents	Price /	month
	Bundled	:		В	undle	d:			Bundle	d:		ι	Jnbundl	led:	
Internet				Internet				Internet		\$	150	Internet		\$	75
Phone line	ç		185	Phone line		\$	150	Cable		<del>ب</del>		Phone line		\$	25
Cable	Ý	,	100	Cable				Ui	nbundl	ed:		Cable		\$	100
Cell phone				Un	bundl	ed:		Phone line		\$	25	Cell phone		\$	75
				Cell phone		\$	75	Cell phone		\$	75				
!	54 month	S		42	mont	ths		3	36 mont	ths			30 mon	ths	

Average customer life



#### Interviewer Guidance, continued

- Push the interviewee to create 6-8 ideas for the client to increase revenue after presenting their profitability analysis. Continue to ask "what else?" Continue to push for a few minutes, even if they are stumped
- If the interviewee suggested bundling products say, "the client liked your suggestion of beginning to bundle products, and has conducted the following analysis. They would like you to tell them which of the following bundles would be most likely to achieve their goals." Show them Exhibit 1
- If the interview did not suggest bundling, say "The client believes that beginning to bundle products will increase revenue and customer retentions rates, and has conducted the following analysis. They would like you to tell them which of the following bundles would be most likely to achieve their goals." Show them Exhibit 1
- See appendix 1 for explanation of exhibit and required calculations

#### Recommendation

• The interviewee should recommend that the client begin offering / promoting the 4 bundle product: fulfills goal of increased revenue and customer retention



#### **Performance Evaluation**

- What does the case test?
  - o Basic profitability analysis of telecom industry
  - o Opportunities to increase revenue when costs are not a concern
  - o Basic math and exhibit comprehension
- What should good interviewee be doing/asking/providing throughout the case?
  - Should have a solid profitability analysis
  - o Should ask about products offered by client
  - o Should provide accurate answers to mental math on Exhibit 1
  - o Should be able to understand exhibit 1 without asking too many clarifying questions
- Provide examples of what exceptional interviewees are doing throughout this case.
  - Excellent interviewees will ask about product mix without prompting and will mention the fact that they know there has been a lot of consolidation (M&A) and product line expansion in this industry
  - o Should be able to come up with ideas on demand until the interviewer provides the bundling suggestion
    - Coming up with the bundling idea should not be expected
  - o Ideal candidate would ask about cannibalization / opportunity size (even though it's not relevant)



## **Exhibit 1**

## **Explanation**

	4X bundle 3X bundle		le		2x bundle		No Bundle							
Featu	re	Price /	month	Componen	ts	Price / mont	Compo	nents	Price /	month	Compon	ents	Price /	month
	Bundle	ed:		В	undled	d:		Bundle	ed:			Unbundl	ed:	
Internet				Internet			Internet		\$	150	Internet		\$	75
Phone line		\$	185	Phone line		\$ 15	Cable		Ş		Phone line		\$	25
Cable		Ą		Cable				Unbund	led:		Cable		\$	100
Cell phone				Un	bundle	ed:	Phone line	2	\$	25	Cell phone		\$	75
				Cell phone		\$ 7	Cell phone	<u> </u>	\$	75				
	54 mon	ths		42	2 montl	hs		36 mon	iths			30 mon	ths	

#### Average customer life

**Total value:** 

9990 9450 9000 8250

Interviewee should realized that lifetime value is the key here. Therefore monthly revenue should be multiplied by average customer life. Assume client buys all 4. Also, cannibalization and market size should not be considered



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

## **Case Interview feedback form**

CONSULTING CLUB	Case	Case type	Interviewer
Execution			Case start time:
•Structure  ➤ Logical approa  ➤ MECE  ➤ Appropriate d		1 2 3 4 5 Comments:	Framework development min Framework explanation min Case discussion min
•Quantitative Abilit		1 2 3 4 5	Case end time:
➤Speed ➤Accuracy ➤Comfort, reac	tion to mistakes	Comments:	Overall Rating: 1 2 3 4 5
•Business intuition  >Practical  >Insightful  >Breadth & dep  >Creativity	oth across multiple functio	1 2 3 4 5 Comments:	Strengths
Communication	1		
•Professionalism  >Poise  >Confident-Per  >Articulate-con		1 2 3 4 5 Comments:	Weaknesses
➤ Ability to refe	ing and page layout r back tion to mistakes	1 2 3 4 5 Comments:	
Behavioral (opt	ional)		
•Quality of star stories •Length	1 2 3 4 5 1 2 3 4 5	Comments:	

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# **CASE 8 – THE EVERYTHING RETAILER**







## **Prompt**

A mass retailer Everything Retailer is seeing stagnating growth in its year-over-year sales. You were brought in to identify the issue and propose ways to boost sales growth.

### **Behavioral Questions**

- Describe a time you were confronted with a failure or an obstacle at your job, and how you handled it.
- · Describe a time you exercise creativity or outside-the-box thinking.

#### **Interviewer Guidance**

This starts as a broad case on strategy – there are many different ways the interviewee may want to proceed. Quantitative analysis begins when the interviewee identifies the need for a new store format. Bonus points if, at the end, the interviewee mentions other risks and ways to mitigate them.

Additional information:

- Large US retailer (think Walmart) with an extensive network of big-box discount stores across the US.
- Sales growth slowed to 1-2%, while industry is growing at 3%. Client's target: double-digit "comp sales" growth.
- If asked about any increases in costs, say no. This is irrelevant.



## **Analysis**

- 1) Ask the interviewee to identify the source of Everything Retailer's problem by presenting data on sales from Everything Retailer
  - Show Exhibit 1

#### Recommendation

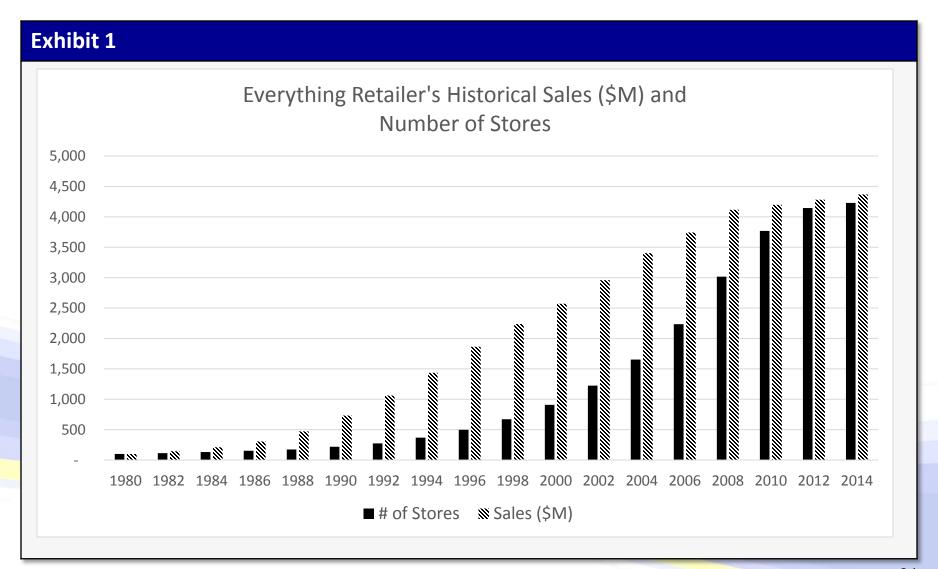
Some potential sources of flat growth that the interviewee may mention are:

- New competitors, especially e-commerce as consumers shift away from big-box stores to shopping online tell him/her that this is an interesting additional consideration, but steer him/her away from delving into this.
- Big-box stores' product assortment no longer as relevant to the customers shopping in those stores.
- Macroeconomic factors recession and decrease in consumers' disposable income.

Exhibit 1 shows that stores are now opening faster than the sales are increasing. Thus, the current store format has reached its maximum penetration, and sales are flat.

• Need to tap into a new customer segment.







## **Analysis**

- 2) In proposing ways to grow sales, interviewee may have (MECE):
  - International expand overseas (build stores or M&A or Joint Venture) steer interviewee away.
  - Domestic
    - Grow current big-box store sales steer interviewee away current stores have the optimal product mix and locations for big-box retailer.
    - o Reach new customer:
      - Product go up-market or down-market to target more affluent or less affluent shoppers. Good point, but steer interviewee away.
      - Format say that the client has piloted 3 formats and show Exhibit 2

#### Recommendation

Entering the grocery market with "Local Market" stores represent the biggest revenue opportunity.

Ask the interviewee what analysis he/she would need to do next. What analysis and factors should Everything Retailer consider in deciding whether to go ahead with opening Local Markets?



## Exhibit 2

Format	Description	Competitors	Market (FY2015)	Expected market share
Local Market	Grocery store + pharmacy	Kroger, Safeway, regional grocers	\$620B	30%
MiniBox	Same product assortment as big- box stores, but much smaller size	Dollar stores, convenience stores	\$106B	60%
Campus Companion	Big-box stores on college campuses, with some assortment tailored to students' shopping habits	Depends on location (urban vs. college town)	N/A	N/A



## **Analysis**

3) Use a simple NPV analysis to determine whether Everything Retailer should go ahead with opening Local Markets. Show Exhibit 3 and ask to calculate NPV. Give formula, if needed: NPV =  $\sum$  (FCFt)/(1+WACC)^t

Assume market growth rate of 0% annually

## **Exhibit 3 Guidance**

	Year 0	Year 1	Year 2	Year 3
Market share		10%	20%	30%
Revenue		\$62,000,000,000	\$124,000,000,000	\$186,000,000,000
Costs	\$6.25M *1,000 stores = \$6.25B	\$1,000,000,000	\$4,000,000,000	\$8,000,000,000
Discount rate (WACC)		10%	10%	10%
FCF	(\$6,250,000,000)	\$61,000,000,000	\$120,000,000,000	\$178,000,000,000
FCF <sub>t</sub> /(1+WACC) <sup>t</sup>	(\$6,250,000,000)	\$55,454,545,455	\$99,173,553,719	\$133,734,034,560
NPV	\$282,112,133,734			

<sup>\*</sup> Acceptable for Interviewee to round numbers

## Recommendation

Ask the interviewee whether the client should undertake this venture. The answer should be "Yes" since it is NPV-positive.



## Exhibit 3

## **NPV of building 1,000 Local Market stores**

	Year 0	Year 1	Year 2	Year 3
Market share		10%	20%	30%
Revenue		?	?	,
Costs	\$6.25M per store to build	\$1M per store to maintain	\$4M per store to maintain	\$8M per store to maintain
Discount rate (WACC)		10%	10%	10%
(1+WACC) <sup>t</sup>		1.10	1.21	1.33
FCF	?	?	?	,
FCF <sub>t</sub> /(1+WACC) <sup>t</sup>	· ?	· ?	Ş	?
NPV	?			



#### **Performance Evaluation**

- This case tests the interviewee's ability to consider the client (which is a huge and mature big-box retailer), and hone in on the fact that the current store format has reached its optimal penetration, and that a new format strategy is needed.
- Interviewee will also suggest a basic NPV analysis as a way to evaluate whether Everything Retailer should build Local Market stores.
- A good interviewee will have a MECE approach for exploring the levers to grow sales growth, and in his/her Recommendation and Next Steps slide, will also include risks such as:
  - Competitors other brick-and-mortar grocers can be mitigated if Everything Retailer leverages its economies of scale to maintain a price leadership position on the products in in its Local Markets, thus differentiating itself from other grocery chains.
  - o Competitors e-commerce, like Fresh Direct or AmazonFresh can be mitigated by a move into e-commerce.
  - o Cannibalization of grocery sales from existing big-box stores, which also carry groceries. Can be offset by offering a different grocery assortment in its big-box stores versus its Local Markets.
  - Overcoming a brand perception of quality that can be an obstacle to winning grocery customers' trust can be mitigated by spinning off Local Markets as a separate brand.



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

## **Case Interview feedback form**

CONSULTING CLUB	Case		Case type	Interviewer
Execution				Case start time::
•Structure  ➤Logical approach  ➤MECE  ➤Appropriate driv		1 2 3 4 5 Comments:		Framework development min Framework explanation min Case discussion min
•Quantitative Ability		1 2 3 4 5		Case end time:
➤Speed ➤Accuracy ➤Comfort, reactio	n to mistakes	Comments:		Overall Rating: 1 2 3 4 5
<ul> <li>Business intuition</li> <li>▶ Practical</li> <li>➤ Insightful</li> <li>➤ Breadth &amp; depth</li> <li>➤ Creativity</li> </ul>	across multiple function	1 2 3 4 5 Comments:		Strengths
Communication				
<ul><li>Professionalism</li><li>Poise</li><li>Confident-Persu</li></ul>	asive	1 2 3 4 5 Comments:		
➤ Articulate-concis ➤ Client ready	e			Weaknesses
•Written  ➤Clarity of writing ➤Ability to refer b ➤Comfort, reactio	ack	1 2 3 4 5 Comments:		
Behavioral (option	nal)			
•Quality of star stories •Length	1 2 3 4 5 1 2 3 4 5	Comments:		

**<u>Key</u>**: 1=Bottom 10%, 2= 10<sup>th</sup>-25<sup>th</sup> percentile, 3= middle 50%, 4= 75<sup>th</sup>-90<sup>th</sup> percentile, 5=Top 10%

# CASE 9 – GEE & GEE'S HOUSE OF BRANDS



### **Prompt**

A large CPG company "Gee & Gee" is looking to shed half of its brands in an effort to boost growth, simplify its operations, be more nimble, and cut costs. How do you decide which brands to eliminate in order for Gee & Gee to reach its growth targets? What are the additional considerations that the client should be aware of?

#### **Behavioral Questions**

- What achievement are you most proud of? Why?
- Describe a time you faced a conflict in a team, and the outcome.

#### **Interviewer Guidance**

The client is looking to exit any industry or brand that it does not have a market leadership position in. Make sure the interviewee grasps this motivation, and it informs his/her analysis of which brands to eliminate. Bonus points for the interviewee who appreciates why the client is willing to cull its brand portfolio – in order to become more nimble in responding to consumer trends.

#### **Additional information:**

- The client is a large, multinational CPG company (think P&G, Unilever), with ~\$6B in annual sales.
- Assume a 10-brand portfolio spanning beauty, personal care products, baby care, cleaning supplies, pet food, etc. Client wants to shed 5 brands.
- If asked about any increases in costs, say there has been nothing unusual, but that Gee & Gee will benefit from eliminating the costs associated with maintaining "unproductive" brands.



## **Analysis**

- 1) How would you choose which 5 brands to divest from the 10-brand portfolio? Show Chart 1.
  - Are some metrics more important or relevant to Gee & Gee than others?
  - Reiterate that <u>size</u> of the business may not matter a billion-dollar in sales brand can go on the chopping block if Gee & Gee does not have a market leadership position in that space.

#### Recommendation

The interviewee's criteria for which brands to eliminate should be similar to the criteria he/she will see in Chart 1.

#### The interviewee should point out the following observations from Chart 1:

- Top 5 brands are bringing in ~80% of sales revenue.
- Quickly identify the obvious market leaders for Gee & Gee (Warrior Two Detergent, Triangle Diapers) across all the metrics.
- Acknowledge the trade-offs of eliminating smaller brands that may be higher-margin, have strong brand equity, or give Gee & Gee access to a certain retail channel.
  - Interviewee does not need to calculate the annual profit of each brand; he/she can just point to the trade-off inherent in divesting smaller brands that may have with higher margins.
- Pet food is probably not strategic fit with CPG's overall focus on personal care products.

#### The client might look into eliminating (and give the rationale):

- 1. Downward-Facing Dog Food does not have a market leadership position.
- 2. Bird of Paradise Feed does not have a market leadership position.
- 3. Headstand Hair Color relatively small annual sales and low consumer brand perception, despite being high-margin.
- 4. Soapvasana relatively small annual sales and low margin, but strong consumer brand perception.
- 5. Sun Salutations Soak relatively small annual sales and low consumer brand perception.

#### The interviewee should name some risks associated with divesting each of these brands, such as:

• An exit from the Pet food market means there is less portfolio diversification for Gee & Gee – and Downward-Facing Dog Food is a large brand in terms of annual sales.



## Exhibit 1

#### Gee & Gee's Brand Portfolio

Brand	Category	Annual sales	Profit margin	Gee & Gee's market share	Consumer perception*
<b>Upward-Facing Wash</b>	Beauty	\$980M	18%	2nd	3
Soapvasana	Personal care	\$110M	12%	4th	4
Happy Baby Shampoo	Baby care	\$660M	22%	3rd	4
Cat Cow Cleaner	Cleaning supplies	\$415M	14%	2nd	3
Downward-Facing Dog Food	Pet food	\$915M	27%	4th	2
Sun Salutations Soak	Personal care	\$125M	29%	5th	3
Triangle Diapers	Baby care	\$1.05B	33%	2nd	4
Warrior Two Detergent	Cleaning supplies	\$1.150B	19%	1st	5
Bird of Paradise Feed	Pet food	\$230M	26%	3rd	3
<b>Headstand Hair Color</b>	Personal care	\$190M	36%	5th	2

<sup>\*</sup> A proxy for brand equity, measured on a scale of 1-5, where 1 is perceived as the as cheapest and lowest-tier brand in that market, 5 as the highest-tier brand.



## **Analysis**

- 2) After proposing to sell the 5 brands identified in Chart 1, if the interviewee does not dive into next steps, prompt him/her to discuss:
  - How to calculate the sale price?
  - How to evaluate potential buyers?

#### Recommendation

Calculate the sale price – interviewee can suggest a Discounted Cash Flow analysis or a Comparables analysis.

#### Potential buyers are:

- Other CPG firms
  - Pro: Less aggressive in price negotiations than PE firms
  - Con: May become more competitive vis-à-vis Gee & Gee; may end up leveraging Gee & Gee brands' retail channels or hiring Gee & Gee employees
- PE firms specializing in turning around "orphaned" CPG brands
  - Pro: Do not directly compete with Gee & Gee
  - Con: Traditionally, aggressive in extracting value from the deal



## **Analysis**

3) Suppose Gee & Gee divests the 5 brands you identified. Propose a strategy that will drive company growth post brand-rationalization.

#### Recommendation

This prompt is broad, and tests the interviewee's ability to tackle ambiguity in a structured way.

Interviewee may suggest levers for growth such as:

- Appeal to new customer segments in the same distribution channels:
  - Demographic trends brands that target Baby Boomer or Millennials, which are growing segments
  - Social-economic segmentation for example, grow Gee & Gee's market share in premium or all-natural products
- Look for new distribution channels:
  - Brick-and-mortar undertake co-branding campaigns with major big-box retailers; pharmacies; Costco/Sam's Club
  - E-commerce grow Gee & Gee's market share in Amazon.com, Soap.com



## **Performance Evaluation**

#### This case tests the interviewee's ability to:

- Sift through a lot of information quickly and ignore the extraneous data.
- Put him/herself "in the client's shoes" as the CPG client undergoes the process of brand rationalization, and refreshes its growth strategy (intentionally ambiguous prompt).

A good interviewee will drive the case after the 5 brands are eliminated, discussing the potential buyers and the growth strategy, and will deliver a Recommendation and Next Steps slide that succinctly ties the whole case together.



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

## **Case Interview feedback form**

CONSULTING CLUB	Case	Case	type	Interviewer
Execution				Case start time::
•Structure  ➤Logical approach  ➤MECE  ➤Appropriate drive		1 2 3 4 5 Comments:		Framework development min Framework explanation min Case discussion min
<ul><li>Quantitative Ability</li></ul>		1 2 3 4 5		Case end time:
➤Speed ➤Accuracy ➤Comfort, reaction	n to mistakes	Comments:		Overall Rating: 1 2 3 4 5
<ul> <li>Business intuition</li> <li>▶ Practical</li> <li>➤ Insightful</li> <li>➤ Breadth &amp; depth</li> <li>➤ Creativity</li> </ul>	across multiple functio	1 2 3 4 5 Comments:		Strengths
Communication				
<ul> <li>Professionalism</li> <li>Poise</li> <li>Confident-Persua</li> <li>Articulate-concis</li> </ul>		1 2 3 4 5 Comments:		Weaknesses
➤ Client ready				Weakilesses
<ul> <li>Written</li></ul>	ack	1 2 3 4 5 Comments:		
Behavioral (optio	nal)			
•Quality of star stories •Length	1 2 3 4 5 1 2 3 4 5	Comments:		

**Key**: 1=Bottom 10%, 2= 10<sup>th</sup>-25<sup>th</sup> percentile, 3= middle 50%, 4= 75<sup>th</sup>-90<sup>th</sup> percentile, 5=Top 10%

# **CASE 10 – GOING GREEN**





## **Behavioral Questions**

- Describe a time a teammate was not pulling their weight. What did you do about it?
- What three things would your previous supervisor identify as your areas of improvement?

### **Prompt**

Over the last few years some states have legalized medical marijuana sales on a prescription basis, and some have even legalized recreational use. The cultivation and sales of marijuana most often take place in small storefronts called dispensaries. In most states, limits have been created on how many dispensaries are allowed to exist at any one time.

Your client, North Carolina Tobacco Company, made \$8 Billion in revenue and \$2 Billion in profits last year, but has seen declining use of cigarettes in the United States, which currently makes up 25% of its total revenue and profit. NC Tobacco is considering moving into the recreational marijuana market. What should they do? Assume that federal regulations are not a concern in this case.



#### **Interviewer Guidance**

Provide if requested:

- Global use of tobacco has not declined and is even increasing in some areas
- NC Tobacco currently grows and processes cigarette/tobacco products, which are then sold to retailers
- Dispensaries grow, process and sell their own products directly to consumers
- NC Tobacco is interested in diversifying their portfolio of products
- NC Tobacco is normally focused on long-term profitability, but because this is a very new market they aren't completely sure what other considerations they should be thinking about
- NC Tobacco only interested in entering the recreational market, not the medical marijuana market

A good candidate will recognize that this is a market entry question. The framework can include:

- Market: Market Size, barriers to entry, consumer profile
- Entry: Buy, Build, Partner
- Economics: Costs, Revenue, synergies with cigarette business, product mix,
- Risks: underdeveloped market, PR risk, vertical integration in marijuana value chain, cannibalization, detracting from core business



### **Prompt**

NC Tobacco is interested in Washington and Colorado, which are two states that have legalized recreational use of marijuana. What is the potential market size in Washington and Colorado?

#### **Interviewer Guidance**

Guide the candidate toward a top-down approach. Provide the following information if requested:

- Colorado Population: 5 Million
- Colorado Population that smokes: 15%
- · Washington Population: 7 Million
- Washington Population that smokes: 10%
- Number of grams consumed per week: 1
- Price per gram (assume this is the equivalent of 1 marijuana cigarette): \$15

Candidate should lay out information requested on an organized chart or data table.

## **Analysis**

Washington Market size: \$15/gram \* 50 grams/yr \* 7M people \* 10% = \$525 M Colorado Market Size: \$15/gram \*50 grams/yr \* 5M people \* 15% = \$562.5 M

Candidate should note a fairly large market size relative to current NC Tobacco profits, and a relatively larger market size in Colorado.



## **Prompt**

Now that NC Tobacco understands the market size, how should they enter the market?

#### **Interviewer Guidance**

The candidate should analyze the cost/benefits for buy, build or partner. Guide them to the primary analysis of buy or build, if they don't arrive there quickly. If candidate inquires about JV, assume NC Tobacco wants full control of the process. The candidate should approach this in a structured way that analyzes the positives and negatives of each. Utilizing a table is one way to facilitate this:

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Strategy	Buy	Build
Benefits	<ul> <li>Quick to ramp up and capitalize on first mover advantage</li> <li>Utilize local expertise</li> <li>Few states have marijuana cigarettes so easy to consolidate</li> <li>Utilize local brand recognition</li> </ul>	<ul> <li>Easier to build culture</li> <li>Few consolidated competitors means less competition</li> <li>Similar products may allow ease of entrance into market</li> </ul>
Disadvantages	<ul> <li>Integration into new company</li> <li>Scattered, independent operators may make consolidation challenging</li> <li>Financing may be challenging for marijuana dispensary purchases</li> </ul>	<ul> <li>Limited licenses distributed restrict ability to build from scratch</li> <li>Time to grow plants, establish brand name and sell may take too long – other competitors may enter</li> </ul>

### Recommendation

Candidate should recall limited amount of licenses distributed and recognize that building would be more difficult. Client should buy rather than build.



## **Prompt**

Which market should NC Tobacco enter, if any? How would you determine this?

#### **Interviewer Guidance**

Guide the candidate towards an NPV analysis to determine of the value of purchased dispensaries to NC Tobacco. Once they have asked for financial information, provide Exhibit 1.

The first step of this analysis is to determine the revenue for each individual dispensary. Candidate should recognize that they require the number of individual dispensaries in each state. See below for information – individual revenue numbers are on interviewer copy of Exhibit 1.

- Total number of dispensaries in Colorado: 100
- Total number of dispensaries in Washington: 200

One they calculate the individual revenue, the candidate should begin pursuing an NPV valuation with the data at hand. Provide the following information upon request.

- Total number of dispensaries in Colorado available for sale: 10
- Estimated purchase price of each Colorado dispensary: \$4M
- Total number of dispensaries in Washington available for sale: 30
- Estimated purchase price of each Washington dispensary: \$1.5M
- Discount rate: 10% (assume the NPV is in perpetuity)

NOTE: Candidate should recognize that NC Tobacco can only purchase a portion of the dispensaries in each market. Guide the candidate towards this realization if not acknowledged or questioned when they arrive at that part of the calculation.



## Exhibit 1

Estimated Income Statement for a Future NC Tobacco Dispensary

	Colorado	Washington
Revenue	Ş	?
Cost of Goods Sold	\$2,175,000	\$1,050,000
Overhead	\$1,100,000	\$450,000
Salary	\$525,000	\$375,000



## **Exhibit 1: Interviewer Guidance**

Estimated Income Statement for a Future NC Tobacco Dispensary

	Colorado	Washington
Revenue	\$5,625,000	\$2,625,000
Cost of Goods Sold	\$2,175,000	\$1,050,000
Overhead	\$1,100,000	\$450,000
Salary	\$525,000	\$375,000



	Colorado	Washington
Market Size	\$562,500,000	\$525,000,000
# of Dispensaries	100	200
Revenue/Dispensary	\$5,625,000	\$2,625,000
Cost of Goods Sold	(\$2,175,000)	(\$1,050,000)
Overhead	(\$1,100,000)	(\$450,000)
Salary	(\$525,000)	(\$375,000)
CF/store	\$1,825,000	\$750,000
# of stores available for purchase	10	30
Total CF/Store	\$18,250,000	\$22,500,000
Discount Rate	10%	10%
DCF of purchased stores	\$182,500,000	\$225,000,000
Cost to purchase 1 store	(\$4,000,000)	(\$1,500,000)
Cost to purchase available stores	(\$40,000,000)	(\$45,000,000)
NPV	\$142,500,000	\$180,000,000

## Recommendation

A good candidate will immediately note the higher NPV for Washington over Colorado. An excellent candidate will realize that both are viable options due to the positive NPV..



## **Case 10: Going Green**

## **Prompt**

The CEO of NC Tobacco is walking in the door, and is interested in seeing what you have discovered.

## **Interviewer Guidance**

Candidate should provide a conclusion clearly identifying the recommendation, along with the risks associated with the strategy. Recommended action would be to move forward with purchase of both Colorado and Washington dispensaries due to NPV, but the candidate can make a case for either moving forward or for not purchasing as long as sufficient support is provided. After the candidate completes their conclusion, test the candidates poise by pushing back with a few contrary points, some of which are listed on the following page.



## **Case 10: Going Green**

## **Analysis**

### Potential rationale for moving forward with purchase:

- Positive NPV
- Higher profit margin than cigarettes
- First mover advantage
- Potential high-growth market as more states legalize
- Synergistic opportunities in supply chain, marketing, etc.
- New (and highly loyal) customer base
- Cigarettes potentially inviable for long term

### Potential rationale for not continuing:

- NPV relatively small
- Potential variability in projected vs. actual income statement estimates
- Potentially low estimate of purchase price (given low NPV/store)
- Potential first mover disadvantage (i.e. free rider problem)
- Negative PR for getting in 'drug' business
- · Potential substitution of cigarette sales
- Potential consumer distaste for 'big business'
- Problems with financing (banks don't want to finance due to risks associated with Marijuana)
- Cigarette sales still strong abroad focus on international opportunities
- NC Tobacco moving into unfamiliar part of value chain (retail in addition to manufacturing)



## **Case 10: Going Green**

### **Performance Evaluation**

- This case tests the candidate's ability to:
  - Work through complicated math
  - Develop structured approaches to problems
  - o Recall key facts discussed earlier in the case
  - o Understand key factors that drive market entry and M&A cases
  - o Make a recommendation in the face of ambiguous information
  - o Remain professional in a business case that may otherwise encourage individuals to lose their professionalism
- · Good interviewees will:
  - o Will have an understanding where the case is going throughout
  - Have 1-2 math errors but recovers appropriately
  - o Displays good ability to utilize public math
  - o Creates basic MECE structure (bucketed approach, etc.) to analyze problems
  - o Provides conclusion with support
  - o Provides a recommendation after analysis with 3-4 potential risk factors
  - o Maintains professional composure throughout
- Exceptional interviewees will
  - o Drive the case forward throughout with hypothesis based inquiry
  - o Have 0 math errors
  - o Will maintain composure throughout the math
  - Add creative ideas to qualitative analysis
  - o Addresses prompts with advanced matrices or analytical structures that show depth of thinking and organization
  - o Is engaging, displays interest in the subject and has appropriate body posture and presence
  - o Provides a strong, efficient, concise recommendation with at least 4-5 risk factors.



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

## **Case Interview feedback form**

CONSULTING CLUB	Case	Case type	Interviewer
Execution			Case start time:
•Structure  ➤ Logical approach  ➤ MECE  ➤ Appropriate driv		1 2 3 4 5 Comments:	Framework development min Framework explanation min Case discussion min
<ul><li>Quantitative Ability</li></ul>		1 2 3 4 5	Case end time:
➤Speed ➤Accuracy ➤Comfort, reactio	n to mistakes	Comments:	Overall Rating: 1 2 3 4 5
•Business intuition  >Practical >Insightful		1 2 3 4 5 Comments:	Strengths
<u> </u>	across multiple function	ons	
Communication			
<ul><li>Professionalism</li><li>Poise</li><li>Confident-Persu</li></ul>	asive	1 2 3 4 5 Comments:	
➤ Articulate-concis ➤ Client ready			Weaknesses
•Written  >Clarity of writing >Ability to refer b >Comfort, reactio	ack	1 2 3 4 5 Comments:	
Behavioral (option	nal)		
•Quality of star stories •Length	1 2 3 4 5 1 2 3 4 5	Comments:	

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# **CASE 11 – ALLHEALTHY CRM**



## Case 11: AllHealthy CRM

## **Prompt**

Your client, AllHealthy, is one of the largest health plans in the United States with over 30,000 employees. They are facing drastic changes in the health care industry. Healthcare reforms have pushed AllHealthy to pursue a route of customer-centric strategies. To remain competitive with the raise of Health Care Exchanges, your client has decided to implement a Client Relationship Management (CRM) system in order to enhance the customer and employee experience.

Currently, contact center associates have no visibility into customer call history. When a customer calls with a follow up question, new cases are created in AllHealthy's legacy CRM system instead of being attached to the original case. Additionally, when calls are transferred, the next associate does not the previous call history and must re-ask demographic and issue questions. This process decreases customer satisfaction and leads to re-work and decreased productivity for contact center associates.

You are the change management lead for the new CRM system adoption project. AllHealthy wants to understand how you will help them prepare their business for this large scale change.

There are several questions and considerations they want you to address in your plan:

Who are the stakeholders? How will you communicate to these stakeholders?

What are the change issues and how will you address them?

How will you measure success?

### **Interviewer Guidance**

Note: Human Capital cases are intended to be carried in a conversational manner. They may take multiple different routes and have multiple acceptable answers. The candidate should not abandon the use of a framework. The focus of this case is on the approach needed to mange the proposed changes in the organization.



# **Case 11: AllHealthy CRM**

## **Analysis**

### Who are the stakeholders? How will you communicate to these stakeholders?

- Stakeholders: Leadership, contact center associates, customers, and rest of organization
- Consider how the organization currently receive communications and leverage current policies and procedures.
- Identify change champions and change agents, some of which may serve as super-users for the IT adoption project
- Videos can provide context to the reasons why the new CRM system creates greater value for stakeholders
- Ask for honest and open feedback through anonymous surveys

#### What are the change issues and how will you address them?

- **Leadership alignment**: While top leadership may want the new CRM system, leadership throughout all levels should be engaged. The reasons for the change must be explained and understood by all stakeholders as well as how they will be rewarded.
- **Buy-in**: Change is always met with resistance. Employees need to see that leadership is aligned and are all behind the new CRM system. Change agent networks should be set up and provided with speaking points to engage the rest of the organization.
- **Communications**: Mistrust and resistance is rampant when employees do not know that change is coming. Clear, consistent, and early communications plans help to facilitate feedback and manage negative perceptions.
- **Training**: While employees may undergo training, the main consideration here is adoption. The training must be concise, yet thorough. It must take into account knowledge gaps, competency tests, and continued use post deployment.
- **Incentives**: Employees are more likely to adopt if there is an established benefit or incentive for the new system. Design and implement or tie the adoption to Performance Management.

### How do you measure success?

Determine a collective, measurable set of success metrics at the onset of the project from the perspective of leadership, customers, and contact center associates. Examples include:

- 75% employees trained, logged in, and using new system by the end of the deployment
- · Greater customer satisfaction on surveys relating to call quality
- Enhance employee satisfaction, adoption, and productivity through surveys and call metrics like call issue resolution time, open issue past due, etc



# **Case 11: AllHealthy CRM**

### **Performance Evaluation**

The case tests candidates' ability to critically think about IT adoption projects from the lens of a Human Capital practitioner.

**Expected:** The candidate will recognize that the CRM project will affect the entire organization and will touch on the major points mentioned.

**Good**: The candidate will touch on the major points mentioned and also provide his/her analysis in a structured framework. **Excellent**: The candidate will thoroughly discuss the major components of change management in a thoughtful and structured framework. The candidate will show an in-depth understanding of Human Capital concepts and be able to prioritize change management issues.

## **Behavioral Questions**

- Tell me about a weakness that you have turned into a strength.
- Tell me about a failed client interaction and how you have grown from that experience.



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

## **Case Interview feedback form**

CONSULTING CLUB	Case	Case type	Interviewer
Execution			Case start time:
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•Business intuition  >Practical  >Insightful  >Breadth & dep  >Creativity	oth across multiple functio	1 2 3 4 5 Comments:	Strengths
Communication	1		
•Professionalism  >Poise  >Confident-Per  >Articulate-con		1 2 3 4 5 Comments:	Weaknesses
➤ Ability to refe	ing and page layout r back tion to mistakes	1 2 3 4 5 Comments:	
Behavioral (opt	ional)		
•Quality of star stories •Length	1 2 3 4 5 1 2 3 4 5	Comments:	

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# **CASE 12 – COYOTES**





### Prompt #1

Your client is the American Southwest Preservation Trust (ASPT). The trust is a non-profit organization tasked with promoting conservation & eco-tourism in the American Southwest. One of the biggest tourist draws is local fauna, particularly coyotes. The coyote population has declined significantly from historical levels. The Trust requests your help to figure out why & what it should do.

## **Behavioral Questions**

- If your C-LEAD teammates had to describe your biggest point for improvement, what would it be and why?
- Can you tell me about a time when you handled an especially sensitive or high-risk assignment or project?

### **Case Guidance**

This case is geared towards challenging brainstorming and frameworking skills, while at the same time honing public math and analytical skills. It simulates cases which have uncommon or unanticipated structural elements, and may be especially appropriate for individuals who need practice building creative frameworks.

### **Interviewer Guidance – Prompt Q&A**

Provide the additional information if requested:

- Coyotes are medium size canine carnivores (between a fox and a wolf) native to the American Southwest.
- Coyote populations were historically stable until recently. Only 10,000 coyotes exist today down from 25,000.
- Geographically, only consider the area administered by the trust.
- No other fauna or flora have been impacted as much.



### **Interviewer Guidance: Framework**

Species loss is a not a common framework, and so be prepared to iterate by asking "what else." Quality frameworks should include at least the following "buckets" or "nodes" (for those who use trees):

- Environmental factors (pollution, climate change, species migration)
- Dietary factors (number of predators, number of prey, availability of water)
- Human-generated factors (hunting, poaching, habitat loss)
- Disease and Genetics

Award brownie points for additional creative ideas.

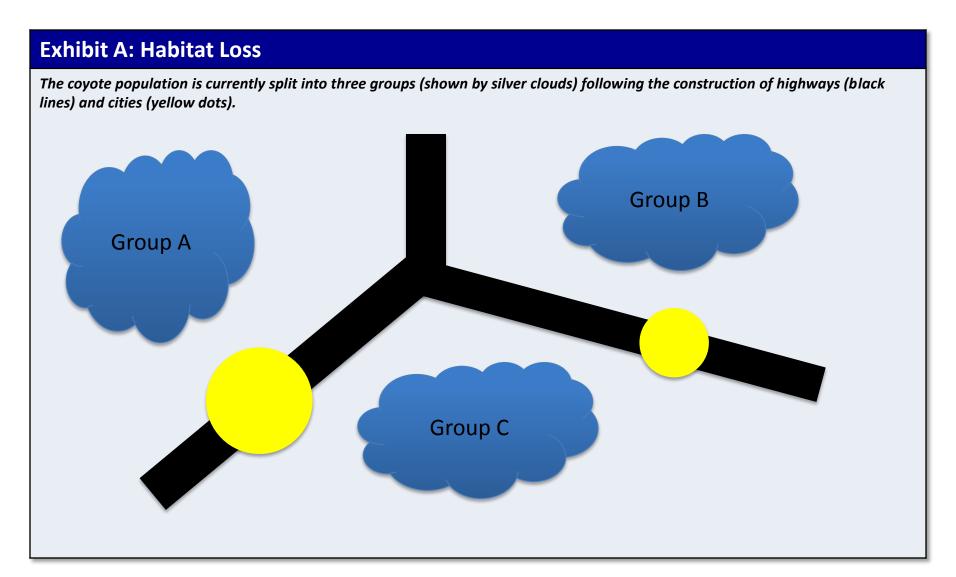
Steer the candidate gradually towards human-generated factors (habitat loss and hunting). Have the candidate brainstorm for a few minutes how habitat loss would impact the species, especially given that other factors haven't changed significantly with time (prey availability, water, hunting, etc).

A strong candidate may immediately guess changing birth rates, fertility, and the availability of finding partners. Regardless of whether the candidate gets to this or not, steer the candidate by issuing the next prompt (below).

## Prompt #2 – For Analysis

The client is likewise concerned by the impact of development and interactions with man on the coyote population, and wants to understand the expected impact on the population this year. ASPT has provided a few demographic details they have on the coyote population in the area (Exhibits A and B).







# **Exhibit B: Group Statistics**

The following table shows estimated demographics by group

Group	Percent of Total Pop	Percent Male	Percent Female	Hunting Licenses
А	40	60	40	800
В	20	35	65	200
С	40	90	10	400



## **Interviewer Guidance: Exhibits and Analysis Part 1**

From the exhibits, the candidates should point out links between groups, unequal gender sizes, and different numbers of hunting licenses for similarly sized territories.

The candidate should grasp that the overall goal of the analysis is to find out how populations are changing. The first step is finding out the current number of coyotes in each group by gender.

The total population should have been asked for during the Q&A portion. If the candidate did not get to it then, provide the number now (10,000).

The first step is to break out the 10k by each group by gender. If the candidate doesn't think of this, steer them towards it. Some candidates may try to jump towards calculating births and deaths, in which case they guessed the missing steps (see next section), but have them work out the calculations by gender and group first.

### **Analysis Part 1 – Solution**

The candidate should arrive at the following numbers (series of multiplications) needed for the second part.

Group	Percent of Total Pop	Number of Coyotes	Number of Male	Number of Female
А	40	4000	2400	1,600
В	20	2000	700	1,300
С	40	4000	3600	400



## **Interviewer Guidance: Analysis Part 2**

Let the candidate drive the continuation of the analysis. If the candidate is lost, ask them how they would calculate the change in coyotes every year. The general equation they should arrive at:

Change in coyotes for this year = Number Born in this year – Number Died in this year. Focus them on calculating the change for this year!

Several pieces of information have been deliberately withheld from the candidate. A perceptive candidate will ask for them:

- Litter size: This is the number of coyotes born to each pregnant female. Assume 2 pups/litter.
- Gestation period: Assume coyotes breed once per year.
- Partner fidelity: Assume that coyotes are monogamous (meaning that once a male coyote has impregnated one female coyote, he will not impregnate another female coyote).
- Availability or % Mate: Not all coyotes will breed each year. Assume that only 40% of potential pairs birth a litter each year.
- The candidate should notice that hunting isn't the only cause of death. Assume that all other deaths are natural and the death rate is 10% (applies to adults only use beginning population and don't include pups).
- Assume that hunting deaths happen at the end of the year, and hence so is cumulative with the natural deaths.

Other questions that the candidate could ask:

- What are the frequency of hunting licenses? Answer: annual
- How many coyotes does a license permit to be killed? Answer: one
- Can both males and females be hunted? Answer: yes
- · Do all hunting licenses get used? Answer: assume yes

Lastly, because of the monogamous nature of coyotes, the candidate should pick up on the fact that the lesser occurring gender in each territory is the limiting factor on births.



## **Analysis Part 2 – Solution**

The candidate should arrive at the following numbers.

The equations for getting them are:

# of Births: # of Pairs \* % Mate \* Birth Rate

# of Deaths: (Beginning Population – Hunting Deaths) \* Natural Death Rate

Note that calculating Deaths as "(Beginning Population \* Natural Death Rate) + Hunting Deaths" wrongfully assumes that none of the hunted coyotes would have died naturally if they had not been hunted

Group	Limiting Gender	# of Pairs	% Mate	Birth Rate	# of Births
А	Female	1600	40%	2	1,280
В	Male	700	40%	2	560
С	Female	400	40%	2	320

Group	Beg. Population	Hunting Deaths	Natural Deaths	# of Deaths
А	4,000	800	320	1,120
В	2,000	200	180	380
С	4,000	400	360	760



## **Advanced Conclusions from Analysis**

A very perceptive candidate should notice:

- The decline is gradual (only 100 coyotes per year). Hence the historical number of 25k must either imply a long time ago or a large drop due to other circumstances.
- The C population group will be gone in approximately 10 years, or even sooner if females are hunted or die disproportionately.
- The other groups should grow if hunting and natural deaths affect both genders equally and at present rates.
- Overall, coyotes are likely to remain in the Southwest.

Group	Total Births	Total Deaths	Total Change
А	1,280	1,120	160
В	560	380	180
С	320	760	-440
Total	2,160	2,260	-100



### Prompt #3 (if time)

ASPT is considering lobbying for a reduction in hunting licenses. How would you design a proposed reduction, and what information would you use to support it?

### **Interviewer Guidance:**

The candidate should hopefully mention some of the bullet points under the advanced analysis section if they have gotten to this point. If not, spend some time with the analysis results and ask the candidate what they imply.

Afterwards, redirect the candidate towards the topic of hunting licenses. Ask if hunting licenses are really the issue. If after the candidate struggles for a few minutes, they are still lost, point out that more hunting licenses were issued for Group A rather than C, even though the groups were the same size.

This should mean that Group A should not be sustainable, while Group C should be growing. However, the reality is exactly the opposite. Ask the candidate why?

The candidate should quickly zero in on two potential culprits:

- The gender ratio in Group A v. Group C
- The percentage that mate

Since the percentage that mate (and other factors) are constant, the gender ratio must be the key. Once the candidate realizes this, proceed to the recommendation portion of the case.



### Recommendation

Recommendations should include:

- Overall, the population of coyotes is not at risk.
  - o One group of coyotes (Group C) will die out within 10 years, if no interventions are attempted.
- ASPT can help rescue or foster coyote population growth by:
  - o Evening out the gender ratio between populations by building wildlife bridges, transplanting coyotes, etc.
  - o Helping coyotes locate each other and increasing the mating pair percentage.
  - o Increasing fertility levels (# of pups/pair) using medical techniques.
- (For those who made it to Prompt #3) The ASPT should not invest significant resources in a legislative battle against hunting licenses if licenses are maintained at the current levels.
  - o That said, a temporary hunting ban in Group C would likely help as an effort is made to stabilize the female population



### **Performance Evaluation**

· What does the case test?

This case involves a non-traditional framework, extensive "public math," and a logic puzzle with clearly identifiable missing pieces. This makes this a fairly all-around good practice case. However, it is especially appropriate for individuals that need practice with being creative with frameworks or figuring out withheld pieces of a puzzle.

**Expected**: The candidate's framework may have missing elements, but should be MECE. The candidate is able to brainstorm ideas for species loss, and perhaps habitat loss. Once provided with the framework elements, the candidate is able to proceed to and solve Analysis – Part 1. The candidate may get stuck with Analysis Part 2 and will probably not get all the way through it and to Prompt #3. Recommendations are likely to be primarily around the framework and exhibit observations.

**Good**: The candidate creates a complete MECE framework, and is able to brainstorm ideas for habitat loss. The candidate does a good job noticing the hunting licenses, gender ratios, and groups in the exhibits. With minimal direction, the candidate is able to solve Analysis Part 1. The candidate makes it through Analysis Part 2 with minimal or moderate assistance and attempts to make advanced observations. The candidate probably won't get to the third prompt. Recommendations from the analyses #1 and #2 should be correct, but are likely to be incomplete.

**Excellent:** The candidate is undaunted by a uncommon framework, and comes up with a solid MECE framework. He or she is able to identify habitat loss, and provides interesting and creative brainstorming ideas. Analyses #1 and #2 are solved with minimal direction, and the candidate is able to make advanced observations. Analysis #3 is solved with minimal to moderate assistance, and recommendations are complete, clear, and concise.



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

## **Case Interview feedback form**

CONSULTING CLUB	Case		Case type	Interviewer
Execution				Case start time::
•Structure  ➤Logical approach  ➤MECE  ➤Appropriate driv		1 2 3 4 5 Comments:		Framework development min Framework explanation min Case discussion min
•Quantitative Ability		1 2 3 4 5		Case end time:
➤Speed ➤Accuracy ➤Comfort, reactio	n to mistakes	Comments:		Overall Rating: 1 2 3 4 5
<ul> <li>Business intuition</li> <li>▶ Practical</li> <li>➤ Insightful</li> <li>➤ Breadth &amp; depth</li> <li>➤ Creativity</li> </ul>	across multiple function	1 2 3 4 5 Comments:		Strengths
Communication				
<ul><li>Professionalism</li><li>Poise</li><li>Confident-Persu</li></ul>	asive	1 2 3 4 5 Comments:		
➤ Articulate-concis ➤ Client ready	e			Weaknesses
•Written  ➤Clarity of writing ➤Ability to refer b ➤Comfort, reactio	ack	1 2 3 4 5 Comments:		
Behavioral (option	nal)			
•Quality of star stories •Length	1 2 3 4 5 1 2 3 4 5	Comments:		

**<u>Key</u>**: 1=Bottom 10%, 2= 10<sup>th</sup>-25<sup>th</sup> percentile, 3= middle 50%, 4= 75<sup>th</sup>-90<sup>th</sup> percentile, 5=Top 10%

# **CASE 13 – FERRY FOLLIES**





## **Prompt**

Your client is a Department of Transportation for a state in the northwestern United States. The Department of Transportation controls six modes of transportation: aviation, biking, ferries, rail, public transportation (e.g. busses), and walking. With budget cuts and rising energy costs projected for the coming fiscal year, your client evaluated each mode of transportation and determined that it must improve the financial performance of its ferries. The Department of Transportation has employed your firm to assess the current state of its ferry operations and recommend a strategic plan for improving financial performance.

## **Behavioral Questions**

- Imagine that it is a Friday afternoon and you have just been given your new client assignment to begin on Monday morning. What steps will you take to prepare for your first day? What steps will you take when you arrive at the client site to get up to speed?
- What type of teammate are you?

### **Interviewer Guidance**

- Provide this information to the candidate if asked:
  - o The client defines "improved financial performance" as increased profit margins.
  - o The client wants to cut \$70M from its annual budget after 2 years
  - o There are 24 ferry vessels and 18 ferry terminals. The ferries are used by both commuters and tourists.
  - o Over 20 million passengers travel on these ferries annually.
- Note: Not all of this information is relevant to the case; a strong candidate will be able to assess what is salient.



## **Analysis**

- The candidate should ask about the measurement of financial performance. If they have not, encourage them to think through various ways to measure financial performance and guide them towards profit margin.
- Prompt 1: Identify sources of cost and revenue for the Department of Transportation's ferry system.

### Recommendation

- These brainstorming questions test the candidate's ability to think through the underpinnings of transportation operations. Encourage the candidate to be creative when brainstorming.
- Answers may include but are not limited to:

#### **COST**

- o Ferry Maintenance
- o Fuel
- o Employees: salaries, wages, benefits
- o Overhead (e.g. Executive, HR, Legal)
- Marketing & Advertising
- Weather Services

### **REVENUE**

- Fares/Tickets
- o Advertising (e.g. promotions)
- Corporate partnerships
- o Food and drink on board
- Don't hesitate to ask "what else" to push them.
  - o For example, if they list "employees" as a source of cost, encourage them to think through categories of employees (DOT administrators, ferry captains, ferry crews, ticket office staff, etc.)
- Strong candidates will identify that cost is a more salient option than revenue for improvement.



## **Analysis**

- Prompt 2: The client has decided to focus on cost control. Your consulting team investigated the cost structure of the ferries and identified four main cost buckets: diesel fuel, salaries & wages, overhead costs, and miscellaneous (e.g. dock fees and ferry maintenance). We know that:
  - o Diesel fuel accounts for 1/3 of the client's total ferry budget, which is \$270 million
  - There are approximately 2000 employees with average salaries of \$54,000
  - Overhead is 20% of all costs

### Recommendation

- This question tests the candidate's ability to process ambiguous information, identify missing pieces, develop a clear understanding of the client's cost structure, and perform accurate calculations.
- Strong candidates will create a table to look at each of the four cost buckets and reach the following conclusions, remarking on the implications of each:

Cost bucket	Percent of total cost	Total (in \$M)	Calculations
Fuel	33%	90.0	33% of \$270
Wages	40%	108.0	2000 x 54k
Overhead	20%	54.0	20% of \$270
Miscellaneous	7%	18.0	Plug
TOTAL	100%	270.0	Given



## **Analysis**

- Prompt 3: Given the cost structure, the client would like your consulting team to determine if the targeted savings are feasible and identify potential areas for cost reduction.
- Hint: What percentage cost reduction would be needed in order for the client to shed \$70M from the ferry budget?

### Recommendation

- Note: This question is intentionally ambiguous and tests the candidate's ability to drive the case, handle ambiguity, and think logically under pressure. If needed, remind the candidate that the client aims to achieve \$70M in savings in two years.
- Calculation: \$70M of \$270M is approximately a 25% cut.
- A strong candidate will:
  - o A. Investigate the four major cost buckets and brainstorm solutions to each
    - Examples: Using alternative fuel sources other than diesel, explore staff reductions, pooling shared services across Department of Transportation divisions, better understand the "miscellaneous" cost bucket
  - o B. Prioritize solutions that address the client's primary cost centers
    - Diesel fuel and wages collectively account for over 3/4 of the client's annual costs; solutions that address these high-cost buckets are more likely to help the client achieve significant cost savings than solutions focused on overhead or miscellaneous costs
  - o C. Determine if \$70M in 2 years is feasible
    - \$70M is a ~25% cost reduction in 2 years; this tests the candidate's logical thinking
  - D. Create a recommendation
    - A strong recommendation will include an assessment of whether the client's goal is feasible and specific actions the client may take to reach this goal AND/OR a suggested revision of the client's goal either should mention the targeted timeframe



## **Analysis**

- Prompt 4: The client has requested that you design an implementation strategy to achieve the targeted savings of \$70M in 2 years. They have provided this additional information:
  - Switching from diesel to alternative fuel sources will cut fuel costs by 45% over the next two years
  - The client has told us they can accommodate the following labor reductions over the next two years: 10% cut of ferry captains, 500 cut administrative staff, 100 cut operational staff
- Is the client's \$70M goal feasible? What potential hurdles or backlashes could results from these cuts?

### Recommendation

Provide this additional information if asked:

# of Employees	% of Total	Salary	Total Wages
50	2.50%	\$110,000	\$5,500,000
1300	65.00%	\$50,000	\$65,000,000
650	32.50%	\$58,000	\$37,700,000
2000	100%	\$54,100	\$108,200,000
	50 1300 650	50 2.50% 1300 65.00% 650 32.50%	50 2.50% \$110,000 1300 65.00% \$50,000 650 32.50% \$58,000

Calculations:

<b>Fuel Costs</b>		<b>Labor Costs</b>				Total Cost Cuts (Million)	
Diesel	\$90,000,000		#	Salary	Total	GAS	40.5
Gas	45% savings	Drivers	5	\$110,000	\$550,000	Labor	31.4
Cost cut:	\$40,500,000	Admin	500	\$50,000	\$25,000,000	Total:	71.9
		Operational	100	\$58,000	\$5,800,000		
					\$31,350,000		

- The candidate should conclude that the client can reach the targeted \$70M savings by implementing these recommendations. Risks include fuel contract renegotiation challenges and negative PR from laying off state government employees.
- Request that the candidate articulate succinctly the recommendation, risks, and next steps as if presenting to a client.



### **Performance Evaluation**

- This case tests the candidate's ability to:
  - Understand the underpinnings of profit margins:
    - Determine appropriate measures of financial performance
    - Brainstorm sources of costs and revenue as they relate to profit margin and determine which area should be investigated
  - o Determine what information is salient to "solve" the case
    - Employ critical thinking skills to weed through information
  - Think logically in ambiguity
  - Complete calculation quickly and accurately
- A strong candidate will:
  - o Hone quickly in on cost reduction
  - o Handle the math of the cost table smoothly and without aid
  - o Drive the case with little prompting by the interviewer
- · An exceptional candidate will
  - o Transition between Prompt 2 and Prompt 3 without the interviewer asking the next question
  - Exhibit "what else" thinking and provide creative brainstorming
  - o Create a logical, actionable, prioritized recommendation for the client with specific time parameters



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

## **Case Interview feedback form**

CONSULTING CLUB	Case	Case type	Interviewer
Execution			Case start time:
•Structure  ➤ Logical approach  ➤ MECE  ➤ Appropriate driv		1 2 3 4 5 Comments:	Framework development min Framework explanation min Case discussion min
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•Business intuition  >Practical >Insightful		1 2 3 4 5 Comments:	Strengths
<u> </u>	across multiple function	ons	
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# **CASE 14 – AUTODRIVERS**



### **Prompt**

A large auto insurance company, AutoDrivers is exploring telematics and has identified whether OBD (On-Board Diagnostics) or a mobile solution is the right fit for them. Telematics is defined as the convergence of informatics and telecommunications to transmit data. Think about Fit Bit, On Star which collect and use data to deliver additional services to consumers. With Telematics, AutoDrivers can capture driving data and use it to better price insurance premiums.

The company hopes that using telematics will enable it to enroll new customers and reverse its decline in market share. The company has hired you to identify which telematics strategy is the right fit for them. The company is also interested in understanding how it can increase its engagement with its customers and provide them additional services. Specifically they are interested in growing in states where AutoDrivers has a low brand perception.

## **Behavioral Questions**

- Tell me a time when you encountered a challenging situation and how did you overcome it?
- What are your areas of development?

### **Interviewer Guidance**

This is a strategy case where the interviewee will identify the right strategy for AutoDrivers and help it select either the OBD approach or the mobile app approach.

### **Additional Information**

- 1) AutoDrivers is a medium size auto insurnace company operating mostly in NJ, PA and MD
- 2) AutoDrivers currently only offers auto insurance



### **Interviewer Guidance Continued**

- 3) AutoDrivers had revenues of \$300 M in 2013 and has seen a 5% slide in market share for each of the last 3 years
- 4) The US auto insurance industry as a whole had revenue of \$3B in 2013
- 5) Major competitors of AutoDrivers are all currently exploring telematics options and operate in the same geographies as AutoDrivers
- 6) If interviewee asks about customer engagement then explain how insurance is a commoditized business and insurance companies are developing services (Competitions for safe drivers, teen-driving programs) to differentiate themselves from competitors and increase their engagement with their customers.

### **Analysis**

Question 1

Ask the interviewee to identify what are the first steps that AutoDrivers should consider when deciding which telematics strategy to implement.

### **Interviewer Guidance**

Expected response from the interviewee should consider several factors including, margin for OBD vs mobile solution, will AutoDrivers be able to implement in a timely manner, what are the technology considerations for AutoDrivers (Is this a product that will be developed inside the company or will AutoDrivers need to partner with another firm), what is competition doing

A advanced response will also consider factors such as which options offers AutoDrivers the best way to increase customer engagement, what are some of the regulatory considerations and customer adoption rates.



### **Interviewer Guidance Continued**

After the interviewee has presented the initial framework, share Exhibit 1 with them

Question 2

Which strategy should AutoDrivers select

### **Exhibit 1 Guidance**

Based on the information presented in the Exhibit, the interviewee should calculate two data points

### 1) Potential Size of the Market

- · Correct Calculation should be as following
- OBD potential customers are 1000 and with an adoption rate of 25%, OBD will enable AutoDrivers to enroll 250 new customers
- Mobile solution potential customers are 1000 and with an adoption rate of 50%, mobile solution will enable AutoDrivers to enroll 500 new customers
- After the interviewee has identified the size of potential new customers, the next step is to calculate the net profitability for both OBD and Mobile Solutions

#### 2) Calculation of Profits (OBD)

- OBD total fixed cost = \$0.9 M
- OBD variable costs are \$OBD variable costs are \$1400
- OBD revenue = \$2000
- Margins = \$2000 \$1400 = \$600
- Net Profit = \$600\*250 customers \$0.9 M = \$(0.75 M)
- The right number of customers is 250 based on the adoption rate]



## **Exhibit 1 Guidance (Continued)**

- 3) Calculation of Profits (Mobile Solution)
  - Mobile Solution total fixed cost \$2 M
  - Mobile Solution variable costs are \$OBD variable costs are \$500
  - Mobile Solution revenue = \$5000
  - Margins = \$5000 \$500 = \$4500
  - Net Profit = \$4500\*500 customers \$2 M = \$250,000
  - [The right number of customers is 500 based on the adoption rate]
- 4) Based on the calculation of profitability, the interviewee should recommend that AutoDrivers choose the strategy of Mobile Solution

### **Analysis**

### **Question 3**

Ask the interviewee to identify what are some of the pros and cons of choosing the Mobile Solution. Ensure the interviewee does not focus on financial figures and thinks of several other reasons



## Exhibit 1

	OBD	Mobile Solution
Potential Customer Size for telematics	10000	20000
Potential Market Share	10%	5%
Variable Marketing Cost per customer	\$400	\$0
Variable Equipment Cost per customer	\$1000	\$500
Revenue per customer	\$2000	\$5000
Customer Adoption Rate	25%	50%
Technology Development	Partner with a firm in NJ	Partner with a firm in China
Cost of technology development	\$0.9 M	\$2 M

• Expected over next 3 years



## **Interview Guidance for Question 3**

A strong interviewee will identify the following factors when evaluating the pros and cons of the Mobile Solution

Keep probing the interviewee until he or she has come up with a detailed list

Pros of Mobile Solution	Cons of Mobile Solution
Ease of use. Customers will only download a Mobile App	Reliability of data capture – Mobile technology is still under development
High scalability for AutoDrivers	Partnering with a firm in China could increase development lead time
Updates to technology can be easily sent to customers	Regulators could impose restrictions on collecting driving data via mobile phone
Fits in with new customer demographics – Mobile, flexible	Higher Cap Ex
Mobile phone technology keeps improving at a high speed	
High speed to market	

A good interviewee will come up with a few pros and cons. Keep probing them until they have exhausted their list of responses.

An excellent interviewee will show understanding of mobile platforms and applications and be able to identify advantages of having a mobile solution



## **Analysis**

#### **Question 4**

AutoDrivers has now requested your help to identify in which state they should pilot the Mobile Solution. What is the state for the AutoDrivers? Share Exhibit 2 with the interviewee



# Exhibit 2 % of New Customers Interested in Telematics **Auto Drivers Brand Perception** MD 35 PA NJ 10 25 ■ Auto Drivers Brand Perception ■ NJ = PA MD New customers represent the customers who are considering signing up for a telematics program provided by **Auto Drivers** • Brand Perception is based on a customer survey comparing different auto insurance companies and how they are perceived in providing high customer engagement



# **Exhibit 2 (Continued)** % Increase in Adoption Rates 20 15 10 5 0 Year 1 Year 2 Year 3 **← –** NJ **–** PA ····· MD

• % of Adoption Rates is the number of customers who will continue signing up for AutoDrivers Mobile solution



## **Interview Guidance for Question 4**

The interviewee should be able to identify that NJ has the highest % of new customers who might be interested in signing up for telematics and also has the highest brand perception for Auto Drivers. This seems to be an ideal state for Auto Drivers to launch its Mobile Solution.

However the rate of increase in the adoption rate for NJ is lower than PA and may hurt AutoDrivers in its long-term strategy of reversing its slide in market share

Since AutoDrivers wants to increase customer engagement i.e. provide more value-added services, PA represents the best option for AutoDrivers. The candidate should be able to tie back to the original prompt which indicated where AutoDrivers prefers to grow. Although it has low brand perception in the state, the Mobile Solution will give it opportunity to offer new features to its customers and increase customer engagement. The rate of increase in customer adoption is also the highest in PA which will enable AutoDrivers to enroll new customers.



#### Recommendation

We anticipate running into the CEO in the cafeteria. What would you say to him?

## **Interview Guidance for Recommendation**

An average response should be concise and structured. It should include why AutoDrivers should implement the Mobile Solution and what are some of the risks associated with implementing this solution. The interviewee should also identify which state they should pilot the program in

#### **Next steps**

An exceptional response should include the next steps for selecting the Mobile Solution and the state to pilot the program in. These can include developing a contract with the partner in China, ensuring that the partner can successfully develop the product in a timely manner, identifying the distribution channels for the Mobile Solution (Agents, Third-party vendors), selecting the right marketing strategy for the Mobile Solution and conducting a testing program to validate the solution.

#### **Risks for telematics**

- How to subside customer concerns over privacy
- Potential barriers from regulators and state governments
- · Contingency plan if telematics does not succeed



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

## **Case Interview feedback form**

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# **CASE 15 – STEEL WORKS**



#### **Prompt**

A large steel manufacturing company based in Chicago called Steel Works has been facing some challenging times. They are facing pressure from competition who are stealing away customers by offering cheaper prices. Steel Works is currently exploring the option to shut down one of its three production units to consolidate operations and reduce its total operating costs. You have been asked to identify which production unit they should close down in order to reduce their total operating costs.

Share with interviewee Exhibit 1

#### **Behavioral Questions**

- Tell us about a time when you explored alternatives to a solution and how you went about choosing between the alternatives?
- What is your most exemplary leadership experience?

#### **Interviewer Guidance**

This case tests the interviewee's ability to digest information and identify a solution that reduces the overall operating cost for Steel Works. The interviewee will also be tested in his ability to identify synergies among the production units after a consolidation process.

#### **Additional Information**

- 1) Steel Works is a global steel manufacturing company that has several operations in the US.
- 2) Its competitors include other major steel makers who offer similar products at lower prices



#### **Interviewer Guidance**

- 3) Steel Works recently hired a new CEO that is open to investing in new technology as long as overall operating costs can be reduced
- 4) Steel Works supplies products to several industries including aerospace, automotive, appliance makers, construction and roofing
- 5) Steel Works is operating in a growing steel market with a 5 Yr CAGR of 2.5%

## **Analysis**

#### Question 1

What should Steel Works consider when choosing which production unit to close

#### **Interviewer Guidance**

Expected response from the interviewee should consider several factors including the following

**Production Costs** 

**Shipping Costs** 

Process Capability and access to technology

Potential investment required to accommodate increase in production

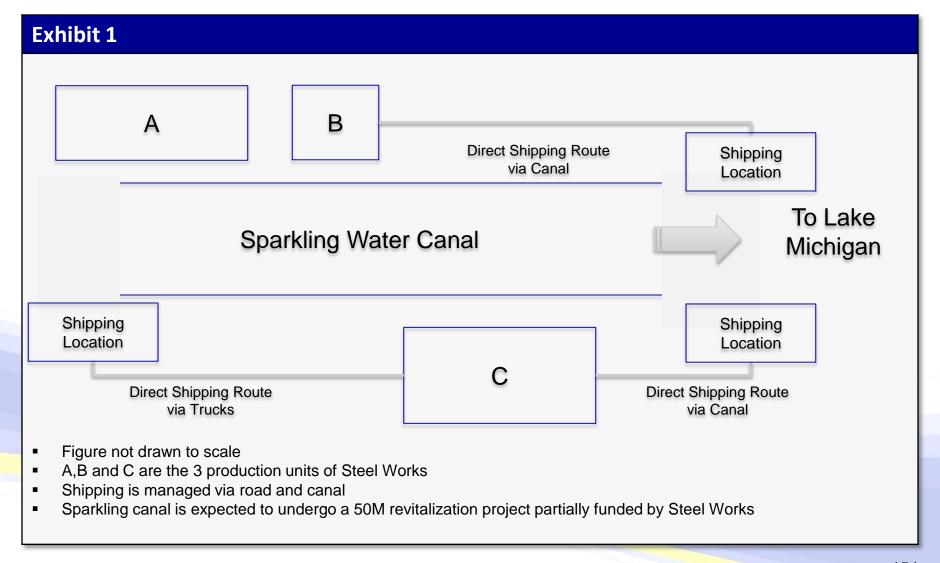
How will the integration be planned and executed

An exceptional response can also include the following

Will testing be required for products being moved from one facility to the other

If we reduce workforce, how will this affect the morale of the company







## **Analysis**

#### **Question 2**

Can you come up with a new production plan for Steel Works and the impact on their total costs

Share Exhibit 2 with the interviewee

## **Interviewer Guidance**

The interviewee should be able to correctly identify the new production plan.

The first step is calculating current production levels at each of the 3 production units. Based on the production capacity and utilization for the 3 production units, the candidate should correctly identify spare capacity available

	Α	В	С
Production Capacity	2 M tons	4 M tons	1 M tons
Utilization	80%	90%	80%
Actual Production	<u>1.6 M tons</u>	<u>3.6 M tons</u>	<u>0.8 M tons</u>
Spare Capacity	<u>0.4 M tons</u>	<u>0.4 M tons</u>	<u>0.2 M tons</u>



## **Interviewer Guidance**

After the interviewee has identified the correct spare capacity, guide the interviewee to develop the new production plan for each production unit with the goal of closing 1 production unit

	Α	В	С
Production Capacity	2 M tons	4 M tons	1 M tons
Utilization	80%	90%	80%
Actual Production	<u>1.6 M tons</u>	<u>3.6M tons</u>	<u>0.8 M tons</u>
Spare Capacity	<u>0.4 M tons</u>	<u>0.4 M tons</u>	<u>0.2 M tons</u>
New Production Plan			
TRIP Steels	1.2 M tons	2.8 M tons	0 M tons
Dual Phase Steels	0.5 M tons	0.7 M tons	0 M tons
Complex Phase Steels	0.3 M tons	0.5 M tons	0 M tons



#### **Exhibit 2**

	Α	В	С
Year Built	1965	1940	1955
Production Capacity	2 M tons	4 M tons	1 M tons
Utilization	80%	90%	80%
Number of Employees	1000	800	600
Workforce	Unionized	Non-unionized	Unionized
Type of Products Manufactured			
TRIP Steels	0.9 M tons	2.6 M tons	0.5 M tons
Dual Phase Steels	0.5 M tons	0.7 M tons	0 M tons
Complex Phase Steels	0.2 M tons	0.3 M tons	0.3 M tons
Production Cost	\$300 / ton	\$100 / ton	\$ 250 / ton
Major Customers	Automotive, Appliance	Aerospace, Appliance	Automotive, Aerospace

- TRIP Steels, Dual Phase Steels and Complex Phase Steels are 3 types of advanced steels
- Production units A and C can produce a maximum of 0.3 M tons of Complex Phase Steels
- Production unit A can produce a maximum of 1.2 M tons of TRIP Steels
- 1 ton = 2,000 lbs
- Complex Phase steels are growing due to high demand from automotive and aerospace companies



#### **Interviewer Guidance Continued**

#### The interviewee should correctly allocate production by production unit

This requires taking into account the capacity constraint for Production Units A,B and C for production of Complex Phase Steels and TRIP steels and the cost of production per production unit.

Therefore the correct recommendation is to close Production Unit C, but an excellent interviewer will be able to develop the new production plan without too much guidance.

The interviewee should also correctly identify the new production costs

#### Old production costs = \$ 1040 M

Production Unit A – Total tons: 1.6 M, Total cost: 1.6 M tons \* \$300 / ton = 480 MProduction Unit B – Total tons: 3.6 M, Total cost: 3.6 M \* \$100 / ton = 360 MProduction Unit C – Total tons: 0.8 M, Total cost: 0.8 M \* \$250 / ton = 200 M

#### New production costs = \$ 1000M

Production Unit A – Total tons: 2 M, Total cost: 2 M tons \* \$300 / ton = \$600 MProduction Unit B – Total tons: 4 M, Total cost: 4 M \* \$100 / ton = \$400 M

Production Unit C – Total tons: 0 M, Total cost: \$0 M

An excellent interviewee will recognize that although Steel Works is saving \$40M by closing one production unit, it requires running the other two production units at full capacity. It also requires shutting down an unionized facility and Steel Works may face obstacles to successfully close it down.



## **Analysis**

#### **Question 3**

Present Exhibit 3 to the Interviewer and ask how this will affect the choice of Production Unit to close.

#### **Exhibit 3 Guidance**

Based on the information presented in the Exhibit, the interviewee should be able to observe the following

- 1) Shipping cost for Production Unit A is the highest
- 2) Although it is highest, it should not change the decision of Steel Works to close Production Unit C based on production constraints
- 3) An advanced interviewee will quickly recalculate the total costs saved after taking into account the shipping costs for each production unit
- 4) Old Operating Cost with 3 Production Units (Including Shipping Costs) \$1.858 B
  - Production Unit A \$800 M
  - Production Unit B \$738 M
  - Production Unit C \$320 M
- 5) New Operating Cost with 2 Production Units (Including Shipping Costs) \$1.820 B
  - Production Unit A \$1000 M
  - Production Unit B \$820 M
  - Production Unit C \$0 M

Savings of \$38 M



# Exhibit 3 – Shipping Costs

	Α	В	С
Via Canal	0	\$ 105 / ton	\$ 100 / ton
Via Truck	0	0	\$ 50 / ton
To Production Unit	\$200 / ton	0	0

- Production Unit A ships products to production units B or C to ship to final customers
- For production unit C, equal amount of steel is shipped via canal and truck
- Above costs represents total shipping costs for each production unit.



## **Analysis**

#### **Question 4**

What factors should Steel Works consider when they are integrating different production units?

#### **Interviewer Guidance**

- The interviewee should be able to come up with a detailed list of factors that Steel Works should consider when integrating different production units
  - Does the new labor force have the right skills to operate on new machinery or technology that might exist in a different production unit
  - o Are we going to layoff any of the workforce? If yes, how many and how will the compensation be structured
  - o Will any of the workforce be relocated to another production unit
  - o Is there any investment that would be required to ensure production units can run at 100% utilization
- An advanced response can consist of the following
  - o How is employee morale affected by closing of 1 production unit. How can Steel Works mitigate loss in employee morale
  - o Will customers care if they are being products from a different production unit
  - o Is there a need for a testing phase to accommodate production of new products
  - o Are production units setup to accommodate increase in production and manpower
  - How will Steel Works deal with Union issues
  - What should Steel Works do with the truck fleet used to ship steel from Production Unit C



#### Recommendation

The CEO after attending a recent shareholders meeting is under pressure to reduce costs. Request the interviewee to come up with a recommendation for the CEO.

#### **Interviewer Guidance**

An expected response from the interviewee should include recommendation to close Production Unit C in order to reduce total operating cost for Steel Works. The interviewee should explain that shipping costs do not alter the recommendation. He or she should also outline risks and next steps for the company.

#### Risks

- Loss of employee morale
- Production Units may not be able to operate at 100% utilization
- Closing 1 Production Unit may affect Steel Works ability to meet demand for Complex Phase Steels, if demand continues to rise

#### **Next Steps**

- Communicate with customers of closing down of 1 Production Unit
- Setup planning team to carry out closure and consolidation of operations

#### An advanced recommendation can consist of the following

- Savings of \$38 M after shipping costs may not be substantial for Steel Works to reduce its overall operating costs. The
  recommendation can include ways of reducing costs by looking at inefficiencies in the process as well as labor costs.
- Steel Works should consider making investments in its equipment to produce more volumes of the Complex Phase Steels
- Consider building a shipping facility at Production Unit A and avoid shipment of products between Production units. This can further reduce shipping costs.



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

## **Case Interview feedback form**

CONSULTING CLUB	Case	Case	type	Interviewer
Execution				Case start time::
•Structure  ➤Logical approach  ➤MECE  ➤Appropriate drive		1 2 3 4 5 Comments:		Framework development min Framework explanation min Case discussion min
<ul> <li>Quantitative Ability</li> </ul>		1 2 3 4 5		Case end time:
➤Speed ➤Accuracy ➤Comfort, reaction	n to mistakes	Comments:		Overall Rating: 1 2 3 4 5
<ul> <li>Business intuition</li> <li>▶ Practical</li> <li>➤ Insightful</li> <li>➤ Breadth &amp; depth</li> <li>➤ Creativity</li> </ul>	across multiple functio	1 2 3 4 5 Comments:		Strengths
Communication				
<ul> <li>Professionalism</li> <li>Poise</li> <li>Confident-Persua</li> <li>Articulate-concis</li> </ul>		1 2 3 4 5 Comments:		Weaknesses
➤ Client ready				Weakilesses
<ul> <li>Written</li></ul>	ack	1 2 3 4 5 Comments:		
Behavioral (optio	nal)			
•Quality of star stories •Length	1 2 3 4 5 1 2 3 4 5	Comments:		

**Key**: 1=Bottom 10%, 2= 10<sup>th</sup>-25<sup>th</sup> percentile, 3= middle 50%, 4= 75<sup>th</sup>-90<sup>th</sup> percentile, 5=Top 10%

# CASE 16 - WOEM



## **Prompt 1**

Your client is WOEM, a wedding cake and clothing company located in Los Angeles, California. WOEM has two separate entities; WOEM cakes and WOEM clothing. WOEM was unprofitable last year. WOEM's CEO believes that the creation of a third entity, WOEM wedding planning, will lead to sustained profitability. WOEM's CEO wants your perspective on how to make WOEM profitable again.

## **Behavioral Questions**

- · Tell me about a time when you resolved a conflict within your team
- What are your strengths and weaknesses list 2 for each

#### **Interviewer Guidance**

This is a profitability case, within the context of evaluating the current state of the company and expanding offerings

#### Additional information, should be provided only upon request:

- Major players in the wedding cake, clothing and wedding planning industry were profitable last year
- WOEM's current customers include middle income individuals (40%) and wedding planners (60%)
- WOEM has no experience in wedding planning, but it understands the wedding business and have a network to pull this off
- There is no specific goal for WOEM (no ROI or specific profit) WOEM just wants sustained profitability

The interviewee should break the case into two parts. Part A should focus on WOEM's current operations and part B should focus on understanding the wedding planning industry. Ask interviewee to present a framework focusing on part A only.

The interviewee's current operations framework should include questions on the industry, for example competitors and trends (no information available) and a basic profitability tree to understand why WOEM is unprofitable.



## **Prompt 2**

Provide the interviewee with the following financial information:

#### **WOEM Cakes:**

2013: Sales: 900 cakes; Price: \$1000 average per cake; costs: \$600 average per cake

2012: Same average price and cost but number of cakes sold was 1300

#### **WOEM Clothing:**

2013 Revenue: \$150,000; Total Costs: \$560,000 2012 Revenue: \$140,000; Total Costs: \$400,000

#### **Interviewer Guidance**

A good interviewee will state that WOEM is unprofitable because of WOEM Clothing. A good interviewee will do the math quickly and state that WOEM cakes is selling about 30% fewer cakes than it did in 2012 and that although WOEM clothing's revenue increased 7% in 2013, costs increased by 40%.

#### Ask interviewee why WOEM is selling 30% less cakes. Possible answers include:

- New competition
- Substitute: Customers are switching to other types of cakes that WOEM doesn't offer
- Decreased income level: Customers are purchasing fewer cakes/having fewer weddings

The answer is that consumers are switching from vanilla and chocolate cake to red velvet cake, WOEM doesn't sell red velvet cake.

If interviewee asks why WOEM clothing is unprofitable: It has been unprofitable since its inception. Customers don't associate WOEM with clothing and Los Angeles customers are very brand conscious.



## **Prompt 3**

Ask the interviewee how he or she will determine if WOEM should enter the wedding planning market.

#### **Interviewer Guidance**

The interviewee's framework should cover the following:

- Industry (Understanding the key players in this market, market size and trends): 4 reputable players control 50% of the wedding planning market in Los Angeles. Reputation of wedding planners is the main purchase driver in this market. No market size or trend information is available (to make this case more advanced you can test interviewee's market sizing thought process.
- Company Capability (Understanding if the company has the resources to pull this off): Ask interviewee what he or she thinks. WOEM has access to financing and can leverage its current customer base, but will need to hire wedding planners.
- Economics: Projected Revenue and costs from entering this market (no information available)
- Risks associated with entering this market: Ask interviewee what he or she thinks No experience, loss of current WOEM customers (since wedding planners make up 60% of WOEM's current customer base) and opportunity costs are some of the risks



#### Recommendation

WOEM should not expand into wedding planning at this time. Instead, WOEM should expand its cake line to include red velvet cake and sell its clothing business in order to be profitable

#### **Supporting facts:**

- Wedding planners make up 60% of WOEM's customer base. WOEM will face intense competition from its current customers and thereby reduce profitability on current business. WOEM also doesn't have a reputation in wedding planning
- Consumer tastes are changing, for WOEM to stay profitable it needs to enter the red velvet market
- WOEM' clothing has been unprofitable since its inception, as WOEM is not associated with clothing

#### Risks

- WOEM and competition might be leaving money on the table by not entering the wedding planning business
- Closing the clothing business might affect the sales of WOEM cakes
- Cannibalization

#### **Immediate Next steps**

- Expand cake line to include red velvet cake (understand the costs associated with this)
- Start looking for buyers of the clothing business



## **Performance Evaluation**

#### What does the case test?

Structure and Strategy

#### What should good interviewee be doing/asking/providing throughout the case?

- Interviewee will develop a structured approach
- Interviewee will do the math accurately
- Interviewee will generate at least 3 ideas to explain why WOEM is selling fewer cakes

# Provide examples of what exceptional interviewees are doing throughout this case. In addition to what is above, interviewee should do the following:

- Be able to drive to insights within the case without prompting
- Be able to come up with a solid recommendation even though the case is unstructured and has limited financial information
- Be able to maintain poise under pressure from the interviewer



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

## **Case Interview feedback form**

CONSULTING CLUB	Case		Case type	Interviewer
Execution				Case start time::
•Structure  ➤Logical approach  ➤MECE  ➤Appropriate driv		1 2 3 4 5 Comments:		Framework development min Framework explanation min Case discussion min
•Quantitative Ability		1 2 3 4 5		Case end time:
➤Speed ➤Accuracy ➤Comfort, reactio	n to mistakes	Comments:		Overall Rating: 1 2 3 4 5
<ul> <li>Business intuition</li> <li>▶ Practical</li> <li>➤ Insightful</li> <li>➤ Breadth &amp; depth</li> <li>➤ Creativity</li> </ul>	across multiple function	1 2 3 4 5 Comments:		Strengths
Communication				
<ul><li>Professionalism</li><li>Poise</li><li>Confident-Persu</li></ul>	asive	1 2 3 4 5 Comments:		
➤ Articulate-concis ➤ Client ready	e			Weaknesses
•Written  ➤Clarity of writing ➤Ability to refer b ➤Comfort, reactio	ack	1 2 3 4 5 Comments:		
Behavioral (option	nal)			
•Quality of star stories •Length	1 2 3 4 5 1 2 3 4 5	Comments:		

**<u>Key</u>**: 1=Bottom 10%, 2= 10<sup>th</sup>-25<sup>th</sup> percentile, 3= middle 50%, 4= 75<sup>th</sup>-90<sup>th</sup> percentile, 5=Top 10%

# **CASE 17 – MONEY IN MICHIGAN**



## **Prompt**

Your client is Michigan Economic Development Corporation (MEDC), a state agency tasked with economic development for the state of Michigan. Michigan is still recovering from the economic recession in 2009, when Michigan had the highest unemployment rate in the country at 13.4% and also the highest net emigration, with over 86,000 citizens leaving the state, presumably to find work elsewhere. Five years later the state is slowly recovering and MEDC wants to know what to do to make Michigan more attractive.

## **Behavioral Questions**

- Tell me about a time you faced a challenging situation in a team and what you did to solve it
- What is your proudest accomplishment that is not listed on your resume?



#### **Interviewer Guidance**

#### Background data that the candidate may request:

The candidate should confirm that increasing employment is MEDC's main goal, but a second goal is to increase the CAPEX or capital expenditure in the state. Numbers will be provided later.

#### Suggestions about how the case is to be delivered:

Interviewers should read the case in advance and be prepared to lead the candidate through and provide answers to questions as necessary.

#### What to look for in a candidate 's responses:

The candidate should come up with a MECE framework that strategically addresses ways to make Michigan more attractive. A few examples include:

- · Determine what industries are new/growing
- · Offer financial incentives:
  - o Financial/other incentives for companies to relocate to Michigan
  - o Tax credits for companies already in Michigan to expand
- Make policy/regulatory changes:
  - Change policies to make it easier for companies to be successful and grow
  - o Examine tax code and ensure it incentivizes growth
  - o Improve quality of life for citizens (e.g., education, poverty, health, crime)
- · Create programs:
  - o Prepare citizens with training programs (private and public)
  - Offer public work programs
- Research competition:
  - o Learn what are other states doing to create jobs/ attract Michigan's workforce



## **Prompt 2**

- A. MEDC is focused on adding 1,000 jobs and bringing in \$40MM in CAPEX (capital expenditure) in the next year, what else can they do to achieve this goal?
- B. The state of Michigan has created a special fund of \$10 MM to spend to incentivize companies to relocate their business to Michigan. The state has given MEDC sole discretion on how to spend the money and MEDC has decided to go "all in" and try and get the best project it can. To do this, MEDC has some information about direct, indirect, and induced job creation. Direct jobs are those created by the new company, indirect jobs are those created by related businesses (e.g., suppliers to the new company), and induced jobs are those created by a stimulated economy (e.g., a hotel increases its employees due to more usage from the new company). For example, if a new company creates 10 jobs and the indirect job multiplier is 1.5, then there would be 15 new jobs total, 10 direct and 5 indirect.

## **Analysis**

- A. This is a quick way to get candidates prepared for the "what else," question. Have the candidate provide 5 additional ideas not included in his/her framework OR finish when the candidate says "I have a strong list, and I would like to proceed with.." and then gives you a concrete next step.
- B. Calculations: (A trick is to subtract 1 from the multiplier and multiply it by the direct jobs (e.g., 3.2\*100 =320 indirect jobs instead of 4.2\*100 =420 total 100 direct jobs = 320 indirect jobs); another trick is to use relationships between indirect/induced jobs to do calculations quicker

Nama	Industry	Direct Jobs	CAPEX	Indirect	Induced	Total	Total	Total
Name	Industry	Direct Jobs	(MM)	Jobs	Jobs	Indirect	Induced	Jobs
Gamer Zone	Software	100	70	4.2	2.6	320.0	160.0	580.0
	Development							
Kidoodle	Retail chain for	280	16	1.4	1.2	112.0	56.0	448.0
	children							
PreFab	Capital-intensive	70	420	7.0	2.0	420.0	70.0	560.0
	Manufacturing							
Speedylane	Call Center	520	4	1.1	1.05	52.0	26.0	598.0



# Prompt 2

## **Projects under consideration**

Name	Industry	Direct Jobs	CAPEX (MM)
Gamer Zone	Software Development	100	70
Kidoodle	Retail chain for children	280	16
PreFab	Capital-intensive Manufacturing	70	420
Speedylane	Call Center	520	4

## Job multipliers

Industry	Indirect Jobs	Induced Jobs
Software Development	4.2	2.6
Retail chain for children	1.4	1.2
Capital-intensive Manufacturing	7.0	2.0
Call Center	1.1	1.05



## **Prompt 3**

A strong candidate will have provided a recommendation/thoughts after completing the calculations. Whether a recommendation is provided or not, say the following:

It is clear that a single project will not achieve MEDC's goal of adding 1,000 jobs in a single year. Which project do you think most closely achieves the goals and additional concerns/benefits will be provided to the state of Michigan?

## **Analysis**

The candidate should immediately remove Kidoodle and Speedlylane are they do not meet both the job creation or CAPEX goals. Given that Gamer Zone and PreFab both meet the CAPEX goal and are close in terms of job creation, the candidate should create a framework to determine which project to go with and then make a suggestion based on the prompt. The can be done with a chart, or any way that shows organization. Brief suggestions below:

	Gamer Zone	PreFab
Jobs	580	560
CAPEX	420	70
Concerns	Smaller CAPEX could lead to less permanence; availability of trained employees?; located in already prosperous area?;	High indirect jobs multiplier suggests reliance on another industry; manufacturing projects are highly competitive-other states might offer greater incentives
Benefits	Software Developers are usually highly educated/white collar;	High CAPEX suggests permanence; highest potential to spur indirect/induced job creation

If time, feel free to use the above suggested answers to play devil's advocate with the candidate – the important part of this is to ensure the candidate does not easily change his/her opinion.



## **Prompt 4/Conclusion**

An MEDC official is walking into the room and wants to know where MEDC should send their \$10MM. Please take 30 seconds to gather your thoughts and then provide a recommendation.

#### Recommendation

The candidate should suggest: Recommendation (and provide a single project), risks (concerns from the last prompt), and offer some next steps (ideas to mitigate the concerns suggested). The candidate should take no longer than 30 seconds to wrap up.

#### **Performance Evaluation**

This case tests a candidates ability to think creatively and should be an easier case due to fewer numbers/much of the information is provided. However, like more difficult cases, it introduces a problem that is not usually top of mind and it does not require a traditional profit formula to complete.

#### A good candidate:

Asks clarifying questions only to move the case forward Remembers MEDC's goals Has minor calculation errors

#### An exceptional candidate:

Reads signs of the interviewer and organizes information without being prompted Does not make calculation errors

Offers insightful next steps without being prompted

Is able to suggest logical next steps and defend decisions



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

## **Case Interview feedback form**

CONSULTING CLUB	Case	<del></del>	Case type	Interviewer
Execution				Case start time:
•Structure  ➤Logical approach  ➤MECE  ➤Appropriate drive	e to solution	1 2 3 4 5 Comments:		Framework development min Framework explanation min Case discussion min
<ul><li>Quantitative Ability</li></ul>		1 2 3 4 5		Case end time:
<ul><li>➤ Speed</li><li>➤ Accuracy</li><li>➤ Comfort, reaction to mistakes</li></ul>		Comments:		Overall Rating: 1 2 3 4 5
<ul> <li>Business intuition         <ul> <li>Practical</li> <li>Insightful</li> <li>Breadth &amp; depth</li> <li>Creativity</li> </ul> </li> </ul>	across multiple function	1 2 3 4 5 Comments:		Strengths
Communication				
<ul><li>Professionalism</li><li>Poise</li><li>Confident-Persua</li></ul>	isive	1 2 3 4 5 Comments:		
<ul><li>Articulate-concise</li><li>Client ready</li></ul>				Weaknesses
•Written  ➤Clarity of writing ➤Ability to refer ba ➤Comfort, reaction	nck	1 2 3 4 5 Comments:		
Behavioral (optio	nal)			
•Quality of star stories •Length	1 2 3 4 5 1 2 3 4 5	Comments:		

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# CASE 18 – PHARMA CO.



#### **Prompt**

Pharma Co. has developed a new AML drug X (type of cancer). Preliminary Phase I trials indicate tremendous potential, but the costs to get the drug FDA approved and to market are extremely high. A private equity firm has approached Pharma Co. offering to pay \$150M for 50% of all future drug X profits. Pharma Co. wants you to tell it what to do.

#### **Behavioral Questions**

- What are three traits that your former colleagues would use to describe you? Briefly explain each.
- Tell me about something not on your resume that you are proud of.

#### **Interviewer Guidance**

Information that can be provided to the interviewee / used to direct the interviewee during case:

- The only known objective is to determine how Pharma Co. should proceed
- Pharma Co. has no experience taking a drug to market
- Cancer drugs tend to be extremely expensive (\$100k+) for the patient
- ONLY U.S. insurance will reimburse the cost of the drug, thus Pharma Co. only wants to consider the U.S. market
- Pharma Co. does have other drugs in the pipeline
- This new drug has not completed U.S. FDA Phase I, Phase II, or Phase III trials
- Assume patent life of 10 years
- · Side effects are consistent with similar drugs so a non-factor
- There will be competition (will be explored later)



## **Analysis**

The interviewee should quickly recognize that market opportunity needs to be evaluated against the total costs - a good framework will include these two points as its primary pillars. Other points that would likely be included within the framework include patent expiration, insurance reimbursement, current experience / capability set, probability of FDA trial success, and competition.

Guide interviewee towards total market opportunity if not initiated. Begin by asking interviewee what inputs should be used to determine total opportunity and how these inputs could be collected (sample answers - push interviewee to explore and defend new inputs):

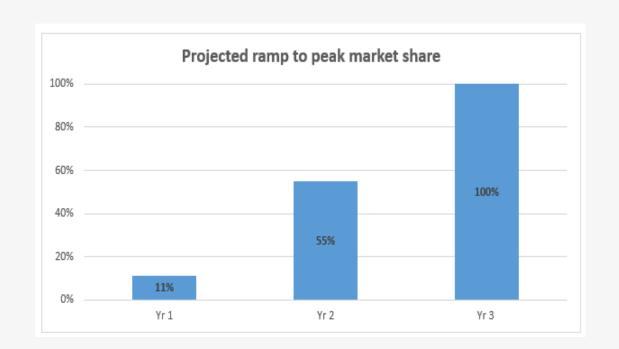
- Interviews with experts in the field (doctors, insurance experts, pharmaceutical business experts, healthcare experts)
- Review of government census data for population / demographic data
- · Review of medical journals for cancer incidence trends
- · Review of FDA records of trials of competitive drugs to see if competition could cut into market share
- · Review of the ramp of adoption of similar drugs
- Survey / interview with potential patients and their willingness to try drug X
- Review of the price points of similar drugs
- Financial reports for competitors' drug performance / drug pipeline information (competition)
- Review of negotiated blanket contracts similar drugs have in place with the government (think Medicare)

Fortunately, for the interviewee a lot of that information has already been collected. Provide Exhibit 1 to the interviewee. Ask interviewee to provide total market opportunity for drug X.



## Exhibit 1

- Annual patients afflicted with AML are 3,300
- Estimated cost of drug X is \$125,000 per patient per year
- Interviews indicate that doctors are willing to prescribe drug X to 70% of their patients
- Assume drug X achieves 100% of its projected market share after Yr 3



#### **Competitor market share**

Year (Yr)	YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10 (1)	YR11
Competitor Market Share	0%	0%	0%	0%	25%	25%	25%	25%	25%	25%	100%

(1) Drug X goes off patent after 10 years



# **Total market opportunity calculation (for interviewer only)**

	YR1	YR2	YR3	YR4	YR5	YR6	YR7	YR8	YR9	YR10
Number afflicted	3300	3300	3300	3300	3300	3300	3300	3300	3300	3300
Willingness to prescribe	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Patients (pre-ramp)	2310	2310	2310	2310	2310	2310	2310	2310	2310	2310
Share of market	100%	100%	100%	100%	75%	75%	75%	75%	75%	75%
Patients (after competitor cut)	2310	2310	2310	2310	1733	1733	1733	1733	1733	1733
Ramp	11%	55%	100%	100%	100%	100%	100%	100%	100%	100%
Patients (after ramp)	254	1271	2310	2310	1733	1733	1733	1733	1733	1733

 Total patients (after ramp)
 16,543

 Price
 \$ 125,000

 Total Market Opportunity
 \$ 2,067,875,000



## **Analysis**

Great! That is a lot of money! But we need to take into consideration the probability that drug X receives FDA approval.

This probability is applied to the total market opportunity to determine the "risk-adjusted" market opportunity.

An internal team has developed percentages of failure at each phase. The percentages that drug X completes each stage are (TOTAL PROBABILITY AND RISK-ADJUSTED MARKET OPPORTUNITY TO BE CALCULATED BY INTERVIEWEE):

- Phase I probability 90% (already begun and results are promising resulting in high %)
- Phase II probability 30%
- Phase III probability 50%

How should these probabilities be applied to the total market opportunity that was just calculated?

- Total probability that drug X receives FDA approval 13.50% (FOR INTERVIEWER ONLY)
- Risk-adjusted market opportunity for drug X is ~\$280M (FOR INTERVIEWER ONLY)



#### **Analysis**

With the risk adjusted market opportunities in hand, costs should now be calculated. Ask the interviewee what costs should be considered (sample answers - difficulty can be increased by eliminating time to structure thoughts):

- · Regulatory fees
- · Promotional materials
- · Marketing campaigns
- Production costs (e.g. materials, quality, sourcing)
- Adding personnel (e.g. sales, marketing, administrative, regulatory)
- New facilities
- · Packaging materials
- Shipment (e.g. logistics)
- Distribution costs (e.g. McKesson)
- Taxes

Fortunately, Exhibit 2 outlines these costs and should be provided to the interviewee. Using Exhibit 2 and the market opportunity numbers calculated in the first half of the case the interviewee should be prompted to begin calculating the EBITA for the "risk-adjusted" scenario (FOR RISK ADJUSTED KEY THAT INTERVIEWEE RISK ADJUSTS COSTS AS THEY ALIGN WITH THE FDA PHASES - HINT IF NECESSARY). Total EBITA is \$38M (FOR INTERVIEWER ONLY). If interviewee initiates NPV discussion, redirect to total EBITA noting management has specifically requested a total EBITA number as part of the analysis and that NPV will follow.

Interviewee should ask for discount rate to calculate NPV of the 50% profit stream that the private equity company has offered \$150M for. Provide a discount rate of 5% BUT BEFORE interviewee begins to calculate ASK HOW they would structure the NPV calculation. Once explained, note that the NPV will likely be negative (or ask interviewee based on information provided where they think it would fall without doing any calculations), and that time is running short so you need to move on...

With a negative NPV estimate (approximate NPV is -\$25M) for the 50% profit stream, total EBITA, and the total assuming the private equity firm's offer is accepted of \$181M (\$150M offer + \$31M profit split), ask for the recommendation.







## **Exhibit 1 ("RISK ADJUSTED" ANSWERS - FOR INTERVIEWER)**

Phase I

Phase II

Phase III

• \$160M

• \$125M

- \$75M
- Phase I: \$160M x 90% = ~\$144M
- Phase II: \$125M x (90% x 30%) = ~\$34M
- Phase III: \$75M x (90% x 30% x 50%) = ~\$10M
- Total for production:
  - ~2B x (5% x 5% x 10%) = \$400M
  - \$400M x (90% x 30% x 50%) =  $\sim$ \$54M
- EBIDTA is: \$280M \$242M = ~\$38M

#### **Production**

- Manufacturing costs: 5% of price
- Logistics: 5% of price
- All other costs: 10% of price



#### Recommendation

An argument can be made to both accept and turn down the private equity firm's offer, though most will suggest that it be accepted based on the numbers. But an argument could be made that because other drugs are in the pipeline this could serve as a foundation drug, that the risk adjustment numbers are too conservative, etc. Either recommendation should mention risk tolerance of Pharma Co., need for capital, validation of the risk adjustment percentages, risks because Pharma Co. has never taken a drug to market, possible exploration of alternative paths forward (partner, license, or sell the technology). Additional questions to probe / challenge recommendation:

- Probe for alternative solutions?
- What additional analysis would the interviewee like to perform?
- Would it make sense for Pharma Co. to revaluate after Phase I approval? Phase II and III approvals?
- What data would be required to further explore / validate alternative solutions?
- What are the non-financial risks to pushing forward with development?
- How can the risk adjusted numbers be validated?
- What are logical next steps for Pharma Co.?

#### **Performance Evaluation**

The case evaluates the interviewees ability to recognize a profit case, thinking logically and quickly through a long-term strategic problem, and perform simple math. An exceptional interviewee will do the following:

- Recognize that there is risk that the drug will not make it through all FDA approvals (and appropriately apply to the total market opportunity and costs)
- Able to quickly and logically identify reasonable means for collecting inputs required to determine market opportunity
- Understand that there are both non-recurring costs (R&D, trials, etc.) and recurring costs (manufacturing, staffing, selling, etc.)
- Note that the market will be cut or end because of generic competition once the patent ends
- Identify other geographies and other uses as key channels to push total profits higher
- Able to quickly and logically identify key costs
- Note that competition is likely and needs to be considered



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

#### **Case Interview feedback form**

CONSULTING CLUB	Case	Case type	Interviewer
Execution			Case start time:
•Structure  ➤ Logical approa  ➤ MECE  ➤ Appropriate d		1 2 3 4 5 Comments:	Framework development min Framework explanation min Case discussion min
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➤Speed ➤Accuracy ➤Comfort, reac	tion to mistakes	Comments:	Overall Rating: 1 2 3 4 5
•Business intuition  >Practical  >Insightful  >Breadth & dep  >Creativity	oth across multiple function	1 2 3 4 5 Comments:	Strengths
Communication	1		
•Professionalism ➤Poise ➤Confident-Per ➤Articulate-con		1 2 3 4 5 Comments:	Weaknesses
➤ Ability to refe	ing and page layout r back tion to mistakes	1 2 3 4 5 Comments:	
Behavioral (opt	ional)		
•Quality of star stories •Length	1 2 3 4 5 1 2 3 4 5	Comments:	

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# **CASE 19 – QUALITY CONTROL**



# **Case 19: Quality Control**

#### **Prompt**

Your client is a leading medical device company and just recently acquired a smaller company to help grow their orthopedics division. Shortly after the acquisition, the parent company found several quality problems within the acquired company's manufacturing sites that have to be remediated within six months to avoid FDA violations. You have been hired to come up with a plan that will successfully complete all remediation efforts on time.

#### **Behavioral Questions**

- Tell me about a time when you received feedback (positive or constructive) and you acted upon the feedback to further improve?
- What kind of client interaction would be the most difficult for you to manage and why?

#### **Interviewer Guidance**

This care requires a nontraditional framework and requires flexibility and creativity.

Additional key details if asked: (Provide only after initial framework is given by interviewee)

- 5 manufacturing sites are affected
- 25 quality problems found at each site that all need to be remediated
- Client can not extend beyond six month time frame and assume six months starts from today

Candidate should focus on first understanding the scope of this remediation effort and if it is feasible to complete given certain constraints. They should consider the costs, constraints/barriers, and offer potential next steps.



# **Case 19: Quality Control**

#### **Analysis**

- 1) There are 5 manufacturing sites that are affected with 25 quality defects found at each site. Their current level of resources can remediate at a rate of .125 defects/day. Will they meet their remediation goals? Let interviewee know that they can assume they are working weekends
- 2) What do you suggest that our client do in order to complete remediation on time? What are some potential options?
- 3) The CEO of our client is about to walk into the room, please summarize your findings and suggestion to him. You do not have time to prepare.

#### Recommendation

- 1) No, they will not meet their remediation goals
  - 5 sites \* 25 defects = 125 total defects
  - .125 = 1/8 so it takes 8 days to complete one defect
  - 125 defects \* 8 days = 1000 total days to complete all defects
  - 1000 days / 30 days in month = 33.3 months needed at current rates
  - 33.3 months / 6 month timeline = over by ~5.5 times
  - Conclude that need 5.5x the number of resources at the same rate or improve their productivity
- 2) Brainstorming question: many different options (hire more, increase productivity, contract out, etc) with each option the candidate should be thinking about the potential costs associated or other barriers in addition to how feasible. A great candidate would be able to structure their brainstorming (ex: greatest impact, least cost, feasibility)



# **Case 19: Quality Control**

## **Performance Evaluation**

- Fairly easy case but should test candidate's ability to structure thoughts and their creativity in suggestions
- Exceptional candidates will drive to a solution upon discovering the objective is unachievable
- Exceptional candidates will structure their thoughts logically in response to brainstorming questions (written structure is not required as long as conveyed verbally in a structured manner)



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

#### **Case Interview feedback form**

CONSULTING CLUB	Case		Case type	Interviewer
Execution				Case start time::
•Structure  ➤Logical approach  ➤MECE  ➤Appropriate driv		1 2 3 4 5 Comments:		Framework development min Framework explanation min Case discussion min
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➤Speed ➤Accuracy ➤Comfort, reactio	n to mistakes	Comments:		Overall Rating: 1 2 3 4 5
<ul> <li>Business intuition</li> <li>▶ Practical</li> <li>➤ Insightful</li> <li>➤ Breadth &amp; depth</li> <li>➤ Creativity</li> </ul>	across multiple function	1 2 3 4 5 Comments:		Strengths
Communication				
<ul><li>Professionalism</li><li>Poise</li><li>Confident-Persu</li></ul>	asive	1 2 3 4 5 Comments:		
➤ Articulate-concis ➤ Client ready	e			Weaknesses
•Written  ➤Clarity of writing  ➤Ability to refer b  ➤Comfort, reactio	ack	1 2 3 4 5 Comments:		
Behavioral (option	nal)			
•Quality of star stories •Length	1 2 3 4 5 1 2 3 4 5	Comments:		

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# **CASE 20 – WORKIT**

## Prompt #1

Your client is Worklt an insurance firm that sells workers' compensation insurance policies exclusively. Workers' compensation is an insurance policy that companies purchase to protect themselves from lengthy litigation and unexpected and incredibly high legal fees related to employees who are injured at work. Workers' compensation is paid by the company on a per-employee basis each month and in exchange, the policy covers medical, indemnity, and other expenses. For example, if an employee falls off a ladder and breaks a leg, workers' compensation pays for the employee's medical bills and indemnity or lost wages. The policy also covers other related expenses. Companies are required by state law to purchase workers' compensation plans.

WorkIt has been successful in North Carolina, South Carolina, and Georgia but is considering entering a new state. WorkIt would like your help to determine if this is a good idea.

#### **Behavioral Questions**

- Tell me about a time you had to make a difficult decision when you had limited information
- What is your greatest transferable skill?



#### **Interviewer Guidance**

#### Background data that the candidate may request:

This case does not provide a lot of information about the direction upfront, but successful candidates will work through the content and uncover the direction as they proceed. The candidate may ask some clarifying questions; however, the main goal is to determine whether WorkIt should expand (and then where the company should expand) and candidates will receive more information as they proceed. Profit is a big concern, but so are qualitative issues.

#### Suggestions about how the case is to be delivered:

- The first prompt is meant to be open ended, so there is not any additional information for the candidate at this point (e.g., WorkIt's main goals are not explicit)
- If candidates need more information about workers' compensation, please provide the optional overview / explanation:
  - It is an insurance policy in which a company pays a premium to be protected from unpredictable accidents
  - The following example can be repeated to explain components: If an employee falls off a ladder and breaks a leg, workers' compensation pays for the employee's medical bills (medical) and also pays the employee for lost wages (indemnity). The policy also covers other expenses (e.g., overhead, benefit delivery, occasional attorney fees paid by workers' compensation).

#### What to look for in a candidate's responses:

- The candidate should come up with a MECE framework that covers the following areas: revenue and cost (profitability), competitors, WorkIt's current market saturation/industry mix of clients, regulatory concerns/changes, economic conditions, and company network geographically
- The prompt mentions that WorkIt sells workers' compensation policies exclusively, so a successful candidate will not ask about additional insurance offerings, though this could become a suggestion for WorkIt to consider later in the case.



## **Optional Overview of Workers' Compensation**

#### **Employee**

 Covered if injured (whether the employee is at fault or not)

#### **Employer**

- Pays insurance premium to cover employees injured at work
- Benefits by avoiding lawsuits and unexpectedly large expenses if an employee is injured at work

# Workers' Compensation Provider (e.g., WorkIt)

- Receives insurance premium in exchange for providing benefits to employees injured at work
- Benefits include:
  - Medical (e.g., hospital bills)
  - Indemnity (e.g., lost wages)
  - Expenses (e.g., overhead, benefit delivery, occasional attorney fees)



#### Prompt #2

Great, so WorkIt is thinking of expanding in the South to remain regional. WorkIt has gathered data on 9 states; however, WorkIt does not want to engage with markets smaller than South Carolina (30,000 cases of injured employees) or larger than Georgia (70,000 cases of injured employees). In this case, you can assume that WorkIt would be able to control the entire market in the state. Please take a moment to review the data sheet and gather your thoughts on which states to consider.

#### **Analysis**

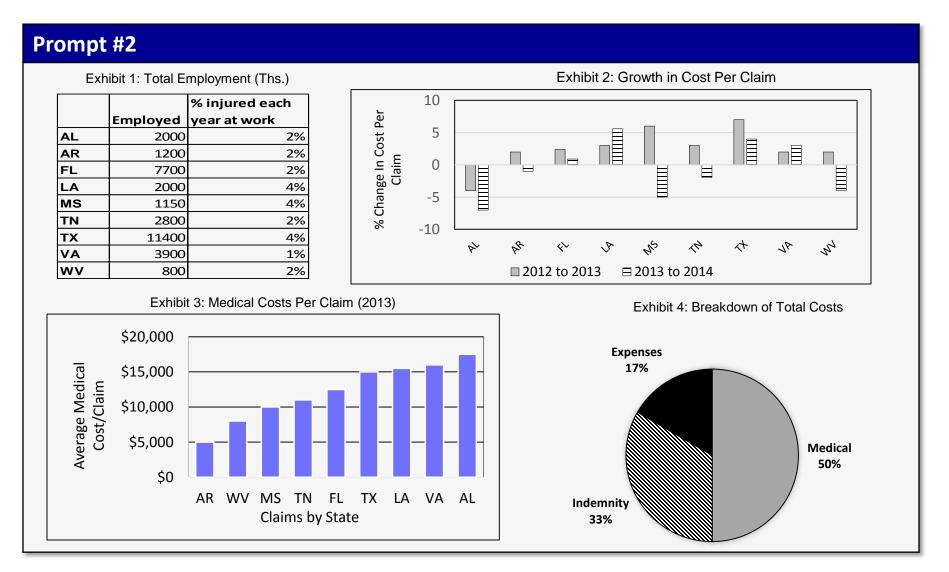
The candidate should determine that only four states fit WorkIt's criteria: AL, MS, TN, VA

#### Frequency of claims

#### **Total Employment (Ths.)**

	AL	AR	FL	LA	MS	TN	TX	VA	W۷
Employed	2000	1200	7700	2000	1150	2800	11400	3900	800
% injured each year	2%	2%	2.00%	4%	4%	2%	4%	1%	2%
Total injured (Ths.)	40	24	154	80	46	56	456	39	16







#### Prompt #3

Let's proceed with Alabama, Mississippi, Tennessee, and Virginia. Now determine WorkIt's profit. Please note that WorkIt's revenue is a flat 101% of total costs.

## **Analysis**

Provide hints if the candidate needs it. Here is one way to solve:

#### Costs

Step 1: # of injuries (exhibit 1) x cost per (medical) (exhibit 3) = total medical

Step 2: total medical x 2 (medical is half the total expense from exhibit 4) = total cost by state

#### Revenue/Profit

Step 3: Total per state x 101% commission – total cost by state = profit

OR

Step 3: Candidates could realize that profit is 1% of total costs

		Revenue	Profit			
	# of injuries (ths.)	Cost per injury (medical)	Total cost (medical)	Total cost (all three)	101% (Costs)	1% (Costs)
AL	40	\$17,500	\$700,000	\$1,400,000	\$1,414,000	\$14,000
MS	46	\$10,000	\$460,000	\$920,000	\$929,200	\$9,200
TN	56	\$11,000	\$616,000	\$1,232,000	\$1,244,320	\$12,320
VA	39	\$16,000	\$624,000	\$1,248,000	\$1,260,480	\$12,480

The candidate should comment about the state with the highest revenue potential. Also, note that the commission could still be in (ths.) from earlier (i.e., \$14,000 is actually \$14,000,0000) making this a worthwhile option for Worklt.



#### Prompt #4

WorkIt is concerned about recent policy changes and hospital and judicial reform, which could eventually impact the company's 1% commission. Without doing any math, what state should WorkIt now consider?

## **Analysis**

Based on Exhibit 4, Alabama is now less attractive – as total costs have decreased significantly over the past year (and prior year). Mississippi and Tennessee show variability and have decreased costs from 2013-2014, which shows decreased profits from the 2013 numbers. It also suggests it will be difficult for WorkIt to predict future profits.

In this case, Virginia is the most stable state and it could be argued, the most attractive state.



#### Prompt #5

What else should WorkIt research before making a decision?

## **Analysis**

Suggested response should include a few of the below:

- 1. Additional Costs will there be future changes to fixed and variable costs?
- 2. Competition what other company is operating in each state? Does WorkIt stand a chance of getting the contract? Could there be a bidding war?
- 3. Different legal/regulatory changes will WorkIt need to hire a new legal team? Any reason a state might not be ideal (that is not included in Exhibit 3)?
- 4. Company Capabilities cost of entry, will their be a bidding war for the contract, can WorkIt operate successfully from afar? If not, can WorkIt be successful in the selected state?



## **Prompt #6/Conclusion**

WorkIt's CEO is walking into the room and wants to know if the company should expand and if so, where? He is now in the room, let him know what you suggest.

#### Recommendation

The candidate should suggest: Recommendation (go or no go is fine as long as it is supported), risks (concerns from the last prompt), and next steps (these could be based on earlier work from the initial framework/concerns). In this case, the candidate was told to give the conclusion right away and should not ask for 30 seconds. However, the candidate could write the recommendation as he/she presents to remain organized.

#### **Performance Evaluation**

This case involves a market entry decision. The decision is based on limited information, as the candidate knows the revenue, but does not have the associated costs needed to determine profit.

#### A good candidate:

Asks clarifying questions only to move the case forward Remembers crucial information and is able to disregard extraneous information Has minor calculation errors and is able to continue after an error is made

#### An exceptional candidate: (in addition to the above)

Finds shortcuts for calculations

Reads signs of the interviewer and organizes information without being prompted

Offers insightful next steps without being prompted

Is able to suggest logical next steps and defend decisions



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

#### **Case Interview feedback form**

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Execution				Case start time::
•Structure  ➤Logical approach  ➤MECE  ➤Appropriate driv		1 2 3 4 5 Comments:		Framework development min Framework explanation min Case discussion min
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Communication				
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•Quality of star stories •Length	1 2 3 4 5 1 2 3 4 5	Comments:		

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# CASE 21 – SO FRESH AND SO CLEAN



#### **Prompt**

Our client, So Fresh and So Clean, is a cleaning supply distributor and operates a national distribution network. Over the past 5 years the client has acquired several small regional players and has experienced decreasing margins. In 2009, the company's net margin was 3.1% and since the net margin has dwindled to 2.4% at the end of 2013. The CEO is worried about long-term longevity of the company and hired us to conduct an extensive diagnostic of the company's health. How would you approach this problem?

#### **Behavioral Questions**

- Ask the candidate which industry they're passionate about. Then ask them what they think the future state of the industry will be over the next ten years.
- Tell me about a time you had to convince someone of your ideas where there was a lack of data.

#### Interviewer Guidance

- This is intended to be an overarching case, which requires candidates to analyze the overall market and diagnose a specific company issue. The crux of the case is an ineffective sales force. However, the candidate is not expected to discover this right away.
- The candidate should first probe about market health. Once they realize the overall market is stagnant and the company's profitability is aligned with competitors they should push towards a profitability tree.
- Clarifying questions
  - What products do we sell? Our client provides chemicals, cleaning supplies, uniforms, and equipment to restaurants, hospitals, schools, and other food service providers. Located within the United States.
  - Questions about the industry: Market has averaged 2% growth over the past five years. So Fresh and So Clean is the industry leader with 20% market share, followed by competitor A at 15%, B at 8%, C at 5%, and others make up the rest.
  - The company acquired a \$3.3B revenue competitor in 2010 and \$3.1B revenue competitor in 2012



#### **Prompt A**

The team has recently conducted a market analysis and reviewed the company's audited financial statements. Please review the following Exhibits (1 & 2).

Guidance: Exhibit 1 – The candidate should quickly recognize the market is mature and the client's profitability is aligned with competitors. As a result, they should assess the company's internal operations. Exhibit 2 - The candidate should discover SG&A costs have skyrocketed with the company's acquisitions in 2010 and 2012.

Ask the candidate to brainstorm reasons how to lower sales costs (e.g., reductions, organization structure redesign, technology)

#### **Prompt B**

After each acquisition, the client did not fully rationalize its salesforce and as a result SG&A costs have skyrocketed. The team has conducted 20 field surveys with sales reps to benchmark their monthly activity to the competition. Based on Exhibit 3 what would you recommend to the client?

Guidance: Once the candidate identifies competitors spend 2x the amount of time selling, then the candidate needs to brainstorm specific ways to increase this percentage.



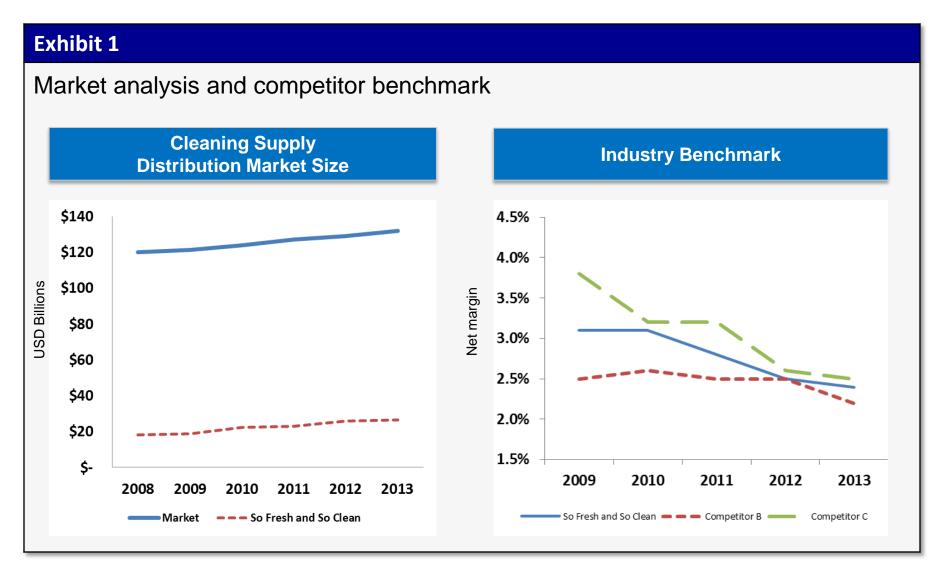
#### **Prompt C**

The team has recommended a new selling model to the client to increase the amount of time sales representative spend working with customers. Under the new model, the client would hire entry level account coordinators to perform administrative tasks and help sales rep service the customers. This position would then allow the client to increase sales reps' customer account coverage and reduce the workforce. The client wants to know how much this model would save them a year.

#### **Prompt D**

The CEO is coming in for a quick update in a minute. Please prepare a recommendation.







# Exhibit 2

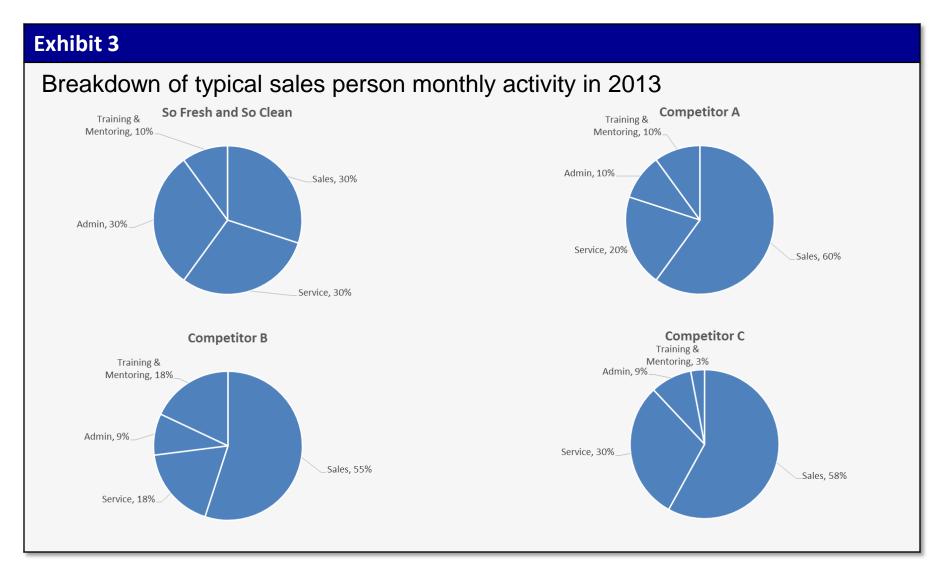
# 5 Year Financial Performance (2009-2013)

So Fresh and So Clean - Income Statement (billions)								Year-over-Year Change					
		2009		2010		2011		2012	2013	2010	2011	2012	2013
Sales	\$	18.79	\$	22.30	\$	22.85	\$	25.82	\$ 26.39	19%	2%	13%	2%
Cost of sales	\$	15.31	\$	18.17	\$	18.74	\$	21.18	\$ 21.64	19%	3%	13%	2%
Gross profit	\$	3.48	\$	4.12	\$	4.11	\$	4.65	\$ 4.75	19%	0%	13%	2%
Depreciation	\$	1.50	\$	1.55	\$	1.62	\$	1.60	\$ 1.61	3%	5%	-1%	1%
Selling, General & Administrative	\$	0.60	\$	0.95	\$	1.00	\$	1.55	\$ 1.60	58%	5%	55%	3%
Other	\$	0.50	\$	0.55	\$	0.60	\$	0.55	\$ 0.56	10%	9%	-8%	2%
Operating expenses	\$	2.60	\$	3.05	\$	3.22	\$	3.70	\$ 3.77	17%	6%	15%	2%
Operating income	\$	0.88	\$	1.07	\$	0.89	\$	0.95	\$ 0.98	23%	-17%	6%	3%
Income taxes	\$	0.29	\$	0.38	\$	0.25	\$	0.30	\$ 0.35	31%	-34%	19%	15%
Net earnings	\$	0.58	\$	0.69	\$	0.64	\$	0.65	\$ 0.63	19%	-7%	1%	-2%

#### **Financial Performance Metrics**

	2009	2010	2011	2012	2013
Gross Profit Margin	18.5%	18.5%	18.0%	18.0%	18.0%
Operating Margin	4.7%	4.8%	3.9%	3.7%	3.7%
Net Margin	3.1%	3.1%	2.8%	2.5%	2.4%







## **Interviewer Guidance (Do not share with Interviewee)**

#### Information and calculation for new sales model benefit

#### **Required information for calculation:**

- Number of new account coordinators 148
- Salary of account coordinators \$55K
- Amount of time saved for Sales Reps 16 orders per week, each order takes 25 minutes
- Total time worked by sales reps in a week: 40 hours
- Sales Reps salary \$120,000
- Total Sales Reps 1,500

#### **Calculation:**

Investment

148 sales reps (~150) x \$55,000 = \$8,250,000

Time saved

16 orders x 25 minutes = 400 minutes 40 hours x 60 minutes = 2,400 minutes 17% (1/6) reduction in time spent

Benefit

\$120,000 x 1,500 sales reps = \$180,000,000

Total Savings

(1/6) \* \$180,000,000 = \$30,000,000

Net Saving = \$21,750,000



#### Recommendation

This case is intended to follow a structured path. The case intentionally begins high level and then quickly narrows upon a specific problem, a bloated sales force. Each prompt is meant to spur creativity and challenge the candidates problem solving. Ensure the candidate holistically assesses each prompt and identifies potential risks to the end solution.

#### **Performance Evaluation**

- This case tests a candidates ability to diagnose a specific problem with initially vague information.
- Each prompt is suppose to test the candidates ability to brainstorm potential solutions to a problem.
- Strong candidates will drive the case through each prompt and solve the cost-benefit analysis
- Exceptional candidates will also come up with innovative solutions to solve the company's profitability issue and highlight the challenges a 17% reduction in salesforce would create for the customer base. The Salesforce reorganization only saves \$21M which is a 2.1% improvement to 2013 operating income. Small in the grand scheme of enterprise.



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

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# **CASE 22 – KID COUNTRY**



## **Prompt**

Our client, Kid Country, is the purveyor of an increasingly unpopular form of hybrid rap/rock/country music. An early boom in the market for awful music allowed him to amass a substantial war chest and offer products (music related) in a variety of areas. His accountants have recently informed him of consistently declining revenues over the last three years and encouraged him to seek outside expertise.

#### **Behavioral Questions**

- · What was your most challenging moment at work?
- · Tell me about a time you led a team

#### **Interviewer Guidance**

A quality framework will seek to identify which lines of businesses are problematic and which have opportunities, address the basic economic levers within these businesses, and take into account both internal and external factors impacting these levers.

When asked about Kid Country's diversification, have the candidate brainstorm some likely possibilities and then share the key lines of business: apparel (tasteless t-shirts), beverages (tasteless beer), CD/MP3 sales, concert ticket sales.

When asked about revenue trends, confirm that overall revenue numbers are down but that trends vary across lines of business. We'll address specifics later on.

Strong candidates will also ask about profitability: profitability trends vary by line of business as well, but we'll get into those later on.



#### **Analysis**

Once the candidate identifies Kid Country's products (either through bucketing each line of business separately, or through a revenue/profitability bucket addressing them all), give him the chance to guide the case towards understanding how each product is performing. Weak candidates may require your prompting to focus in on this.

When the candidate requests information on products' performance, provide Exhibits 1 and 2.

After reviewing the exhibits, the candidate should move into discussing potential recommendations. If the candidate fails to do so, prompt him to.

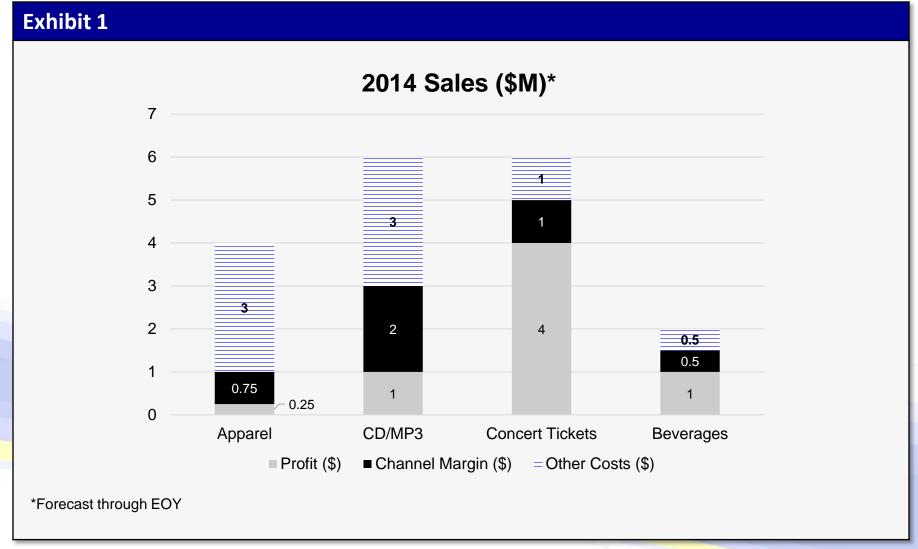
#### Recommendation

Candidate should identify several takeaways from Exhibits 1 & 2

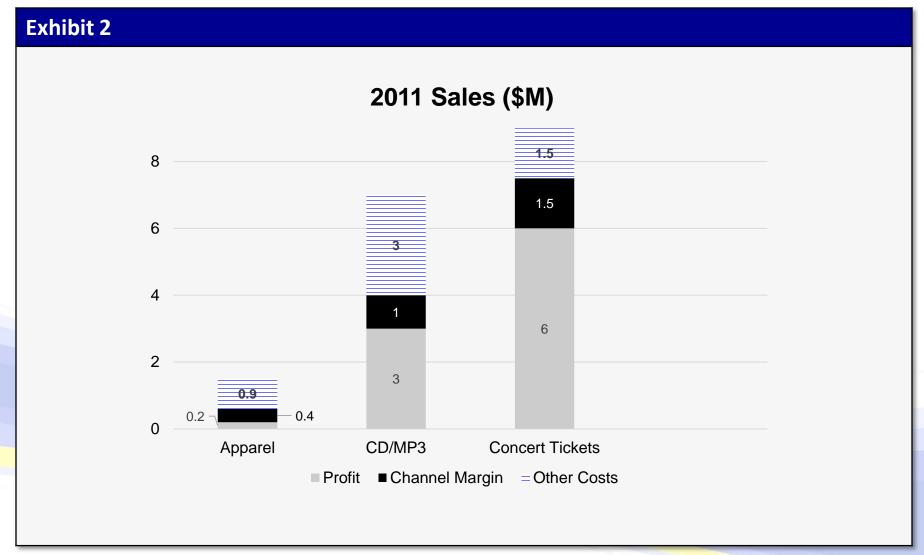
- Concert tickets are the core business highest revenue, great profitability, highest profit, but declining revenues due to Kid Country's out-of-style music
- Apparel seems like a dud- profitability is too low and it hasn't improved much since 2011
- CD/MP3 sales are high but declining with low profitability, and getting squeezed by channels the rise of Spotify, Pandora, and iTunes are eating into artist margins candidates should identify channel margin growth as a problem here, but Kid Country lacks the leverage to fight back against this
- Beverages are a growth opportunity very good profitability, but low current sales Candidate MUST be able to recognize that this line of business was added since 2011

After reviewing exhibits, candidate should guide case forward by suggesting that we explore how to improve Kid Country's position. Strong directions should attempt to shore up the core business of tickets (which is likely a driver for the brand and thus the side business) while capitalizing on growth opportunities in beer and considering ways to either kill or fix the apparel business.











#### Prompt #2

After letting the candidate explore recommendations for improving Kid Country's business, introduce the following: "Kid Country would like us to evaluate a proposal he just received from his concert promoters, which would substantially change the business model of his tours - tell us what you think of it"

Provide Exhibit 3 and voice over the following: "The promoters have been able to negotiate a unique deal with the venues which host Kid Country - if he is willing to drop ticket prices dramatically (while increasing the venues' cut of course), they will allow him to perform back-to-back shows (either the same night or on consecutive nights) and will agree to carry exclusively Kid Country's own "Real American Red White and Blue Lager" for sale during these shows."

#### Recommendation

Candidate should recognize that he is being asked to make a go/no-go recommendation, and should not depend on interviewer prompting to come to one. THIS IS THE CASE CONCLUSION- if a candidate waffles after it, prompt him to conclude.

If the candidate asks what our base case forecasts look like, tell him that we don't have any and ask for his input - a strong candidate should be able to recognize that 2011->2014 trends and the general context of the case imply declining performance.

If the candidate has questions about the forecasts, explain that we are confident in them; a strong candidate will likely express concerns about the fact that we aren't taking into account the extra costs of a second show- explain that, because almost all costs for a given location are fixed, back-to-back shows add negligible costs which do not need to be considered.

Candidate should be able to quickly build a profit calculation table to produce a go/no-go recommendation along with acknowledgment of the risks associated with either.

- · Pros: Major revenue and profit opportunity; movement into higher profitability space; reversal of disastrous trend
- Cons/risks: Redefines core business Kid Country is now essentially a brewer who uses music to sell beers; can Kid Country scale his beverage business?; Kid Country will have to play twice as many shows- this is a huge personal burden does he want to?



## Exhibit 3

## **Tour Forecast Data**

	Tour Dates	Ticket Price	Tickets/ Show	Beer Price	Beers/ Show	% of Own Brand Beers	Ticket Margin	Beer Margin
2014	100	\$ 40.00		\$ 6.25		40%		
2015	200	\$ 10.00	2,000	\$ 6.25	10,000	100%	40%	50%
2016	200	\$ 10.00	2,000	\$ 6.25	10,000	100%	40%	50%
2017	200	\$ 10.00	2,000	\$ 6.25	10,000	100%	40%	50%
2018	200	\$ 10.00	2,000	\$ 6.25	10,000	100%	40%	50%



## **Exhibit 3 Interviewer Guidance**

## **Tour Forecast Data Key**

1	Γicket	Revenue	Bed	er Revenue	To	tal Revenue	<b>Total Profits</b>
2014	\$	6,000,000.00	\$	2,000,000.00	\$	8,000,000.00	\$ 5,000,000.00
2015	\$	4,000,000.00	\$	12,500,000.00	\$	16,500,000.00	\$ 7,850,000.00
2016	\$	4,000,000.00	\$	12,500,000.00	\$	16,500,000.00	\$ 7,850,000.00
2017	\$	4,000,000.00	\$	12,500,000.00	\$	16,500,000.00	\$ 7,850,000.00
2018	\$	4,000,000.00	\$	12,500,000.00	\$	16,500,000.00	\$ 7,850,000.00

<sup>\*</sup>Exceptionally curious candidates may wonder if this is actually a good deal for our venues. It is- their profits go from \$2M to \$2.4M.



#### **Performance Evaluation**

- · Skills tested
  - Rudimentary case math, identification of trends, strengths, and weaknesses within a business, ability to drive a line of thought to an actionable conclusion
- · Strong candidates will:
  - o Complete necessary math with minimal stumbles
  - o Handle Exhibit 3 with a clean, well-organized profit calculation table while avoiding unnecessary calculations
  - o Consider qualitative factors (will Kid Country want to work twice as many shows? Could he re-brand by playing another type of music? [probably not])
  - Drive to conclusions- above all else, a strong candidate will drive this case, recognize that Prompt #2 is a go/no-go decision, and present a crisp, concise, and decisive conclusion upon its completion rather than depending on the interviewer to wrap the case up for him.
  - o Incorporate data on relative impact of project in conclusion (e.g. circle back to total 2014 profits across all lines of business to show % profit increase in overall terms)



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

#### **Case Interview feedback form**

CONSULTING CLUB	Case	Case type	Interviewer
Execution			Case start time:
•Structure  ➤ Logical approa  ➤ MECE  ➤ Appropriate d		1 2 3 4 5 Comments:	Framework development min Framework explanation min Case discussion min
•Quantitative Abilit		1 2 3 4 5	Case end time:
➤ Speed ➤ Accuracy ➤ Comfort, reaction to mistakes		Comments:	Overall Rating: 1 2 3 4 5
•Business intuition  >Practical  >Insightful  >Breadth & dep  >Creativity	oth across multiple functio	1 2 3 4 5 Comments:	Strengths
Communication	1		
•Professionalism  >Poise  >Confident-Per  >Articulate-con		1 2 3 4 5 Comments:	Weaknesses
➤ Ability to refe	ing and page layout r back tion to mistakes	1 2 3 4 5 Comments:	
Behavioral (opt	ional)		
•Quality of star stories •Length	1 2 3 4 5 1 2 3 4 5	Comments:	

**Key**: 1=Bottom 10%, 2= 10<sup>th</sup>-25<sup>th</sup> percentile, 3= middle 50%, 4= 75<sup>th</sup>-90<sup>th</sup> percentile, 5=Top 10%

# CASE 23 – TEXAS OIL

## **Prompt 1**

Your client, Texas Oil, is a large, integrated oil and gas company which competes with the likes of ExxonMobil, Shell, and Chevron. They have assets in 72 countries, on 5 continents, and own one-quarter of the US oil market. They recently purchased a large area of land from a small, independent oil company and are attempting to integrate it into their portfolio in West Texas. They hired your firm to help them determine how to develop the purchased land.

While the company is large, it is "capital constrained". This is because of low crude oil prices and an over-budget refinery in Angola. As a result, the company cannot develop all of the purchased land in the coming years.

How would you frame this problem for the client?

#### **Behavioral Questions**

- What was your favorite team moment?
- Can you tell me a time when you exhibited strong leadership qualities?

#### **Interviewer Guidance**

Background information (if requested):

- All of the purchased land has proven oil and gas reserves (with 90% confidence)
- Other major competitors are also in West Texas.
- Oil and Gas are commodities, and traded on an international, liquid market (meaning the quality of the reserves is not important for the case)
- Texas oil does not have enough market share to influence the price of oil/gas
- · The purchased lease will expire in 3 years
- The total amount purchased is 320,000 acres



## **Interviewer Guidance Continued**

The candidate should frame this as a prioritization problem. The key value measure for prioritization is a cost/benefit analysis:

**Costs**: Land development (building roads, infrastructure), appraisal costs (geological analysis), construction and drilling costs, labor costs, production costs (pipelines, etc.)

Benefits: Revenue, market share, production



#### **Prompt 2**

The land on which the drilling rights were purchased is owned by the government and leased to companies on a five-year timeline. If a lease holder does not develop that land in that time, the lease expires and the lease holder can no longer develop it. Texas Oil's purchased land has only three years remaining on its lease agreement.

How many acres can Texas Oil develop before their lease expires? What percentage of their purchased land does this represent?

#### **Interviewer Guidance**

This is a short, back of the envelop calculation. The candidate should ask for figures, but if they are having difficulty you can start from the top with information.

Historically, the company has been able to develop (drill and produce) land at a rate of 100 square miles per year.

640 acres = 1 square mile

Texas oil has three years remaining on the lease, so 3\*100 = 300 square miles

300\*640 = **192,000** acres can be developed in **3** years

Company purchased a total of 320,000 square acres

192,000 / 320,000 = **60% of its purchased land** 



#### **Prompt 3**

OK, now that we've determined how much of the land can be developed, we need to prioritize. The company has categorized the land into five "focus areas", each with 64,000 acres (show exhibit 1 to candidate).

How would you go about prioritizing focus areas?

#### **Interviewer Guidance**

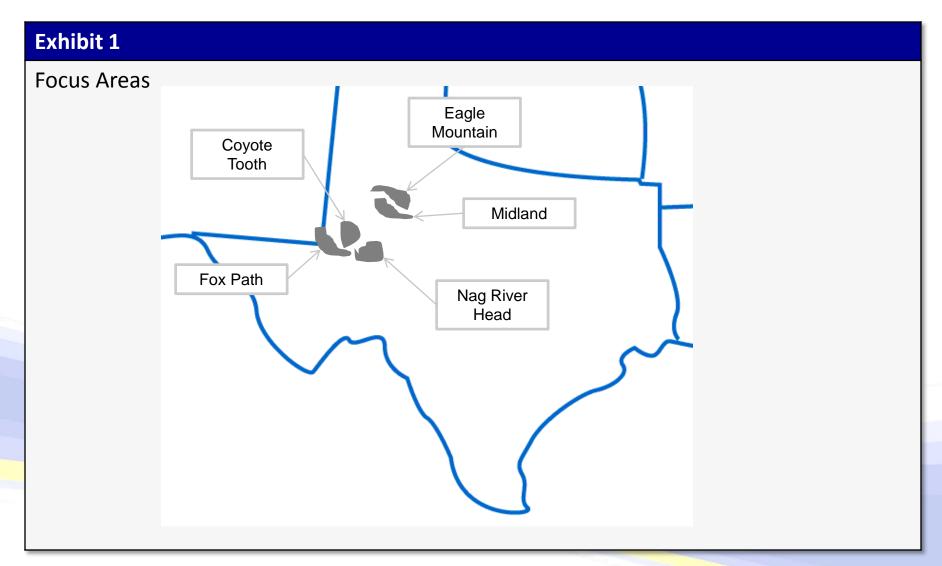
This is purely a brainstorming question, and if the candidate asks for specific figures, you can indicate that they are forthcoming.

NPV is the base answer (i.e. prioritize land based on expected revenue from reserves minus expected costs of development), but you should push the candidate to be a bit more creative.

2<sup>nd</sup> Level Insights:

- Capital efficiency (some areas may have slightly higher profits but cost much more to develop)
- Total cost of development (the prompt indicated that the company is "capital constrained")
- Total production
  - Some companies may be more production focused than profit because it boosts stock price and/or valuation of the company (e.g. independent oil companies looking to sell)







#### **Prompt 4**

Each one of these areas can be developed independently, but not at the same time. The firm has provided you with exhibits 2 and 3 and asked you to determine its optimal course of action. According to the head of the West Texas Business Unit, the company has 300 million available to spend.

How should Texas Oil develop its purchased land?

#### **Interviewer Guidance**

The Oil, Gas, and NGL figures are a distraction, and feed directly into revenue. If the candidate asks about priorities, suggest that the company wants to "maximize profitability given its capital constraints"

The key to answering this question is capital efficiency.

The correct answer is: Eagle Mountain, Midland, and Fox Path.

Coyote Tooth can also be substituted for Fox Path, but it spends more money and gets the same amount of revenue. Nag River Head is attractive because it has a higher NPV, however, it violates the 300 million limit set by the business unit head (when developed with any 2 other areas), and is not capital efficient. If the company decides to develop Nag River Head, then, it must give up developing a third segment, thus forgoing profits on that segment as well.

#### 2<sup>nd</sup> level insights:

- Texas Oil could re-categorize land within those segments and achieve higher portfolio efficiencies (i.e. not all land in one segment is equally profitable)
- Texas Oil should sell the excess acreage to other competitors, rather than sitting on the lease and allowing it to expire.

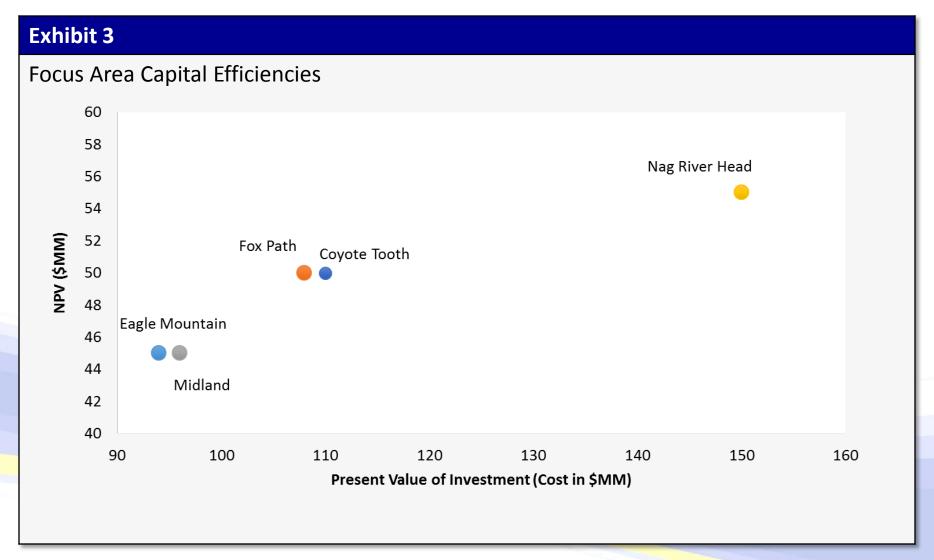


## Exhibit 2

# Focus Area Figures

	Acres	Oil Revenue (\$MM)	Gas Revenue (\$MM)	NGL Revenue (\$MM)	Revenue (\$MM)	Total Cost (\$MM)	NPV (\$MM)
Eagle Mountain	64,000	100	30	9	139	94	45
Fox Path	64,000	110	45	3	158	108	50
Midland	64,000	90	50	1	141	96	45
Nag River Head	64,000	180	10	15	205	150	55
Coyote Tooth	64,000	80	80	0	160	110	50
Total	320,000	560	215	28	803	558	245







Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

#### **Case Interview feedback form**

CONSULTING CLUB	Case		Case type	Interviewer
Execution				Case start time::
•Structure  ➤Logical approach  ➤MECE  ➤Appropriate driv		1 2 3 4 5 Comments:		Framework development min Framework explanation min Case discussion min
•Quantitative Ability		1 2 3 4 5		Case end time:
➤Speed ➤Accuracy ➤Comfort, reactio	n to mistakes	Comments:		Overall Rating: 1 2 3 4 5
<ul> <li>Business intuition</li> <li>▶ Practical</li> <li>➤ Insightful</li> <li>➤ Breadth &amp; depth</li> <li>➤ Creativity</li> </ul>	across multiple function	1 2 3 4 5 Comments:		Strengths
Communication				
<ul><li>Professionalism</li><li>Poise</li><li>Confident-Persu</li></ul>	asive	1 2 3 4 5 Comments:		
➤ Articulate-concis ➤ Client ready	e			Weaknesses
•Written  ➤Clarity of writing  ➤Ability to refer b  ➤Comfort, reactio	ack	1 2 3 4 5 Comments:		
Behavioral (option	nal)			
•Quality of star stories •Length	1 2 3 4 5 1 2 3 4 5	Comments:		

**<u>Key</u>**: 1=Bottom 10%, 2= 10<sup>th</sup>-25<sup>th</sup> percentile, 3= middle 50%, 4= 75<sup>th</sup>-90<sup>th</sup> percentile, 5=Top 10%

# CASE 24 – CONSUMER PRODUCTS STRATEGY

PROVIDED BY BCG



## **Prompt**

Our client is a large, multinational consumer products company with business in over 200 countries. Today, we are going to focus on its US business.

Our client has been following US demographic trends and has found that low income households have been growing two times as quickly as other consumer segments Low income is defined as families with income at the poverty level or below.

Our client has always had a premium product strategy. It sells its products in grocery stores, convenience stores, mass retailers, etc. but its products are always priced at the high-end of their respective categories It has never targeted the low income segment before and doesn't have a low income strategy, but given the growth of this segment, our client is considering entering the low income segment.

Our client has 3 questions for BCG.

- 1) Should it have a low income strategy?
- 2) If it should have a low income strategy, what are some tactics it should deploy?
- 3) What are some of the risks the client may face?

#### **Interviewer Guidance**

Ask the candidate the following question

1) What would you like to know to help the client answer its questions?

When the candidate asks about products, **share Exhibit 1**. The client has shared some data for its key products. What do you make of this information?



#### **Interviewer Guidance Continued**

Ask the interviewee the second question

2) What else would you like know about diapers and cold medicine to assess the opportunity?

Ok. The client is not interested in cold medicine, but it has done customer research that suggests low income consumers are interested in buying diapers. **Share Exhibit 2** 

What do you see that could help us figure out why low income consumers aren't buying our client's diapers?

What else should our client think about as it develops a low income strategy? What are the risks?

## **Interviewer Guidance (Provide only upon request)**

- Low income consumers purchase largely in smaller, local shops
- Low income consumers can't afford salons, but will indulge on shampoos
- Low income consumers are willing to spend more on baby food to protect their children
- There are valid generics that compete with our client's cold medicine



#### Recommendation

The client should pursue a low income strategy, focusing on diapers, which could generate an additional \$25M in revenue.

To pursue low income consumers, our client should reduce its package size. Today, our client's package size is significantly larger than its competitors. Our client could keep the price /diaper the same, but if it dropped the package size from 40 diapers to 20 diapers, it would cut the absolute price of the box to \$10, even lower than its competitors.

There will be some risks involved with adopting a low income strategy including cannibalizing business from existing products and brand risk.



Ex	hi	bit	1

Product/ category	Total category sales (US\$M)	Client category sales (US\$M)	Total LI consumer spend on category (US\$M)	LI consumer spend on client (US\$M)
Shampoo	400	100	90	30
Cold Medicine	250	50	75	7.5
Diapers	300	150	100	25
Baby food	300	100	100	30

LI: Low Income



## Exhibit 2

Product/ category	Client package size	Average package size of competitors	Client price	Average price of top 5 competitors
Shampoo	10 oz bottle	12 oz bottle	\$4	\$3
Cold Medicine	6 oz bottle	6.5 oz bottle	\$6	\$3
Diapers	40-pack	32 pack	\$20	\$16
Baby food	6 oz jar	6 oz jar	\$2	\$1.50



## Quantitative analysis and solutions

Calculate overall share and share of low income consumers by product/category

Product/Category	Client Overall Markey Share	Client Share of Low Income Consumers	Overall share Vs Low Income Share
Shampoo	100/400 = 25%	30/90 = 33%	Overall < LI
Cold Medicine	50/250 = 20%	7.5/75 = 10%	Overall > LI
Diapers	150/300 = 50%	25/100 = 25%	Overall > LI
Baby food	100/300 = 33%	30/100 = 30%	Overall = LI

- Calculate incremental revenue for cold medicine and diapers
  - Cold medicine = (20%-10%) \* \$75M = \$7.5M
  - Diapers = (50%- 25%) \* \$100M = \$25M

Total incremental revenue = \$7.5M + \$25M = \$32.5M



Clarity

Relevance

1 2 3 4 5

1 2 3 4 5

#### **Case Interview feedback form**

Case	Case type	Interviewer
Execution		Case start time::
•Structure  ➤Logical approach  ➤ MECE  ➤ Appropriate drive to solution	1 2 3 4 5 Comments:	Framework development min Framework explanation min Case discussion min
•Quantitative Ability	1 2 3 4 5	Case end time:
<ul><li>➤Speed</li><li>➤Accuracy</li><li>➤Comfort, reaction to mistakes</li></ul>	Comments:	Overall Rating: 1 2 3 4 5
<ul> <li>Business intuition</li> <li>▶ Practical</li> <li>▶ Insightful</li> <li>▶ Breadth &amp; depth across multiple functions</li> <li>▶ Creativity</li> </ul>	1 2 3 4 5 Comments:	Strengths
Communication		
<ul> <li>Professionalism</li> <li>➤ Poise</li> <li>➤ Confident-Persuasive</li> <li>➤ Articulate-concise</li> </ul>	1 2 3 4 5 Comments:	Weaknesses
<ul> <li>➤ Client ready</li> <li>◆Written</li> <li>➤ Clarity of writing and page layout</li> <li>➤ Ability to refer back</li> <li>➤ Comfort, reaction to mistakes</li> </ul>	1 2 3 4 5 Comments:	
Behavioral (optional)		
•Quality of star stories 1 2 3 4 5 •Length 1 2 3 4 5	Comments:	

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# CASE 25 – PHARMACEUTICAL RARE DISEASE BUSINESS GROWTH

PROVIDED BY BCG





## **Prompt**

Our client is a large pharmaceutical company with a strong business in "Rare Disease" (rare diseases are conditions that affect fewer than 200,000 people in the US).

Historically, pharmaceutical companies have not invested significantly in Rare Disease because it has not been cost effective to conduct research for such small populations. Due to the fall off in the number of pharmaceutical blockbusters and improved regulation to make R&D cheaper for Rare Disease, pharmaceutical companies have begun to invest more in Rare Disease R&D over the last few years.

Our client has hired BCG because it would like to grow its Rare Disease business.

#### **Interviewer Guidance**

Case question to solve

1) How can the client double its Rare Disease business in 5 years?





#### **Interviewer Guidance**

Ask the candidate the following questions

- 1) How would you approach our client's question on growing its Rare Disease business?
- 2) Where would you like to start?

When the candidate asks about the existing business, **share Exhibit 1.** Based on the data, how large will the client's rare disease business be in 2016? [If necessary,] what is the shortfall to its goal of doubling its business?

What does the client need to do to double the Rare Disease revenues by 2016? [If candidates discusses acquisitions] ask who should the client acquire and how many assets will client need to buy?

Let's say the CEO walks in, could you summarize for me?

#### **Interviewer Guidance (Provide only if requested)**

Our client is an industry leader with a track record of success. Its existing business is \$2.5B, expected to grow at 5% per year

Rare disease market is \$30B and is as profitable as "Big Pharma"

- While research is relatively expensive, the government provides tax credits for drugs designated to treat rare diseases
- Additionally, prices tend to be higher to make up for the upfront research investment. It's also growing faster than Big Pharma.

There are many small bio-techs that are attractive targets and there are also other big pharmaceutical companies that have rare disease divisions / assets





## Recommendation

Internal growth will not be sufficient to achieve your goal of doubling your business. You will need to acquire ~3 "peak revenue" assets to close the gap between your goal of \$2.5B and the \$1.1B your portfolio will generate organically.





#### **Quantitative Analysis and Solutions**

#### Growth from existing assets

- Current baseline is \$2.5B, growing at 5% for 5 years
- \$2.5B \* 5% \* 5 = \$625M (assumes linear growth would not ask to calculate compounding growth)

#### Growth from pipeline

- Research assets need 6 years to reach the market = \$0M
- Phase I = 5 assets \* 20% attrition \* \$500M peak rev \* 20% rev in 1st year = \$100M
- Phase II = 3 assets \* 40% attrition \* \$500M peak rev \* 40% rev in 2nd year = \$240M
- Phase III = 1 asset \* 60% attrition \* \$500M peak rev \* 60% rev in 3rd year = \$180M
- Total = \$520M

#### Shortfall

- Target is to double the business = \$2.5B
- Internal growth is \$625M + \$520M = \$1.145M, need ~\$1.4B more
- If each asset is \$500M, then need to buy 3 peak revenue assets, or more if they are in R&D

#### 2016 Portfolio

 \$5B portfolio with: \$3.1B (60%) from current baseline, \$520M (10%) from pipeline, \$1.4B from acquisitions (30%)





## Exhibit 1

Assets in research and development

Phase	# Assets	Time to market (years)	Attrition (% expected to be approved to reach the market)	Peak revenue (\$M)
Research	20	6	10%	500
Phase I	5	4	20%	500
Phase II	3	3	40%	500
Phase III	1	2	60%	500

Revenue by years on market

Year on the market	Revenue (% of peak revenue)
1st	20%
2nd	40%
3rd	60%
4th	80%
5th	100%



CASE 26 – INSURECO.

PROVIDED BY **Deloitte.** 





#### **Prompt**

Our client, InsureCo, is a large, multi-national insurance provider, with revenues of over \$25B in 2009. However, the tightening of the credit markets and downturn in the economy has caused their profitability to drop significantly from 10% to 5% in the most recent year.

As a result of economic downturn, our client has decided to evaluate their business portfolio and divest portions of their business to raise capital and refocus on their core General Insurance business. Their goal is to raise over \$3B in capital through the sale of various business units. The management team has already identified two potential candidates for divestiture from its Life Insurance and Property and Casualty divisions.

It is considering divesting one of the following business units, in addition to several other businesses across the company: LifeLine Asia: Asian-based life insurance business, with \$250MM in annual revenues All-World Property and Casualty: A US-based Property and Casualty insurance business, with \$100MM in annual revenues

Deloitte Consulting has been engaged to identify and recommend the most viable business unit candidates for divestiture, as well as assist in the operational separation of the business units' operations from InsureCo.

## **Problem Statement**

InsureCo has approached Deloitte Consulting to assess candidates for divestiture and to develop a game plan for executing the divestiture of selected business units

- 1. What would you estimate as the potential sales price for each company? Please use available data to support your argument (Note to interviewer: no other data is provided, candidate can make assumptions as necessary)
- 2. Which company would you advise InsureCo to divest?
- 3. What are some of the other key factors that InsureCo should consider when assessing which units to divest?





## **Prompt Questions and Responses (For interviewer reference ONLY)**

1. What would you estimate as the potential sales price for each company? Please use available data to support your argument (Note to interviewer: Please provide candidate with data sheet)

The candidates will have to estimate the potential sales price for each company.

A good answer will include:

	LifeLine Asia	
2009 Net Income	\$20 MM	
Average Deal P/E	12	
Potential Price	\$240MM	

	All-World	
2009 Net Income	\$12 MM	
Average Deal P/E	18	
Potential Price	\$216MM	

A better answer will include the above. But the candidates would also mention the following points:

- The P/E has been declining in Life and Increasing in P&C. By using the more recent multiples the potential prices could be:
  - LifeLine Asia \$20 MM \* 10 = \$200 MM
  - o All-World \$12 MM \* 20 = \$240MM
- This makes All-World look like a more attractive divestiture target from a sale price perspective

A great answer will include the above. But the candidates would also mention the following points and how each may affect the valuation of the companies:

- In reviewing the industry segment overview:
  - o The Life segment is on the decline
  - o The P&C is going up
- In reviewing the geography overview:
  - o North America is on the decline
  - Asia seems to be going up





## **Data Sheet**

	Asia

	2009	2008	2007
Revenue (\$MM)	250	275	300
Net Income (\$MM)	20	27	30

Life Companies Latest Deal PE Multiples -

	PE Multiple	Deal Size (\$B)	Deal Date
Life A	10	0.5	March 2009
Life B	14	2	January 2007
Life C	12	7	April 2008
Life D	10	4	June 2009
Life E	14	11	September 2007

#### Industry Segment Overview

Life 45% -3%  Property and Casualty 40% 6%		2009	3-yr Projected Growth (CAGR)
Property and Casualty 40% 6%	Life	45%	-3%
1 7 70 070	Property and Casualty	40%	6%
Long-term Disability 15% 2%	Long-term Disability	15%	2%

#### All-World Property and Casualty

	2009	2008	2007
Revenue (\$MM)	100	95	90
Net Income (\$MM)	12	8	5

#### P & C Companies Latest Deal PE Multiples

	PE Multiple	Deal Size (\$B)	Deal Date
P&C A	20	3	January 2009
P&C B	16	1.2	March 2007
P&C C	18	10	April 2008
P&C D	20	5	October 2009
P&C E	16	6	November 2007

#### Geography Overview

	2009	3-yr Projected Growth (CAGR)
North America	40%	-2%
Europe	40%	2%
Asia	20%	4%





## **Prompt Questions and Responses (For interviewer reference ONLY)**

2. Which company would you advise InsureCo to divest?

A good answer will draw the following conclusions from the data provided:

If candidate chooses LifeLine Asia the candidate should mention:

- The possibility of getting a higher sales price (based on average deal multiples)
- · Asia is a more attractive market and may help InsureCo get a higher premium to help raise capital
- Life seems to be a segment that is detracting, so InsureCo may want to consider getting out of the Life Insurance business

If candidate chooses All-World Property and Casualty the candidate should mention:

- As the company is in the P&C sector, it may command a higher premium than LifeLine
- Based on recent deal multiples, the company may get a higher sales price





## **Prompt Questions and Responses (For interviewer reference ONLY)**

3. What are some of the other key factors that InsureCo should consider when assessing which units to divest?

A good answer will be logically structured to address various business considerations including:

- Overall Culture/People Impact: Selling off the highest quality assets can disrupt the employee base and change the overall image of the company and cultural underpinnings. Considerations should also be made around how to retain key talent at the remaining company. If certain employees in the divested business are being groomed for executive positions at the corporate parent, measures need to be taken to remain these individuals.
- <u>Geographic Reach/Overlap:</u> Considerations should be made to determine where the company has overlap in various geographies and product mixes.
- <u>Impact to Remaining Revenue Streams:</u> Candidates should explore the impact to that a divested business unit will have on the portions of the business that remain. For example, if other insurance and investment products are cross-sold at a life insurance business unit that is being sold, the company needs to assess the potential loss in revenue.
- <u>Potential Buyers:</u> Who are the prospective buyers for the business and what are the potential issues with making a deal with each one? If any of these business are being spun out into separate companies (via IPO), legal and regulatory considerations must be made.

A great answer will include the items above, but also explore the impact of shared infrastructure, including IT and key technology systems, sales and marketing, finance, distribution, etc. Many business units are dependent upon the shared infrastructure for support and running the business. The corporate parent will need to consider the level of effort to fully separate these business units.





#### Wrap-up

- Companies frequently look to M&A activity as a way to accelerate their growth, but divestitures can also be an effective tool for helped businesses sharpen their focus and use proceeds to invest in high-growth areas.
- In this situation, Deloitte was brought in to help the client with an efficient, accelerate divestiture of a number of business units.
- The Deloitte team assisted the client by:
  - Creating a robust divestiture process
  - o Expediting and aligning the planning process with separation blueprints, Day One readiness plans, and exit plans
  - o Execution of issue free Day One for numerous divested business units and successful Day two
- Deloitte is viewed as a trusted advisor to the client and has conducted numerous project to help the client transform their business operations

